

# Signal Tower Lights

CATALOG 2025



## Signal Tower Lights

Signal Beacons and Sounders

Heavy-Duty and Explosion Proof Signalings

Warning Light Bars

Aviation Obstruction Lights

Smart Factory Product

Industrial LED Lights

Performance Line - E Series

# Qlight

Gives you a  
Brighter  
Future



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## Qlight Gives You a Brighter Future!

Qlight has been contributed to an industrial safety and efficiency by producing several audible/ visual signaling devices and industrial LED lights since its establishment in 1986. Our technology and quality are highly reputable among various industries for example semiconductor manufacturing equipment, automobile industry, unmanned automation facility, steel production facility, shipbuilding industry, offshore plant, specialized unit for petrochemical industry based on diverse technology patents and core technologies such as LED light source, heat radiation technology, explosion proof design. Our established local corporations in South Korea and China, sales branches in the United States, Japan, Vietnam, and a global service network provides a distribution and sales system servicing over 80 countries that help Qlight reinforces industrial fields all over the world.



# Qlight is a representative of signaling device in Korea.

Qlight has been striving to accomplish our mission to provide visual and audible status indicating systems and solutions to enhance our customer's work safety and efficiency for the last three decades.  
As a market leader, Qlight is going to accomplish our responsibility by introducing state of the art equipment and unmanned facilities.

## 1986 - 1995

### Business foundation and consolidation

- 1986      Established Qlight
- 1993      Nominated for developing domestic explosion proof warning lights by Korean Ministry of Science & Technology

## 1996 - 2005

### Growing as a signal transmission device specialist

- 2001      Established Shanghai Qlight Electronic Co., Ltd. in China



- 2004      ISO 9001:2000 certificates acquired

## 2006 - 2017

### Mission device specialist A great leap forward & business reconstruction

- 2010      Established R&D Center
- 2011      Selected as a venture company
- 2011      Selected as an INNO-BIZ firm which is an innovative tech company
- 2014      Selected as a promising export company by Small and Medium Business Administration(SMBA)
- 2014      Established the Qlight USA, Inc. in San Jose, CA.
- 2016      The second headquarter factory built



# History of Change & Innovation

## 2018 to Present

### New engines for growth

2019      Established Qidong factory



2019      Selected as a family friendly  
company by Ministry of  
Gender Equality and Family

2020      Selected as a small giants  
company by Small and  
Medium Business Admin-  
istration(SMBA)

2021      Selected as a youth-friendly  
small giants company

2023      Selected as the best reading  
management company  
by the Ministry of Culture,  
Sports and Tourism of Korea

## The 2<sup>nd</sup> growth and globalization

# Qlight, the best professional company

Leading the **improvement of industrial efficiency**

## 1 Aiming for the first-class

Aiming for the first-class specialized company to contribute industrial efficiency and safety of customer based on the core competency of System, Variety, and Hi-quality

## 35 Continuous growth for about 35 years

Based on a partnership-oriented corporate culture and sharing management, we have grown continuously for 35 years since our founding and are recognized for our quality and technology.

## 80 Global networks in 80 countries

Exporting to all over the world through global network spanning over 200 distribution channels in 80 countries and brightening industrial sites around the world

## 450 Multi-variety production

Satisfying various needs of customers through systematic customer-customized production system for over 450 products

### Quick

Prompt customer satisfaction and real time enterprise(RTE)

### Quality

Emphasis on product and service quality, workplace innovation and ethical management

### Question

Problem oriented thinking and creative problem solving are based on achieving strategic task.

### Qualified

The most suitable company that leads the innovation of signaling device technology and industrial efficiency improvement





## Core Competency



### System

Delicate mechanism of the work realizes shorter lead time by effectively managing over-all procedures such as purchasing, production, stock management, and distribution.



### Broad-line

Customers are highly satisfied with Qlight products because we offer over 450 types of wide variety of product family with a systematic customized production system.



### Supreme Quality

Qlight's technological capability and supremacy of quality are being recognized because of our strict technology standard and inspection system. We've obtained over 22 certificates such as IECEx, ATEX, NEPSI, CCS, CE, and UL. We've been expanding it in accordance with industrial demands.

## How Qlight works





## SELECTION OF WARNING LIGHT

The selection of signaling devices will depend on the particular situation and environment.

- Whether the location of installation is dark or bright.
- Whether the signal transmission range should be short or long, or should have good visibility.
- Whether you need an economical but short lifetime product or upscale product with longer lifetime.
- Whether the environment is harsh with vibration and shock, or the environment is stable so that the life of the lights can be guaranteed.
- Whether it hugely or lightly affects ongoing task and safety when light source(bulb) of beacon is damaged at once.

## FACTORS TO CONSIDER IN SIGNAL SELECTION





## TYPE OF LIGHT SOURCE

### Bulb

Light bulb is a light source that uses temperature reflection generated by the current flowing through the light bulb filament (thin line of metal), tungsten wire coil filament is often used. The hot filament is protected from oxidation with a glass sphere injected with inert gas (Argon gas, etc.). Typical characteristics of the gas injected bulb is described below.

1. When operating voltage is 10% lower than bulb's rated voltage, lifespan of product is quadrupled and power consumption is reduced to 85%.
2. On the contrary, when the operating voltage rises by 10%, lifespan of product becomes extremely short by 30% compared to the standard lifespan of a standard bulb (approx. 1,000 to 1,500 hours), and the power consumption rises by 16%. On the other hand, the brightness increases by 40%.

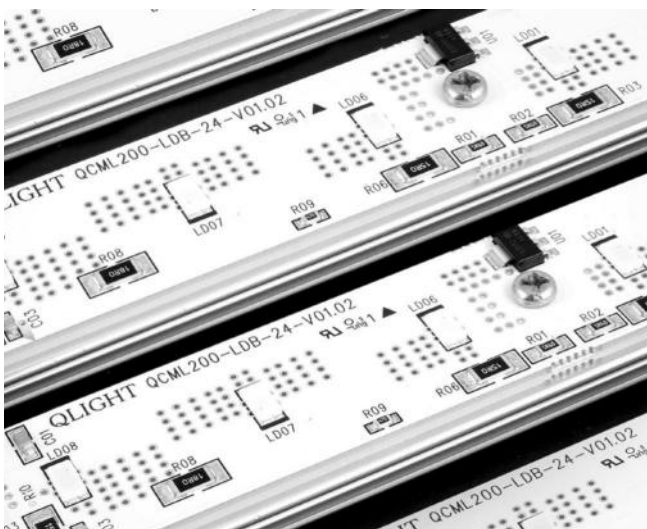
### LED

The LED is a light emitting diode which emits light by injecting a current in the PN junction of the special semiconductor, semiconductors such as GaAs, GaP that Maximizes the electro-optical conversion effects are used. Like other semiconductors, over-voltage or ambient temperature affects the lifetime, but due to the absence of mechanical abrasion of the part, LED is shock/ vibration resistant so there is no need for proper seismic design. The standard service life of an LED is about 50,000 hours.

### Xenon Lamp

Xenon lamp is a flash type light source that emits bright light instantly by inserting high energy into the lamp. Compared with the steady type lamp, xenon lamps need a lot of input power instantly and a extremely large amount of light it is diffused.

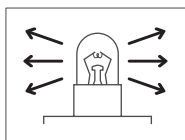
The lamp is filled with xenon(Xe) gas due to the convenience of the production(choice of materials), its use, xenon lamp was named after the xenon gas that it uses. xenon lamps are also resistant to vibration due to its mounting method. In addition, it is visible even in bright environments not only because the spectacle distribution of the visible light is close to the sunlight, it uses the same method as the strobe of the camera.



# Warning Light/Indicator Light Operating Principle

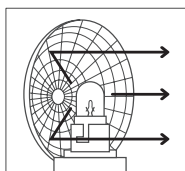
## SELECTION OF WARNING LIGHT

The selection of signaling devices will depend on the particular situation and environment.



### Bulb Steady/Flashing Type

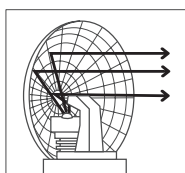
Highly diffusible light bulb that refracts light through a special lens and can be used in a steady or flashing state



### Bulb Revolving Type

By combining a highly diffusible light bulb and a reflector, light is reflected in a parallel beam with a rotating cycle

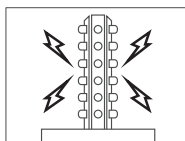
Our bulb revolving model has a long lifetime enabled by using a high durability bulb and a power transfer system that minimizes noise and abrasion



### LED Revolving Type

The combination of an LED and a reflector creates a parallel light beam with a rotating cycle

LED Rotating model with reflector adopts a special light distribution and multiple reflection system that is obtained a patent by Qlight can emit the light intensively and evenly as same as a bulb rotating type with reflector. (Patent No.: 10-0889803, 10-0808669 and 20-2008-0002489)

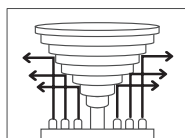


### LED Strobe-Type

By shortening the LED flashing period and supplying the maximum current to the LED, It produces a flash effect just like the xenon lamp

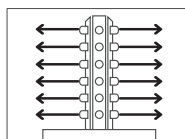




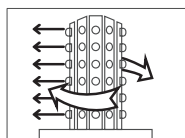


#### LED Steady/Flashing Type

The indirect light distribution system uses a special structure to radiate a uniform light signal throughout the entire body of the lens by using a multi-stage reflector

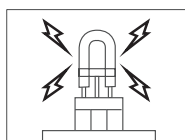


The direct light distribution system uses a high-intensity LED light and diffusion lens to transfer signal over a long distance. Qlight LED lights / flashing lights are equipped with two structures depending on the model type, Steady or Flashing Type



#### LED Simulated Revolving Type

By uniformly arranging the LED lens in a 360 degree circumferential direction, it will produce a flash in a regular rotating sequence. The visual effect looks just the same as the revolving model



#### Xenon Lamp Strobe-Type

An intensive flashing light emitting model with short term energy consumption that can highly attract worker's attention. Better shock resistance than a conventional bulb and weaker than LED.

Since it adopts intensive xenon lamp light emitting into lens design, it can emit intensive signal light in all directions of the lens.

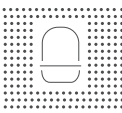
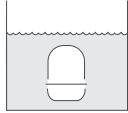


# Waterproof and Dustproof Protection Structure

## Comparing waterproof & dustproof protection structure

IP rating \_ Known as "Ingress Protection rating" indicated in two-digit code showing the amount of protection against solid and the liquid(IEC60529)

# IP 6 7

| First Number             |                                                                                     | Second Number                                                                   |   |                                                                                       |                                                                                                     |
|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Protection against solid |                                                                                     | Protection against liquid                                                       |   |                                                                                       |                                                                                                     |
| 0                        |    | No protection                                                                   | 0 |    | No protection                                                                                       |
| 1                        |    | Protected against solid objects over 50mm, eg accidental touch by persons hands | 1 |    | Protection against vertically falling drops of water eg condensation                                |
| 2                        |    | Protected against solid objects over 125mm, eg persons fingers                  | 2 |    | Protection against direct sprays of water up to 15° from the vertical                               |
| 3                        |  | Protected against solid objects over 25mm (tools and wires)                     | 3 |  | Protected against direct sprays of water up to 60° from the vertical                                |
| 4                        |  | Protected against solid objects over 1mm (tools, wires, and small wires)        | 4 |  | Protection against water sprayed from all directions - limited ingress permitted                    |
| 5                        |  | Protected against dust limited ingress (no harmful deposit)                     | 5 |  | Protected against low pressure jets of water from all directions - limited ingress                  |
| 6                        |  | Totally protected against dust                                                  | 6 |  | Protected against temporary flooding of water, eg for use on ship decks - limited ingress permitted |
|                          |                                                                                     |                                                                                 | 7 |  | Protected against the effect of immersion between 15 cm and 1 m                                     |
|                          |                                                                                     |                                                                                 | 8 |  | Protects against long periods of immersion under pressure                                           |

## NEMA SIZE

National Electrical Manufacturers Associations standard for enclosure protection rating, NEMA1-6 and 11-13 type is applicable in Non-Hazardous Locations, NEMA 7-10 is applicable in Hazardous Locations

| Type | Usage place        | Environment         | Protection rating                                                                                                                                                                                                                |
|------|--------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Indoor Use         | Non-explosion proof | Intended for indoor use primarily to provide a degree of protection against limited amounts of falling dirt                                                                                                                      |
| 2    | Indoor Use         | Non-explosion proof | Intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt                                                                                                            |
| 3    | Outdoor Use        | Non-explosion proof | Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust; and damage from external ice formation                                                                                 |
| 3R   | Outdoor Use        | Non-explosion proof | Intended for outdoor use primarily to provide a degree of protection against rain, sleet; and damage from external ice formation, and must have a drain hole                                                                     |
| 3S   | Outdoor Use        | Non-explosion proof | Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust; and to provide for operation of external mechanisms when ice laden                                                     |
| 4    | Indoor/Outdoor Use | Non-explosion proof | Intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose directed water; and damage from external ice formation                                     |
| 4X   |                    | Non-explosion proof | Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose directed water; and damage from external ice formation                          |
| 5    | Indoor Use         | Non-explosion proof | Intended for indoor use primary to provide                                                                                                                                                                                       |
| 6    | Indoor/Outdoor Use | Non-explosion proof | Intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during occasional temporary submersion at a limited depth; and damage from external ice formation |
| 6P   |                    | Non-explosion proof | Intended for indoor or outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during prolonged submersion at a limited depth; and damage from external ice formation            |
| 7    | Outdoor Use        | Explosion proof     | Intended for indoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the NEC                                                                                                                          |
| 8    | Indoor/Outdoor Use | Explosion proof     | Intended indoor or outdoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the NEC                                                                                                                   |
| 9    | Indoor Use         | Explosion proof     | Intended for indoor use in locations classified as Class II, Groups E, F, and G, as defined in the NEC                                                                                                                           |
| 10   | Indoor/Outdoor Use | Explosion proof     | Are constructed to meet the applicable requirements of the Mine Safety and Health Administration (MSHA)                                                                                                                          |
| 11   | Indoor Use         | Non-explosion proof | Protection from the corrosive effects of liquids and gases by oil immersion                                                                                                                                                      |
| 12   | Indoor Use         | Non-explosion proof | Intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids                                                                                   |
| 12K  | Indoor Use         | Non-explosion proof | Intended knockouts are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non corrosive liquids                                                            |
| 13   | Indoor Use         | Non-explosion proof | Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil, and non-corrosive coolant                                                                                              |

## NEMA Ratings and IP Ratings Equivalency Chart

The chart below is for comparison between two enclosure ratings It is only for reference and these two rating standards are not exactly converted

| NEMA ENCLOSURE TYPE | IP ENCLOSURE TYPE |
|---------------------|-------------------|
| 1                   | IP20              |
| 2                   | IP22              |
| 3                   | IP55              |
| 4                   | IP66              |
| 4X                  | IP66              |
| 6                   | IP67              |
| 12                  | IP54              |
| 13                  | IP54              |

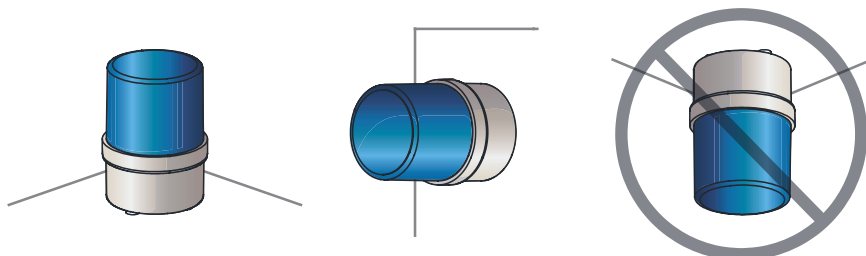
## PRODUCT INSTALLATION DIRECTION



Install the product in accordance with the manual. otherwise, rainwater or moisture may penetrate into the product.

### • BEACON/SIGNALING LIGHT

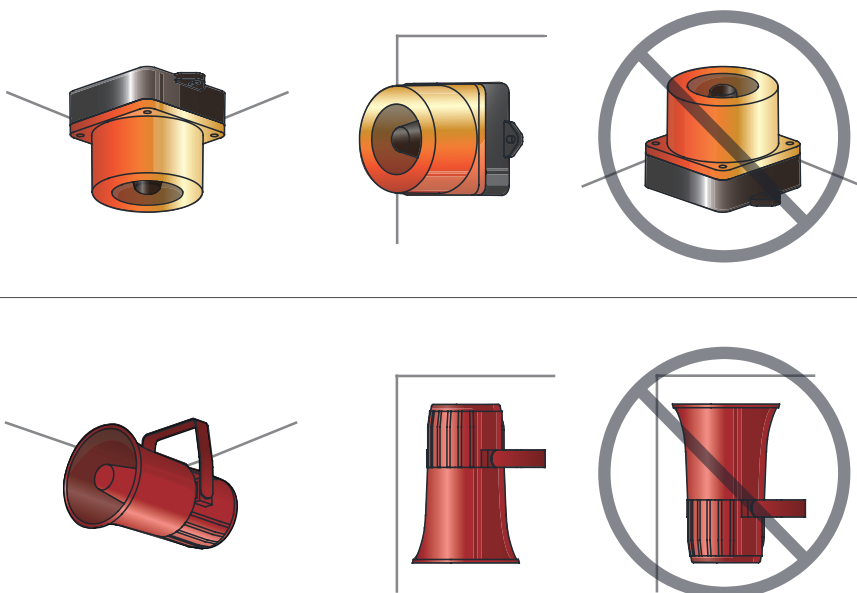
Power cord inlet part shall not be facing the sky.



※ For products with a protection rating of less than IPX4, please install it vertically.

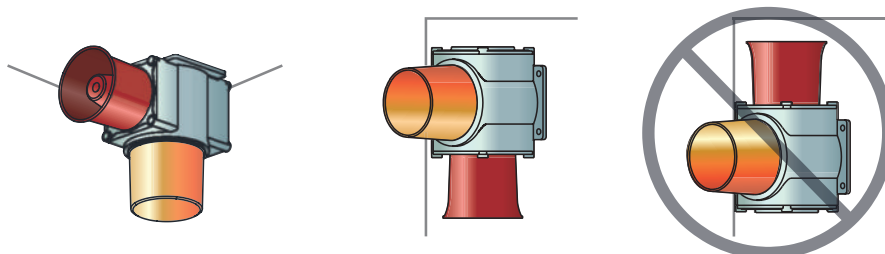
### • ELECTRONIC SOUNDER /SIGNAL HORN

Sounder part shall not be facing the sky.



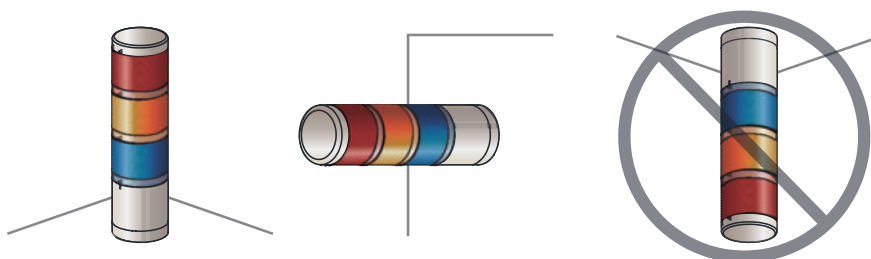
• **HEAVY-DUTY & EXPLOSION  
PROOF SIGNALINGS**

Sounder part shall not be facing the sky.



• **SIGNAL TOWER LIGHTS**

Power cord inlet part shall not be facing the sky.



※ For products with a protection rating of less than IPX4, please install it vertically.

# Pre-recorded Sound Tone and Sound Combination Chart

## The combination of sounds(General)

17 pre-recorded sound tones for standard type products

| Sound Number | Sound Tone              | Sound Number | Sound Tone        |
|--------------|-------------------------|--------------|-------------------|
| SND01        | Fire.A-ANG              | SND10        | Cuckoo's Waltz    |
| SND02        | Emergency WA-U(Yelp)    | SND11        | Piano Sonata      |
| SND03        | Ambulance PI-PO(Hi-low) | SND12        | Turkish March     |
| SND04        | Abandon Alarm           | SND13        | Beep Intermittent |
| SND05        | Machinery Fault         | SND14        | Door Chime        |
| SND06        | High Expansion          | SND15        | Phone Ring        |
| SND07        | 7 Short PI./1 Long      | SND16        | PI.PI.PI Short    |
| SND08        | Sweet Home              | SND17        | Tripping Beat     |
| SND09        | For Elise               |              |                   |

### • Standard sound combination for WS/WP/WM/WA type products

ON = 1/OFF = 0

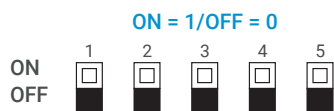
17 sounds per combination can be selected according to your preference.4 combinations are available.

| No. | 1 | 2 | 3 | Ch1                        | Ch2                     | Ch3                      | Ch4                      | Ch5                         |
|-----|---|---|---|----------------------------|-------------------------|--------------------------|--------------------------|-----------------------------|
| 0   | 0 | 0 | 0 | No sound                   |                         |                          |                          |                             |
| 1   | 0 | 0 | 1 | SND01<br>Fire.A-ANG        | SND02<br>Emergency WA-U | SND03<br>Ambulance PI-PO | SND05<br>Machinery Fault | SND06<br>High Expansion     |
| 2   | 0 | 1 | 0 | SND01<br>Fire.A-ANG        | SND04<br>Abandon Alarm  | SND05<br>Machinery Fault | SND06<br>High Expansion  | SND07<br>7 Short PI./1 Long |
| 3   | 0 | 1 | 1 | SND08<br>Sweet Home        | SND09<br>For Elise      | SND10<br>Cuckoo's Waltz  | SND11<br>Piano Sonata    | SND12<br>Turkish March      |
| 4   | 1 | 0 | 0 | SND13<br>Beep Intermittent | SND14<br>Door Chime     | SND15<br>Phone Ring      | SND16<br>PI.PI.PI Short  | SND17<br>Tripping Beat      |

※ You can select sound tones using the 3P switches located on the circuit board of the WS/WP/WM/WA Type products.



## Sound tone combinations for standard type products



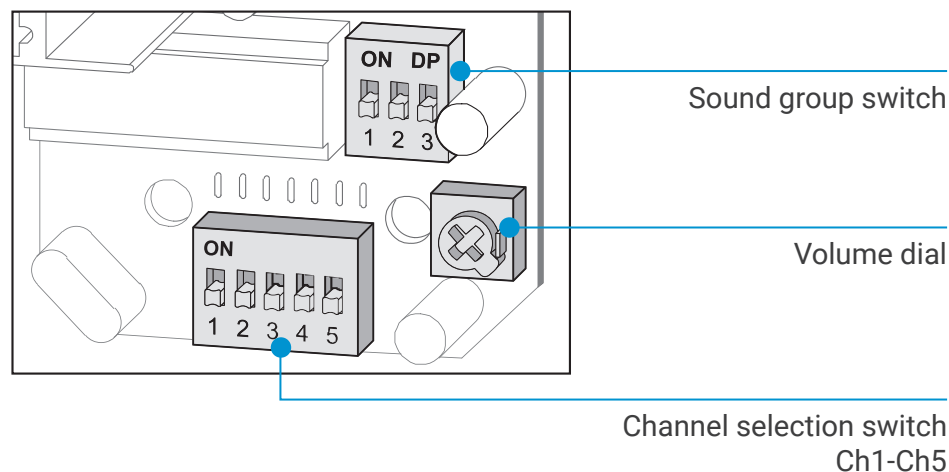
- 5 types of sounds (5 warning sounds (WS), 5 special warning sounds (WP), 5 melodies (WM), 5 alarms (WA), and 5 voice signals (WV) can be selected and played individually.
- The signal wire lead-out type product replaces the channel selection switch with external wiring.

| Sound Category |                          | Channel | Sound Tone                                                                       | Sound Combination # |
|----------------|--------------------------|---------|----------------------------------------------------------------------------------|---------------------|
| WS             | 5 warning sounds         | Ch1     | Fire.A-ANG                                                                       | WS/WP/WM/WA No.1    |
|                |                          | Ch2     | Emergency WA-U(Yelp)                                                             |                     |
|                |                          | Ch3     | Ambulance PI-PO(Hi-low)                                                          |                     |
|                |                          | Ch4     | Machinery Fault                                                                  |                     |
|                |                          | Ch5     | High Expansion                                                                   |                     |
| WP             | 5 special warning sounds | Ch1     | Fire.A-ANG                                                                       | WS/WP/WM/WA No.2    |
|                |                          | Ch2     | Abandon Alarm                                                                    |                     |
|                |                          | Ch3     | Machinery Fault                                                                  |                     |
|                |                          | Ch4     | High Expansion                                                                   |                     |
|                |                          | Ch5     | 7 Short PI./1 Long                                                               |                     |
| WM             | 5 melodies               | Ch1     | Sweet Home                                                                       | WS/WP/WM/WA No.3    |
|                |                          | Ch2     | For Elise                                                                        |                     |
|                |                          | Ch3     | Cuckoo's Waltz                                                                   |                     |
|                |                          | Ch4     | Piano Sonata                                                                     |                     |
|                |                          | Ch5     | Turkish March                                                                    |                     |
| WA             | 5 alarms                 | Ch1     | Beep Intermittent                                                                | WS/WP/WM/WA No.4    |
|                |                          | Ch2     | Door Chime                                                                       |                     |
|                |                          | Ch3     | Phone Ring                                                                       |                     |
|                |                          | Ch4     | PI.PI.PI Short                                                                   |                     |
|                |                          | Ch5     | Tripping Beat                                                                    |                     |
| WV             | 5 customizable sound     | Ch1     | 1. Voice messages are pre-recorded and provided from factory upon user's request | -                   |
|                |                          | Ch2     | 2. Each channel has recording space for 16 sec                                   |                     |
|                |                          | Ch3     | 3. 5 channels available                                                          |                     |
|                |                          | Ch4     | 4. When only one channel is used, maximum recordable space is 80 sec             |                     |
|                |                          | Ch5     |                                                                                  |                     |

※ Please refer to [Pre-recorded Sound Tone and Sound Combination Chart] for detailed information about selectable sound patterns.

※ In case of customized WV 5 tone type, there may be difference of volume depending on user's audio file type.

## Sound Selection of Signal Sounds

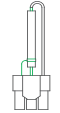
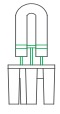
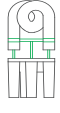


- Standard specification : Use internal switches Turn on dip switches of each channel, designated sound will be played.

## Bulb Specification

The table below summarizes bulb specifications that are equipped with Qlight's products. Please carefully review the bulb specification in case bulb replacement is needed. Otherwise it may cause part malfunction.

| Layout                                                                              | Part# | Feature    | Spec         | Voltage | Current | Product                                                          |
|-------------------------------------------------------------------------------------|-------|------------|--------------|---------|---------|------------------------------------------------------------------|
|    | 1     | 14V / 5W   | G14 9S       | 12V     | 0.357A  | S50, ST45                                                        |
|                                                                                     | 2     | 27V / 5W   | G14 9S       | 24V     | 0.185A  |                                                                  |
|    | 3     | 120V / 5W  | T16 x 28 9S  | 110V    | 0.042A  | S50, ST45                                                        |
|                                                                                     | 4     | 240V / 5W  | T16 x 28 9S  | 220V    | 0.021A  |                                                                  |
|    | 5     | 12V / 5W   | T16 x 35 15S | 12V     | 0.417A  | S60, S80, SR<br>SJ, SJD                                          |
|                                                                                     | 6     | 24V / 5W   | T16 x 35 15S | 24V     | 0.208A  |                                                                  |
|    | 7     | 120V / 5W  | T16 x 35 15D | 110V    | 0.042A  | S60                                                              |
|                                                                                     | 8     | 240V / 5W  | T16 x 35 15D | 220V    | 0.021A  |                                                                  |
|    | 9     | 12V / 10W  | T16 x 35 15S | 12V     | 0.833A  | S100, S125<br>SE<br>ST56, ST80                                   |
|                                                                                     | 10    | 24V / 10W  | T16 x 35 15S | 24V     | 0.417A  |                                                                  |
|                                                                                     | 11    | 48V / 10W  | T16 x 35 15S | 48V     | 0.208A  |                                                                  |
|    | 12    | 120V / 10W | T16 x 35 15S | 110V    | 0.083A  | S100, S125<br>ST56, ST80                                         |
|                                                                                     | 13    | 240V / 10W | T16 x 35 15S | 220V    | 0.042A  |                                                                  |
|  | 14    | 48V / 10W  | T16 x 35 15D | 48V     | 0.208A  |                                                                  |
|                                                                                     | 15    | 120V / 10W | T16 x 35 15D | 110V    | 0.083A  |                                                                  |
|                                                                                     | 16    | 240V / 10W | T16 x 35 15D | 220V    | 0.042A  |                                                                  |
|  | 17    | 12V / 15W  | G23 15S      | 12V     | 1.250A  | SK, S150, SH1, SH2, SED<br>SD, SHD, SHD2<br>SMD, SESA, SEBA, SEA |
|                                                                                     | 18    | 24V / 15W  | G23 15S      | 24V     | 0.625A  |                                                                  |
|                                                                                     | 19    | 48V / 15W  | G23 15S      | 48V     | 0.313A  |                                                                  |
|  | 20    | 120V / 15W | G23 15S      | 110V    | 0.125A  |                                                                  |
|                                                                                     | 21    | 240V / 15W | G23 15S      | 220V    | 0.063A  |                                                                  |
|  | 22    | 120V / 15W | G23 15D      | 110V    | 0.125A  | S150, SH1, SH2, SED<br>SD, SHD, SHD2<br>SMD, SESA, SEBA, SEA     |
|                                                                                     | 23    | 240V / 15W | G23 15D      | 220V    | 0.063A  |                                                                  |
|  | 24    | 12V / 23W  | S25 15S      | 12V     | 1.916A  | S150, SH2, SD, SMD<br>SESA, SEBA, SEA                            |
|                                                                                     | 25    | 24V / 23W  | S25 15S      | 24V     | 0.958A  |                                                                  |
|  | 26    | 48V / 25W  | T23 x 62 15D | 48V     | 0.521A  | S150, SH2, SD, SMD<br>SESA, SEBA, SEA                            |
|                                                                                     | 27    | 120V / 25W | T23 x 62 15D | 110V    | 0.208A  |                                                                  |
|                                                                                     | 28    | 240V / 25W | T23 x 62 15D | 220V    | 0.104A  |                                                                  |
|  | 29    | 12V / 35W  | RP35 15S     | 12V     | 2.917A  | S180                                                             |
|                                                                                     | 30    | 24V / 35W  | RP35 15S     | 24V     | 1.458A  |                                                                  |

| Layout                                                                              | Part# | Feature    | Spec                                          | Voltage | Current | Product                                                                                                                           |
|-------------------------------------------------------------------------------------|-------|------------|-----------------------------------------------|---------|---------|-----------------------------------------------------------------------------------------------------------------------------------|
|    | 31    | 120V / 35W | RP35 15D                                      | 110V    | 0.292A  | S180                                                                                                                              |
|                                                                                     | 32    | 240V / 35W | RP35 15D                                      | 220V    | 0.146A  |                                                                                                                                   |
|    | 33    | 110V / 60W | E26 ES                                        | 110V    | 0.545A  | S150, SH2, SD, SMD<br>SESA, SE, SEBA, SEA                                                                                         |
|                                                                                     | 34    | 220V / 60W | E26 ES                                        | 220V    | 0.272A  |                                                                                                                                   |
|    | 35    | 12V / 30W  | A60 E26                                       | 12V     | 2.500A  | S150, SH2<br>SD, SMD                                                                                                              |
|                                                                                     | 36    | 24V / 60W  | A60 E26                                       | 220V    | 2.500A  |                                                                                                                                   |
|    | 37    | 110V / 60W | A60 E26                                       | 110V    | 0.545A  | S150, SH2<br>SD, SMD                                                                                                              |
|                                                                                     | 38    | 220V / 60W | A60 E26                                       | 220V    | 0.272A  |                                                                                                                                   |
|    | 39    | 12V / 35W  | 15S Halogen                                   | 12V     | 2.917A  | SKH                                                                                                                               |
|                                                                                     | 40    | 24V / 35W  | 15S Halogen                                   | 24V     | 1.458A  |                                                                                                                                   |
|    | 41    | 110V / 35W | 15D Halogen                                   | 110V    | 0.318A  | S150, SH2, SD, SMD<br>SESA, SE, SEBA, SEA                                                                                         |
|                                                                                     | 42    | 220V / 35W | 15D Halogen                                   | 220V    | 0.159A  |                                                                                                                                   |
|  | 43    | 12V / 55W  | 15D Halogen                                   | 12V     | 4.583A  | S150, SH2, SD, SMD<br>SESA, SE, SEBA, SEA                                                                                         |
|                                                                                     | 44    | 24V / 55W  | 15D Halogen                                   | 24V     | 2.292A  |                                                                                                                                   |
|  | 45    | 120V / 55W | 15D Halogen                                   | 110V    | 0.458A  | S150, SH2, SD, SMD<br>SESA, SE, SEBA, SEA                                                                                         |
|                                                                                     | 46    | 240V / 55W | 15D Halogen                                   | 220V    | 0.229A  |                                                                                                                                   |
|  | 47    | 220V-350V  | BGA2120<br>-BBC<br><br>I Type<br>xenon lamp   |         | 4W      | S80S, S80AS<br>SNE-S, SNES-S, SE-S                                                                                                |
|  | 48    | 200V-550V  | EUB0641<br>-1A(G)<br><br>U Type<br>xenon lamp |         | 6W      | S100S, S125S<br>S150US, S150RS<br>SJS, SJSP<br>SH1S, SH2S<br>SEDS, SDS, SMDs<br>SHDS, SHD2S<br>SCDWS, SCDFS<br>SESAS, SEBAS, SEAS |
|  | 49    | 280V-400V  | BH0647(G)<br><br>W Type<br>xenon lamp         |         | 16W     | S180US, S180UHS                                                                                                                   |

# Tower Light Mounting brackets

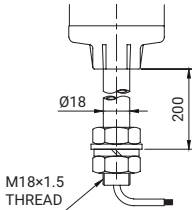
User can select from a variety of Mounting brackets options depending on their application conditions.

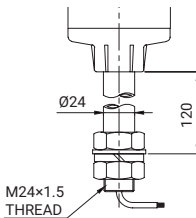
Units: mm

- **18mm SCREW & NUT (Standard Type)**
- **24mm SCREW & NUT (Standard Type)**

Standard type pole mount installation.  
There is a screw at the end of the pole  
and it is equipped with nut for installation.

Material: Steel

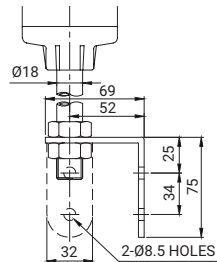
| Product Image                                                                                                                     | Technical Diagram for Applicable Models                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>18mm SCREW &amp; NUT<br/>(Standard Type)</p> |  <p>ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series</p> |

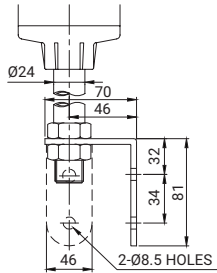
|                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>24mm SCREW &amp; NUT<br/>(Standard Type)</p> |  <p>ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series</p> |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- **LB18 | LB24**

L-type bracket is attached to the pole  
mount tower light for installation to the  
side of the equipment.

Material: Steel

| Product Image                                                                                   | Technical Diagram for Applicable Models                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>LB18</p> |  <p>ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series</p> |

|                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>LB24</p> |  <p>ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series</p> |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# Tower Light Mounting brackets

Units: mm

## • LW18 | LW24

High-end L-type bracket is attached to the pole mount tower light for side of equipment installations. Wires can be threaded through the side of the bracket or come out at the bottom. The threads inside the bottom of the bracket can enable use of cable connectors.

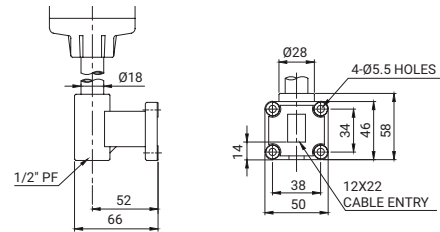
Material: ABS  
Color: Ivory

### Product Image



LW18

### Technical Diagram for Applicable Models

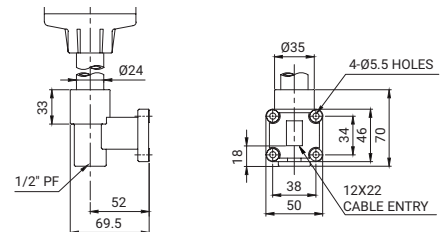


ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series

### Product Image



LW24



ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series

### Technical Diagram for Applicable Models

## • SZ18 | SZ24

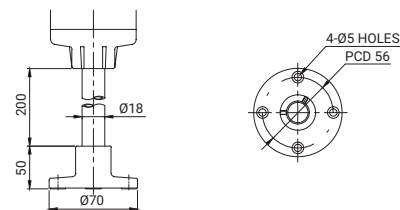
Round-shaped bracket for horizontal surface installation.

Material: Al  
Color: Silver

### Product Image



SZ18

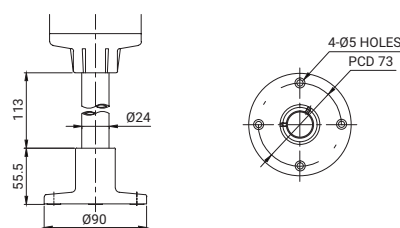


ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series

### Product Image



SZ24



ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series

# Tower Light Mounting brackets

Units: mm

## • QZ18 | QZ24

Round-shaped bracket for horizontal surface installation.

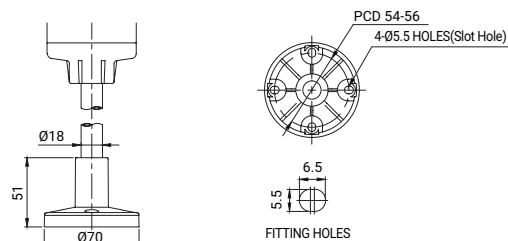
Material: ABS  
Color: Black

### Product Image



QZ18

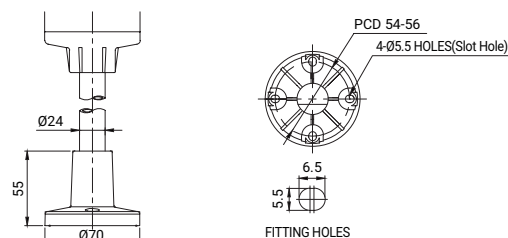
### Technical Diagram for Applicable Models



ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series



QZ24



ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series

## • SL18 | SL24

An angle adjustable bracket (15 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.

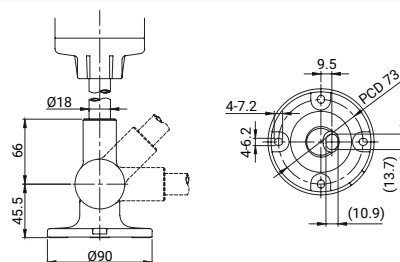
Material: Al  
Color: Silver

### Product Image



SL18

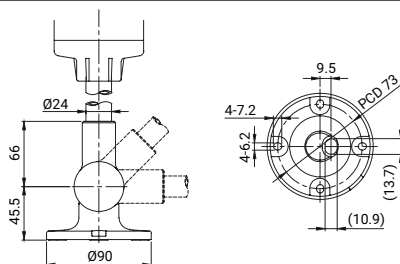
### Technical Diagram for Applicable Models



ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series



SL24



ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series

# Tower Light Mounting brackets

Units: mm

## • QL18 | QL24

An angle adjustable bracket (5 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.

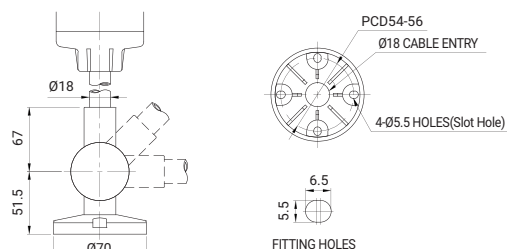
Material: ABS  
Color: Black

Product Image



QL18

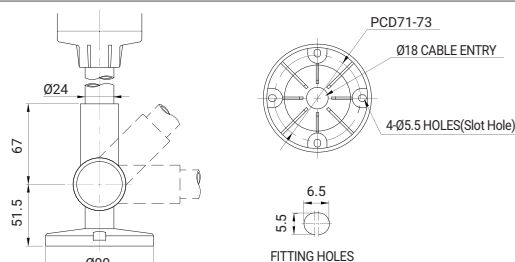
Technical Diagram for Applicable Models



ST45 / ST56 Series, STG40 / STG50 Series, STC45 / STC56 Series, QTG50 / QTG60 Series, QTC50 / QTC60 Series, QTR50 / QTR60 Series, QT50 Series, QTG60-WIZ Series, MTG50 / MTG60 Series, MTC50 / MTC60 Series, MTR50 / MTR60 Series, EST56 Series, ST45 / ST56-ETN Series, QTG50 / QTG60-ETN Series, QTC50 / QTC60-ETN Series, QTR50 / QTR60-ETN Series, ST45 / ST56-USB Series, QTG50 / QTG60-USB Series, QTC50 / QTC60-USB Series, QTR50 / QTR60-USB Series



QL24



ST80 Series, STC80 Series, QTG70 Series, QTC70 Series, QTR70 Series, QT70 Series, QTG70-WIZ Series, MTG70 Series, MTC70 Series, MTR70 Series, QAT80 Series, ST80-ETN Series, QTG70-ETN Series, QTC70-ETN Series, QTR70-ETN Series, ST80-USB Series, QTG70-USB Series, QTC70-USB Series, QTR70-USB Series

## • FB18

An angle adjustable bracket (5 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.

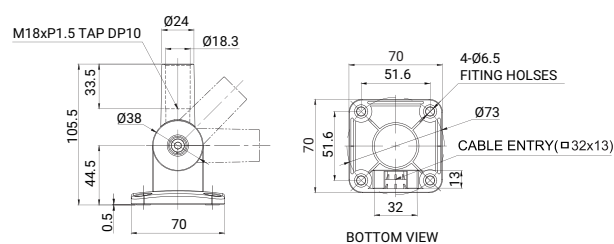
Material: ABS  
Color: Black, Ivory

Product Image



FB18  
(Black)

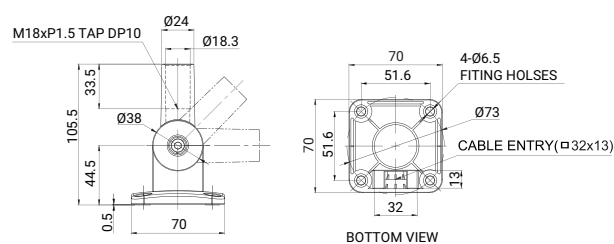
Technical Diagram for Applicable Models



EST56L



FB18  
(Ivory)



EST56L



# Tower Light Mounting brackets

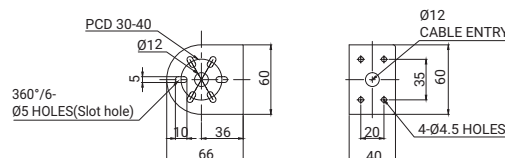
Units: mm

## • TWS45 | TWS80

Bracket options for direct mount warning/  
signal light installation.  
Material: Steel  
Color: Silver, Ivory



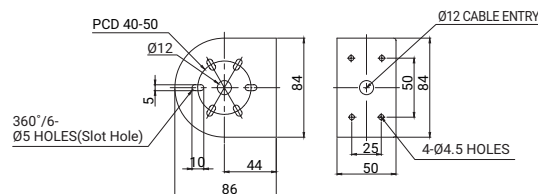
TWS45



ST45 / ST56M Series, STG40 / STG50M Series, STC45 / STC56M Series, QTG50 / QTG60M Series, QTC50M / QTC60M Series, QTR50 / QTR60M Series, QT50M Series, QTG60M-WIZ Series, MTG50 / MTG60M Series, MTC50 / MTC60M Series, MTR50 / MTR60M Series, QTG50 / QTG60M-USB Series, QTC50 / QTC60M-USB Series, QTR50 / QTR60M-USB Series, QTG50 / QTG60M-ETN Series, QTC50 / QTC60M-ETN Series, QTR50 / QTR60M-ETN Series



TWS80



ST80M Series, STC80 Series, QTG70M Series, QTC70M Series, QTR70M Series, MTG70M Series, MTC70M Series, MTR70M Series, QT70M Series, QTG70M-USB Series, QTC70M-USB Series, QTR70M-USB Series, QTG70M-ETN Series, QTC70M-ETN Series, QTR70M-ETN Series, QTG70M-WIZ Series

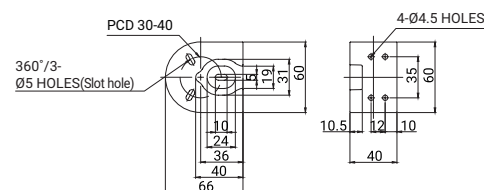
## • TWA45 | TWA80

Bracket options for direct mount warning/  
signal light installation.  
Bracket structure allows for contained  
and tidy wiring with no exposed wires.

Material: PC  
Color: Black, Ivory



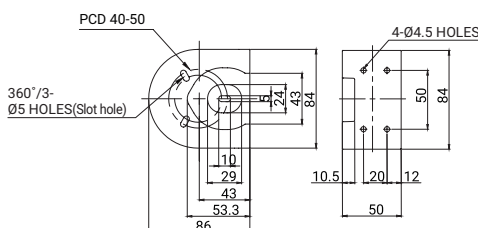
TWA45



ST45 / ST56M Series, STG40 / STG50M Series, STC45 / STC56M Series, QTG50 / QTG60M Series, QTC50M / QTC60M Series, QTR50 / QTR60M Series, QT50M Series, QTG60M-WIZ Series, MTG50 / MTG60M Series, MTC50 / MTC60M Series, MTR50 / MTR60M Series, QTG50 / QTG60M-USB Series, QTC50 / QTC60M-USB Series, QTR50 / QTR60M-USB Series, QTG50 / QTG60M-ETN Series, QTC50 / QTC60M-ETN Series, QTR50 / QTR60M-ETN Series



TWA80



ST80M Series, STC80 Series, QTG70M Series, QTC70M Series, QTR70M Series, MTG70M Series, MTC70M Series, MTR70M Series, QT70M Series, QTG70M-USB Series, QTC70M-USB Series, QTR70M-USB Series, QTG70M-ETN Series, QTC70M-ETN Series, QTR70M-ETN Series, QTG70M-WIZ Series

# Tower Light Mounting brackets

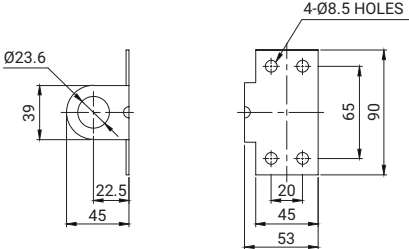
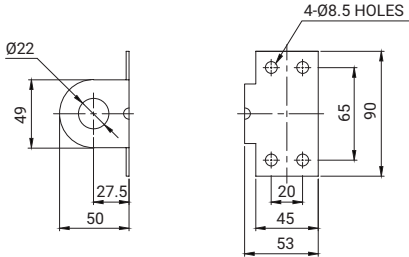


## • STAWB25 | STAWB45

Bracket options for direct mount warning/  
signal light installation.

Material: Steel  
Color: Silver, Ivory

Units: mm

| Product Image                                                                      | Technical Diagram for Applicable Models                                             |  |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|   |   |  |
| STAWB25                                                                            | STA25SLM, STA35SL, STA35SLM                                                         |  |
|  |  |  |
| STAWB45                                                                            | STA45SLM                                                                            |  |

## Icon Description

This catalogue helps users quickly identify the product's specifications and features by using several types of icons. If you understand the concept for each icon, you will find it easy to understand the catalogue information.

### Light Source and Operating Mode Icons

| Icon                                                                              | Operating Mode               | Icon                                                                              | Operating Mode            |
|-----------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------|---------------------------|
|  | Bulb steady type             |  | Bulb steady/flashing type |
|  | Bulb revolving type          |  | LED revolving type        |
|  | LED steady type              |  | LED steady/flashing type  |
|  | LED simulated revolving type |  | LED strobe type           |
|  | Xenon lamp strobe type       |                                                                                   |                           |

### Acoustic Signal Icons

| Icon                                                                                | Siren       | Icon                                                                                | Siren   |
|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|---------|
|  | Buzzer      |  | Speaker |
|  | Horn        |  | Bell    |
|  | Motor siren |  | MP3     |
|  | Volume(dB)  |                                                                                     |         |

### Specifications Icons

| Icon                                                                                | Specification       | Icon                                                                                | Specification                 |
|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|-------------------------------|
|  | Magnet type         |  | Ambient operating temperature |
|  | NPN type transistor |  | PNP type transistor           |
|  | IP rating           |  | Wireless Network              |
|  | RoHS                |                                                                                     |                               |

# Signal Tower Lights



# References for Signal Tower Lights



| Model number             | STA25SLM                                        | STA35SL                | STA35SLM              | STA45SLM                                  | STA45SLMP                                 | QTA56L                                        |
|--------------------------|-------------------------------------------------|------------------------|-----------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V, AC220V                  | DC12V<br>DC24V         | DC12V<br>DC24V        | DC12V<br>DC24V                            | DC12V<br>DC24V                            | DC24V                                         |
| Outdia                   | Ø25                                             | Ø35                    | Ø35                   | Ø45                                       | Ø45                                       | Ø45                                           |
| Height                   | 368-488                                         | 85-265                 | 205-385               | 198-378                                   | 398-578                                   | 433                                           |
| Depth                    |                                                 |                        |                       |                                           |                                           |                                               |
| Material                 | Lens-AS<br>Housing-AI                           | Lens-AS<br>Housing-ABS | Lens-AS<br>Housing-AI | Lens-Acryl<br>Inner lens-AS<br>Housing-AI | Lens-Acryl<br>Inner lens-AS<br>Housing-AI | Lens-PC<br>Housing-AI                         |
| Layers                   | 1-5 Layers                                      | 1-5 Layers             | 1-5 Layers            | 1-5 Layers                                | 1-5 Layers                                | 3 Layers                                      |
| Light source & Operation | LED Steady                                      | ●                      | ●                     | ●                                         | ●                                         | ●                                             |
| Sound & Volume           | 1 buzzer sound                                  | -                      | -                     | Max.90dB at 1m                            | Max.90dB at 1m                            | Max.85dB at 1m                                |
| Layer color change       | No                                              | No                     | No                    | No                                        | No                                        | No                                            |
| Mount bracket            | Direct mount                                    | Direct mount           | Direct mount          | Direct mount                              | Pole mount                                | Pole mount                                    |
| Bracket                  | STAWB25                                         | STAWB25                | STAWB25               | STAWB45                                   | LB18, LW18, QZ18,<br>SZ18, QL18, SL18     |                                               |
| Protection rating        | IP44                                            | IP44                   | IP44                  | IP23(Buzzer type)<br>IP44(Standard)       | IP23(Buzzer type)<br>IP44(Standard)       | IP23(Buzzer type)<br>IP44(Standard)           |
| Usage place              | Indoor Use                                      | Indoor Use             | Indoor Use            | Indoor Use                                | Indoor Use                                | Indoor Use                                    |
| Certificates             | CE, UL                                          | CE                     | CE                    | CE, UL                                    | CE, UL                                    | CE                                            |
| Customization            | Same lens color with LED,<br>Wall mount bracket | Wall mount bracket     | Wall mount bracket    | Wall mount bracket                        | Pole length adjustment                    | Pole mount,<br>M12 connector attached<br>type |
| Transistor               | NPN/ PNP type                                   | NPN/ PNP type          | NPN/ PNP type         | NPN/ PNP type                             | NPN/ PNP type                             | NPN/ PNP type                                 |
| Page                     | P32                                             | P33                    | P34                   | P35                                       | P36                                       | P38                                           |



| Model number             | QAT80L / QAT80ML                      | SWT / SWTE                                                                     | QWT                             | MWTL                 | ST45ML                                                                                      | ST45L                                                                                           |
|--------------------------|---------------------------------------|--------------------------------------------------------------------------------|---------------------------------|----------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Voltage                  | DC12V-24V                             | DC12V-24V<br>AC110V, AC220V                                                    | DC12V, DC24V<br>AC110V-AC220V   | DC24V                | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                        | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                            |
| Outdia                   | Ø80                                   | Ø90(Half)                                                                      | Ø70                             | Ø90(Half)            | Ø45                                                                                         | Ø45                                                                                             |
| Height                   | 269-430                               | 216                                                                            | 121-285                         | 216                  | 106-358                                                                                     | 320-572                                                                                         |
| Depth                    |                                       | 46                                                                             |                                 | 39                   |                                                                                             |                                                                                                 |
| Material                 | Lens-PC<br>Housing-PA66               | Lens-PC<br>Cover-ABS                                                           | Lens-PC<br>Housing-ABS          | Lens-PC<br>Cover-ABS | Lens-AS<br>Housing-ABS                                                                      | Lens-AS<br>Housing-ABS                                                                          |
| Layers                   | 3 Layers                              | 2-3 Layers                                                                     | 1-5 Layers                      | 4 Layers             | 1-5 Layers                                                                                  | 1-5 Layers                                                                                      |
| Light source & Operation | Bulb Steady/Flashing                  | ●                                                                              | ●                               | ●                    | ●                                                                                           | ●                                                                                               |
| LED Steady/Flashing      | ●                                     | ●                                                                              | ●                               | ●                    | ●                                                                                           | ●                                                                                               |
| Sound & Volume           | 1 buzzer sound                        | Max.95dB at 1m                                                                 | Max.90dB at 1m                  | Max.90dB at 1m       | Max.90dB at 1m                                                                              | Max.90dB at 1m                                                                                  |
| Signal sounds            |                                       |                                                                                |                                 |                      | Max.85dB at 1m                                                                              | Max.85dB at 1m                                                                                  |
| Layer color change       | No                                    | No                                                                             | Yes                             | No                   | Yes                                                                                         | Yes                                                                                             |
| Mount bracket            | Direct mount, Pole mount              | Wall mount                                                                     | Wall mount                      | Wall mount           | Direct mount                                                                                | Pole mount                                                                                      |
| Bracket                  | LB24, LW24, QZ24,<br>SZ24, QL24, SL24 | -                                                                              | -                               | -                    | TWS45, TWA45                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                           |
| Protection rating        | IP65                                  | IP55                                                                           | IP54                            | IP55                 | IP23(Buzzer type)<br>IP44(Standard)                                                         | IP23(Buzzer type)<br>IP44(Standard)                                                             |
| Usage place              | Indoor/Outdoor Use                    | Indoor Use                                                                     | Indoor Use                      | Indoor Use           | Indoor Use                                                                                  | Indoor Use                                                                                      |
| Certificates             | CE                                    | CE, UL                                                                         | CE, UL                          | CE                   | CE, UL                                                                                      | CE, UL                                                                                          |
| Customization            | -                                     | Customized color<br>combination,<br>2 buzzer sounds,<br>Transparent inner lens | Customized color<br>combination | -                    | 2 buzzer sounds, Wall<br>mount bracket,<br>AC each layer power<br>supplied, DC24V UL listed | 2 buzzer sounds, Pole<br>length adjustment, AC<br>each layer power supplied,<br>DC24V UL listed |
| Transistor               | -                                     | NPN/ PNP type                                                                  | NPN/ PNP type                   | NPN/ PNP type        | NPN/ PNP type                                                                               | NPN/ PNP type                                                                                   |
| Page                     | P40-41                                | P42                                                                            | P44                             | P46                  | P58                                                                                         | P59                                                                                             |

# References for Signal Tower Lights



| Model number             | ST56MEL                                                                                     | ST56EL                                                                                          | ST56ML                                                                                      | ST56L                                                                                           | ST80MEL                                                                                     | ST80EL                                                                                          |
|--------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Voltage                  | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                        | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                            | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                        | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                            | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                        | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                            |
| Outdia                   | Ø56                                                                                         | Ø56                                                                                             | Ø56                                                                                         | Ø56                                                                                             | Ø80                                                                                         | Ø80                                                                                             |
| Height                   | 127-352                                                                                     | 341-566                                                                                         | 157-502                                                                                     | 371-716                                                                                         | 150-310                                                                                     | 287-447                                                                                         |
| Depth                    |                                                                                             |                                                                                                 |                                                                                             |                                                                                                 |                                                                                             |                                                                                                 |
| Material                 | Lens-AS<br>Housing-ABS                                                                      | Lens-AS<br>Housing-ABS                                                                          | Lens-AS<br>Housing-ABS                                                                      | Lens-AS<br>Housing-ABS                                                                          | Lens-AS<br>Housing-ABS                                                                      | Lens-AS<br>Housing-ABS                                                                          |
| Layers                   | 1-5 Layers                                                                                  | 1-5 Layers                                                                                      | 1-5 Layers                                                                                  | 1-5 Layers                                                                                      | 1-5 Layers                                                                                  | 1-5 Layers                                                                                      |
| Light source & Operation | LED Steady/Flashing                                                                         | ●                                                                                               | ●                                                                                           | ●                                                                                               | ●                                                                                           | ●                                                                                               |
| Sound & Volume           | 1 buzzer sound                                                                              | Max.90dB at 1m                                                                                  | Max.90dB at 1m                                                                              | Max.90dB at 1m                                                                                  | Max.90dB at 1m                                                                              | Max.90dB at 1m                                                                                  |
|                          | Signal sounds                                                                               | Max.85dB at 1m                                                                                  | Max.85dB at 1m                                                                              | Max.85dB at 1m                                                                                  | Max.85dB at 1m                                                                              | Max.85dB at 1m                                                                                  |
| Layer color change       | Yes                                                                                         | Yes                                                                                             | Yes                                                                                         | Yes                                                                                             | Yes                                                                                         | Yes                                                                                             |
| Mount bracket            | Direct mount                                                                                | Pole mount                                                                                      | Direct mount                                                                                | Pole mount                                                                                      | Direct mount                                                                                | Pole mount                                                                                      |
| Bracket                  | TWS45, TWA45                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                           | TWS45, TWA45                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                           | TWS80, TWA80                                                                                | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                           |
| Protection rating        | IP23(Buzzer type)<br>IP44(Standard)                                                         | IP23(Buzzer type)<br>IP44(Standard)                                                             | IP23(Buzzer type)<br>IP44(Standard)                                                         | IP23(Buzzer type)<br>IP44(Standard)                                                             | IP23(Buzzer type)<br>IP44(Standard)                                                         | IP23(Buzzer type)<br>IP44(Standard)                                                             |
| Usage place              | Indoor Use                                                                                  | Indoor Use                                                                                      | Indoor Use                                                                                  | Indoor Use                                                                                      | Indoor Use                                                                                  | Indoor Use                                                                                      |
| Certificates             | CE, UL                                                                                      | CE, UL                                                                                          | CE, UL                                                                                      | CE, UL                                                                                          | CE, UL                                                                                      | CE, UL                                                                                          |
| Customization            | 2 buzzer sounds, Wall<br>mount bracket,<br>AC each layer power<br>supplied, DC24V UL listed | 2 buzzer sounds, Pole<br>length adjustment, AC<br>each layer power supplied,<br>DC24V UL listed | 2 buzzer sounds, Wall<br>mount bracket,<br>AC each layer power<br>supplied, DC24V UL listed | 2 buzzer sounds, Pole<br>length adjustment, AC<br>each layer power supplied,<br>DC24V UL listed | 2 buzzer sounds, Wall<br>mount bracket,<br>AC each layer power<br>supplied, DC24V UL listed | 2 buzzer sounds, Pole<br>length adjustment, AC<br>each layer power supplied,<br>DC24V UL listed |
| Transistor               | NPN/ PNP type                                                                               | NPN/ PNP type                                                                                   | NPN/ PNP type                                                                               | NPN/ PNP type                                                                                   | NPN/ PNP type                                                                               | NPN/ PNP type                                                                                   |
| Page                     | P61                                                                                         | P62                                                                                             | P64                                                                                         | P65                                                                                             | P67                                                                                         | P68                                                                                             |

## Multiple Color LED Signal Tower Lights



| Model number             | STC45ML                                                                                                                  | STC45L                                                                                                                       | STC56ML                                                                                                                                       | STC56L                                                                                                                                            | STC80ML                                                                                                                                       | STC80L                                                                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V, AC220V                                                                                           | DC12V, DC24V<br>AC110V, AC220V                                                                                               | DC12V, DC24V<br>AC110V, AC220V                                                                                                                | DC12V, DC24V<br>AC110V, AC220V                                                                                                                    | DC12V, DC24V<br>AC110V, AC220V                                                                                                                | DC12V, DC24V<br>AC110V, AC220V                                                                                                                    |
| Outdia                   | Ø45                                                                                                                      | Ø45                                                                                                                          | Ø56                                                                                                                                           | Ø56                                                                                                                                               | Ø80                                                                                                                                           | Ø80                                                                                                                                               |
| Height                   | 106-198                                                                                                                  | 320-412                                                                                                                      | 157-287                                                                                                                                       | 371-501                                                                                                                                           | 180                                                                                                                                           | 317                                                                                                                                               |
| Depth                    |                                                                                                                          |                                                                                                                              |                                                                                                                                               |                                                                                                                                                   |                                                                                                                                               |                                                                                                                                                   |
| Material                 | Lens-PC<br>Housing-ABS                                                                                                   | Lens-PC<br>Housing-ABS                                                                                                       | Lens-PC<br>Housing-ABS                                                                                                                        | Lens-PC<br>Housing-ABS                                                                                                                            | Lens-PC<br>Housing-ABS                                                                                                                        | Lens-PC<br>Housing-ABS                                                                                                                            |
| Colors                   | 2-3 Colors                                                                                                               | 2-3 Colors                                                                                                                   | 2-3 Colors                                                                                                                                    | 2-3 Colors                                                                                                                                        | 2-3 Colors                                                                                                                                    | 2-3 Colors                                                                                                                                        |
| Light source & Operation | LED Steady/Flashing                                                                                                      | ●                                                                                                                            | ●                                                                                                                                             | ●                                                                                                                                                 | ●                                                                                                                                             | ●                                                                                                                                                 |
| Sound & Volume           | 1 buzzer sound                                                                                                           | Max.90dB at 1m                                                                                                               | Max.90dB at 1m                                                                                                                                | Max.90dB at 1m                                                                                                                                    | Max.90dB at 1m                                                                                                                                | Max.90dB at 1m                                                                                                                                    |
| Layer color change       |                                                                                                                          |                                                                                                                              |                                                                                                                                               |                                                                                                                                                   |                                                                                                                                               |                                                                                                                                                   |
| Mount bracket            | Direct mount                                                                                                             | Pole mount                                                                                                                   | Direct mount                                                                                                                                  | Pole mount                                                                                                                                        | Direct mount                                                                                                                                  | Pole mount                                                                                                                                        |
| Bracket                  | TWS45, TWA45                                                                                                             | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                        | TWS45, TWA45                                                                                                                                  | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                                             | TWS80, TWA80                                                                                                                                  | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                                                                             |
| Protection rating        | IP23(Buzzer type)<br>IP44(Standard)                                                                                      | IP23(Buzzer type)<br>IP44(Standard)                                                                                          | IP23(Buzzer type)<br>IP44(Standard)                                                                                                           | IP23(Buzzer type)<br>IP44(Standard)                                                                                                               | IP23(Buzzer type)<br>IP44(Standard)                                                                                                           | IP23(Buzzer type)<br>IP44(Standard)                                                                                                               |
| Usage place              | Indoor Use                                                                                                               | Indoor Use                                                                                                                   | Indoor Use                                                                                                                                    | Indoor Use                                                                                                                                        | Indoor Use                                                                                                                                    | Indoor Use                                                                                                                                        |
| Certificates             | CE                                                                                                                       | CE                                                                                                                           | CE                                                                                                                                            | CE                                                                                                                                                | CE                                                                                                                                            | CE                                                                                                                                                |
| Customization            | 2 buzzer sounds, Available<br>in customized color<br>arrangements,<br>Wall mount bracket,<br>M12 connector attached type | 2 buzzer sounds, Available<br>in customized color<br>arrangements,<br>Pole length adjustment,<br>M12 connector attached type | 2 buzzer sounds, Lens<br>height 40mm, Available<br>in customized color<br>arrangements,<br>Wall mount bracket,<br>M12 connector attached type | 2 buzzer sounds, Lens<br>height 40mm, Available<br>in customized color<br>arrangements,<br>Pole length adjustment,<br>M12 connector attached type | 2 buzzer sounds, Lens<br>height 40mm, Available<br>in customized color<br>arrangements,<br>Wall mount bracket,<br>M12 connector attached type | 2 buzzer sounds, Lens<br>height 40mm, Available<br>in customized color<br>arrangements,<br>Pole length adjustment,<br>M12 connector attached type |
| Transistor               | NPN/ PNP type                                                                                                            | NPN/ PNP type                                                                                                                | NPN/ PNP type                                                                                                                                 | NPN/ PNP type                                                                                                                                     | NPN/ PNP type                                                                                                                                 | NPN/ PNP type                                                                                                                                     |
| Page                     | P47                                                                                                                      | P48                                                                                                                          | P49                                                                                                                                           | P50                                                                                                                                               | P51                                                                                                                                           | P52                                                                                                                                               |

# References for Signal Tower Lights



| Model number             | ST80ML                                                                                      | ST80L                                                                                           | STG40ML                                                                                    | STG40L                                                                     | STG50ML                                                                                    | STG50L                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Voltage                  | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                        | AC/DC12V, AC/DC24V<br>AC110V, AC220V                                                            | DC12V, DC24V<br>AC110V-220V                                                                | DC12V, DC24V<br>AC110V-220V                                                | DC12V, DC24V<br>AC110V-220V                                                                | DC12V, DC24V<br>AC110V-220V                                                |
| Outdia                   | Ø80                                                                                         | Ø80                                                                                             | Ø40                                                                                        | Ø40                                                                        | Ø50                                                                                        | Ø50                                                                        |
| Height                   | 180-460                                                                                     | 317-597                                                                                         | 106-331                                                                                    | 334-559                                                                    | 106-314                                                                                    | 334-542                                                                    |
| Depth                    |                                                                                             |                                                                                                 |                                                                                            |                                                                            |                                                                                            |                                                                            |
| Material                 | Lens-AS<br>Housing-ABS                                                                      | Lens-AS<br>Housing-ABS                                                                          | Lens-AS<br>Housing-ABS                                                                     | Lens-AS<br>Housing-ABS                                                     | Lens-AS<br>Housing-ABS                                                                     | Lens-AS<br>Housing-ABS                                                     |
| Layers                   | 1-5 Layers                                                                                  | 1-5 Layers                                                                                      | 1-5 Layers                                                                                 | 1-5 Layers                                                                 | 1-5 Layers                                                                                 | 1-5 Layers                                                                 |
| Light source & Operation | LED Steady/Flashing                                                                         | ●                                                                                               | ●                                                                                          | ●                                                                          | ●                                                                                          | ●                                                                          |
| 1 buzzer sound           | Max.90dB at 1m                                                                              | Max.90dB at 1m                                                                                  | Max.85dB at 1m                                                                             | Max.85dB at 1m                                                             | Max.85dB at 1m                                                                             | Max.85dB at 1m                                                             |
| Signal sounds            | Max.85dB at 1m                                                                              | Max.85dB at 1m                                                                                  |                                                                                            |                                                                            |                                                                                            |                                                                            |
| Layer color change       | Yes                                                                                         | Yes                                                                                             | Yes                                                                                        | Yes                                                                        | Yes                                                                                        | Yes                                                                        |
| Mount bracket            | Direct mount                                                                                | Pole mount                                                                                      | Direct mount                                                                               | Pole mount                                                                 | Direct mount                                                                               | Pole mount                                                                 |
| Bracket                  | TWS80, TWA80                                                                                | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                           | TWS45, TWA45                                                                               | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                      | TWS45, TWA45                                                                               | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                      |
| Protection rating        | IP23(Buzzer type)<br>IP44(Standard)                                                         | IP23(Buzzer type)<br>IP44(Standard)                                                             | IP54(Buzzer type)<br>IP65(Standard)                                                        | IP54(Buzzer type)<br>IP65(Standard)                                        | IP54(Buzzer type)<br>IP65(Standard)                                                        | IP54(Buzzer type)<br>IP65(Standard)                                        |
| Usage place              | Indoor Use                                                                                  | Indoor Use                                                                                      | Indoor/Outdoor Use                                                                         | Indoor/Outdoor Use                                                         | Indoor/Outdoor Use                                                                         | Indoor/Outdoor Use                                                         |
| Certificates             | CE, UL                                                                                      | CE, UL                                                                                          | CE, UL                                                                                     | CE, UL                                                                     | CE, UL                                                                                     | CE, UL                                                                     |
| Customization            | 2 buzzer sounds,<br>Wall mount bracket,<br>AC each layer power supplied,<br>DC24V UL listed | 2 buzzer sounds,<br>Pole length adjustment,<br>AC each layer power supplied,<br>DC24V UL listed | 2 buzzer sounds,<br>Wall mount bracket,<br>DC24V UL listed,<br>M12 connector attached type | Pole length adjustment,<br>DC24V UL listed,<br>M12 connector attached type | 2 buzzer sounds,<br>Wall mount bracket,<br>DC24V UL listed,<br>M12 connector attached type | Pole length adjustment,<br>DC24V UL listed,<br>M12 connector attached type |
| Transistor               | NPN/ PNP type                                                                               | NPN/ PNP type                                                                                   | NPN/ PNP type                                                                              | NPN/ PNP type                                                              | NPN/ PNP type                                                                              | NPN/ PNP type                                                              |
| Page                     | P70                                                                                         | P71                                                                                             | P77                                                                                        | P78                                                                        | P79                                                                                        | P80                                                                        |



| Model number             | STG60ML                                                                                    | STG60L                                                                     | QT56MCL                             | EST56L                                | MTG / MTC / MTR                                                                                                 | STB45ML-NEC               |
|--------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------|
| Voltage                  | DC12V, DC24V, AC110V-220V                                                                  | DC12V, DC24V, AC110V-220V                                                  | DC24V                               | DC24V, AC220V                         | DC24V, AC110V-220V                                                                                              | DC24V                     |
| Outdia                   | Ø60                                                                                        | Ø60                                                                        | Ø45                                 | Ø56                                   | Ø50, 60, 70                                                                                                     | Ø60                       |
| Height                   | 106-314                                                                                    | 333-541                                                                    | 276-312                             | 193-273                               | (Refer to products specifications)                                                                              | 270                       |
| Depth                    |                                                                                            |                                                                            |                                     |                                       | (Refer to products specifications)                                                                              | -                         |
| Material                 | Lens-AS, Housing-ABS                                                                       | Lens-AS, Housing-ABS                                                       | Lens-PC, Housing-AL                 | Lens-AS, Housing-ABS,<br>Pole-AL      | (Refer to products specifications)                                                                              | Lens-PC, Housing-PC       |
| Layers/Colors            | 1-5 Layers                                                                                 | 1-5 Layers                                                                 | 7 Colors                            | 3 Layers                              | 1-5 Layers                                                                                                      | 3 Layers                  |
| Light source & Operation | LED Steady                                                                                 |                                                                            | ●                                   |                                       |                                                                                                                 | ●                         |
| LED Steady/Flashing      | ●                                                                                          | ●                                                                          |                                     | ●                                     | ●                                                                                                               |                           |
| 1 buzzer sound           | Max.85dB at 1m                                                                             | Max.85dB at 1m                                                             | Max.90dB at 1m                      | Max.90dB at 1m                        | Max.90dB at 1m(Standard buzzer),<br>Max.100dB at 1m (High-volume buzzer),<br>Max.85dB at 1m (Waterproof buzzer) | Max.83dB at 1m            |
| Layer color change       | Yes                                                                                        | Yes                                                                        |                                     |                                       | Yes                                                                                                             |                           |
| Mount bracket            | Direct mount                                                                               | Pole mount                                                                 | Pole mount                          | Pole mount                            | Direct mount, Pole mount,<br>M12 connector attached type                                                        | Direct mount              |
| Bracket                  | TWS45, TWA45                                                                               | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                      | -                                   | LB18, LW18, QZ18,<br>SZ18, QL18, SL18 | (Refer to products specifications)                                                                              |                           |
| Protection rating        | IP54(Buzzer type)<br>IP65(Standard)                                                        | IP54(Buzzer type)<br>IP65(Standard)                                        | IP23(Buzzer type)<br>IP44(Standard) | IP23                                  | IP65(Standard, Waterproof buzzer)<br>Non-Waterproof (Standard buzzer, High-volume buzzer)                       | IP54                      |
| Usage place              | Indoor/Outdoor Use                                                                         | Indoor/Outdoor Use                                                         | Indoor Use                          | Indoor Use                            | Indoor/Outdoor Use                                                                                              | Indoor Use                |
| Certificates             | CE, UL                                                                                     | CE, UL                                                                     | CE                                  | CE                                    | CE, UL                                                                                                          | INTERTEK(NRTL), IECEx, CE |
| Customization            | 2 buzzer sounds,<br>Wall mount bracket,<br>DC24V UL listed,<br>M12 connector attached type | Pole length adjustment,<br>DC24V UL listed,<br>M12 connector attached type | M12 connector attached type         | DC12V type products                   | Pole length adjustment                                                                                          | -                         |
| Transistor               | NPN/PNP type                                                                               | NPN/PNP type                                                               | PNP type                            | NPN/PNP type                          | NPN/PNP type                                                                                                    | NPN/PNP type              |
| Page                     | P81                                                                                        | P82                                                                        | P54                                 | P75                                   | P113-150                                                                                                        | P170-171                  |

# References for Signal Tower Lights



| Model number                   | QTG50ML                                                                                                                  | QTG50L                                                                                                                       | QTG60ML                                                                                                                   | QTG60L                                                                                                                       | QTG70ML                                                                                                                   | QTG70L                                                                                                                       |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Voltage                        | DC12V, DC24V<br>AC110V-220V                                                                                              | DC12V, DC24V<br>AC110V-220V                                                                                                  | DC12V, DC24V<br>AC110V-220V                                                                                               | DC12V, DC24V<br>AC110V-220V                                                                                                  | DC12V, DC24V<br>AC110V-220V                                                                                               | DC12V, DC24V<br>AC110V-220V                                                                                                  |
| Dimension<br>(mm)              | Outdia                                                                                                                   | Ø50                                                                                                                          | Ø50                                                                                                                       | Ø60                                                                                                                          | Ø70                                                                                                                       | Ø70                                                                                                                          |
|                                | Height                                                                                                                   | 116-364                                                                                                                      | 344-592                                                                                                                   | 126-399                                                                                                                      | 352-625                                                                                                                   | 126-399                                                                                                                      |
|                                | Depth                                                                                                                    |                                                                                                                              |                                                                                                                           |                                                                                                                              |                                                                                                                           |                                                                                                                              |
| Material                       | Lens-PC<br>Housing-ABS                                                                                                   | Lens-PC<br>Housing-ABS                                                                                                       | Lens-PC<br>Housing-ABS                                                                                                    | Lens-PC<br>Housing-ABS                                                                                                       | Lens-PC<br>Housing-ABS                                                                                                    | Lens-PC<br>Housing-ABS                                                                                                       |
| Layers                         | 1-5 Layers                                                                                                               | 1-5 Layers                                                                                                                   | 1-5 Layers                                                                                                                | 1-5 Layers                                                                                                                   | 1-5 Layers                                                                                                                | 1-5 Layers                                                                                                                   |
| Light<br>source &<br>Operation | LED Steady/<br>Flashing                                                                                                  | ●                                                                                                                            | ●                                                                                                                         | ●                                                                                                                            | ●                                                                                                                         | ●                                                                                                                            |
| Sound &<br>Volume              | 1 buzzer sound                                                                                                           | Max.85dB at 1m                                                                                                               | Max.85dB at 1m                                                                                                            | Max.85dB at 1m                                                                                                               | Max.85dB at 1m                                                                                                            | Max.85dB at 1m                                                                                                               |
| Layer color change             | Yes                                                                                                                      | Yes                                                                                                                          | Yes                                                                                                                       | Yes                                                                                                                          | Yes                                                                                                                       | Yes                                                                                                                          |
| Mount bracket                  | Direct mount                                                                                                             | Pole mount                                                                                                                   | Direct mount                                                                                                              | Pole mount                                                                                                                   | Direct mount                                                                                                              | Pole mount                                                                                                                   |
| Bracket                        | TWS45, TWA45                                                                                                             | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                        | TWS45, TWA45                                                                                                              | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                        | TWS80, TWA80                                                                                                              | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                                                        |
| Protection rating              | IP54(Buzzer type)<br>IP65(Standard)                                                                                      | IP54(Buzzer type)<br>IP65(Standard)                                                                                          | IP54(Buzzer type)<br>IP65(Standard)                                                                                       | IP54(Buzzer type)<br>IP65(Standard)                                                                                          | IP54(Buzzer type)<br>IP65(Standard)                                                                                       | IP54(Buzzer type)<br>IP65(Standard)                                                                                          |
| Usage place                    | Indoor/Outdoor Use                                                                                                       | Indoor/Outdoor Use                                                                                                           | Indoor/Outdoor Use                                                                                                        | Indoor/Outdoor Use                                                                                                           | Indoor/Outdoor Use                                                                                                        | Indoor/Outdoor Use                                                                                                           |
| Certificates                   | CE, UL                                                                                                                   | CE, UL                                                                                                                       | CE, UL                                                                                                                    | CE, UL                                                                                                                       | CE, UL                                                                                                                    | CE, UL                                                                                                                       |
| Customization                  | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Wall mount bracket, High-<br>volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Wall mount bracket, High-<br>volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer module,<br>DC24V UL listed, M12<br>connector attached type |
| Transistor                     | NPN/ PNP type                                                                                                            | NPN/ PNP type                                                                                                                | NPN/ PNP type                                                                                                             | NPN/ PNP type                                                                                                                | NPN/ PNP type                                                                                                             | NPN/ PNP type                                                                                                                |
| Page                           | P86                                                                                                                      | P87                                                                                                                          | P88                                                                                                                       | P89                                                                                                                          | P90                                                                                                                       | P91                                                                                                                          |



| Model number                   | QTC50ML                                                                                                                     | QTC50L                                                                                                                          | QTC60ML                                                                                                                     | QTC60L                                                                                                                          | QTC70ML                                                                                                                     | QTC70L                                                                                                                          |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Voltage                        | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     |
| Dimension<br>(mm)              | Outdia                                                                                                                      | Ø50                                                                                                                             | Ø50                                                                                                                         | Ø60                                                                                                                             | Ø70                                                                                                                         | Ø70                                                                                                                             |
|                                | Height                                                                                                                      | 116-364                                                                                                                         | 344-592                                                                                                                     | 126-399                                                                                                                         | 352-625                                                                                                                     | 126-399                                                                                                                         |
|                                | Depth                                                                                                                       |                                                                                                                                 |                                                                                                                             |                                                                                                                                 |                                                                                                                             |                                                                                                                                 |
| Material                       | Lens, Inner Lens -PC<br>Housing-ABS                                                                                         | Lens, Inner Lens -PC<br>Housing-ABS                                                                                             | Lens, Inner Lens -PC<br>Housing-ABS                                                                                         | Lens, Inner Lens -PC<br>Housing-ABS                                                                                             | Lens, Inner Lens -PC<br>Housing-ABS                                                                                         | Lens, Inner Lens -PC<br>Housing-ABS                                                                                             |
| Layers                         | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      |
| Light<br>source &<br>Operation | LED Steady/Flashing                                                                                                         | ●                                                                                                                               | ●                                                                                                                           | ●                                                                                                                               | ●                                                                                                                           | ●                                                                                                                               |
| Sound &<br>Volume              | 1 buzzer sound                                                                                                              | Max. 85dB at 1m                                                                                                                 | Max. 85dB at 1m                                                                                                             | Max. 85dB at 1m                                                                                                                 | Max. 85dB at 1m                                                                                                             | Max. 85dB at 1m                                                                                                                 |
| Layer color change             | Yes                                                                                                                         | Yes                                                                                                                             | Yes                                                                                                                         | Yes                                                                                                                             | Yes                                                                                                                         | Yes                                                                                                                             |
| Mount bracket                  | Direct mount                                                                                                                | Pole mount                                                                                                                      | Direct mount                                                                                                                | Pole mount                                                                                                                      | Direct mount                                                                                                                | Pole mount                                                                                                                      |
| Bracket                        | TWS45, TWA45                                                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                           | TWS45, TWA45                                                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                           | TWS80, TWA80                                                                                                                | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                                                           |
| Protection rating              | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             |
| Usage place                    | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              |
| Certificates                   | CE, UL                                                                                                                      | CE, UL                                                                                                                          | CE, UL                                                                                                                      | CE, UL                                                                                                                          | CE, UL                                                                                                                      | CE, UL                                                                                                                          |
| Customization                  | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module, DC24V UL listed,<br>M12 connector attached<br>type | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type |
| Transistor                     | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   |
| Page                           | P94                                                                                                                         | P95                                                                                                                             | P96                                                                                                                         | P97                                                                                                                             | P98                                                                                                                         | P99                                                                                                                             |



# References for Signal Tower Lights



| Model number             | QTR50ML                                                                                                                     | QTR50L                                                                                                                          | QTR60ML                                                                                                                     | QTR60L                                                                                                                          | QTR70ML                                                                                                                     | QTR70L                                                                                                                          |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     | DC12V, DC24V<br>AC110V-220V                                                                                                 | DC12V, DC24V<br>AC110V-220V                                                                                                     |
| Outdia                   | Ø50                                                                                                                         | Ø50                                                                                                                             | Ø60                                                                                                                         | Ø60                                                                                                                             | Ø70                                                                                                                         | Ø70                                                                                                                             |
| Height                   | 116-364                                                                                                                     | 344-592                                                                                                                         | 126-399                                                                                                                     | 352-635                                                                                                                         | 126-399                                                                                                                     | 274-557                                                                                                                         |
| Depth                    |                                                                                                                             |                                                                                                                                 |                                                                                                                             |                                                                                                                                 |                                                                                                                             |                                                                                                                                 |
| Material                 | Lens-PC<br>Housing-ABS                                                                                                      | Lens-PC<br>Housing-ABS                                                                                                          | Lens-PC<br>Housing-ABS                                                                                                      | Lens-PC<br>Housing-ABS                                                                                                          | Lens-PC<br>Housing-ABS                                                                                                      | Lens-PC<br>Housing-ABS                                                                                                          |
| Layers                   | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      | 1-5 Layers                                                                                                                  | 1-5 Layers                                                                                                                      |
| Light source & Operation | LED Steady/Flashing                                                                                                         | ●                                                                                                                               | ●                                                                                                                           | ●                                                                                                                               | ●                                                                                                                           | ●                                                                                                                               |
| Sound & Volume           | 1 buzzer sound                                                                                                              | Max.85dB at 1m                                                                                                                  | Max.85dB at 1m                                                                                                              | Max.85dB at 1m                                                                                                                  | Max.85dB at 1m                                                                                                              | Max.85dB at 1m                                                                                                                  |
| Layer color change       | Yes                                                                                                                         | Yes                                                                                                                             | Yes                                                                                                                         | Yes                                                                                                                             | Yes                                                                                                                         | Yes                                                                                                                             |
| Mount bracket            | Direct mount                                                                                                                | Pole mount                                                                                                                      | Direct mount                                                                                                                | Pole mount                                                                                                                      | Direct mount                                                                                                                | Pole mount                                                                                                                      |
| Bracket                  | TWS45, TWA45                                                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                           | TWS45, TWA45                                                                                                                | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                                                                           | TWS80, TWA80                                                                                                                | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                                                                           |
| Protection rating        | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             | IP54(Buzzer type)<br>IP65(Standard)                                                                                         | IP54(Buzzer type)<br>IP65(Standard)                                                                                             |
| Usage place              | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              | Indoor/Outdoor Use                                                                                                          | Indoor/Outdoor Use                                                                                                              |
| Certificates             | CE, UL                                                                                                                      | CE, UL                                                                                                                          | CE, UL                                                                                                                      | CE, UL                                                                                                                          | CE, UL                                                                                                                      | CE, UL                                                                                                                          |
| Customization            | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module, DC24V UL listed,<br>M12 connector attached<br>type | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | Wall mount bracket,<br>2 buzzer sounds,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type | 2 buzzer sounds,<br>Pole length adjustment,<br>High-volume buzzer<br>module,<br>DC24V UL listed, M12<br>connector attached type |
| Transistor               | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   | NPN/ PNP type                                                                                                               | NPN/ PNP type                                                                                                                   |
| Page                     | P102                                                                                                                        | P103                                                                                                                            | P104                                                                                                                        | P105                                                                                                                            | P106                                                                                                                        | P107                                                                                                                            |



| Model number             | ST45ML-Ex             | STB45ML-Ex            | QTEX                                                                             | QTEXB                                                                            | QST50(B)-Ex                                                  | QST50(B)-T-Ex                                                |
|--------------------------|-----------------------|-----------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Voltage                  | DC12V<br>DC24V        | DC12V<br>DC24V        | DC12V, DC24V<br>AC95V-AC230V                                                     | DC12V, DC24V<br>AC95V-AC230V                                                     | DC24V<br>AC110V-230V                                         | DC24V<br>AC110V-230V                                         |
| Outdia                   | Ø45                   | Ø45                   | Ø144                                                                             | Ø144                                                                             | Ø50                                                          | Ø50                                                          |
| Height                   | 115-275               | 149-309               | 472(Direct mount),<br>457(Wall mount)                                            | 472(Direct mount),<br>457(Wall mount)                                            | 430-486                                                      | 488-544                                                      |
| Depth                    | -                     | -                     | 155(Wall mount)                                                                  | 155(Wall mount)                                                                  | -                                                            | -                                                            |
| Material                 | Lens-PC<br>Housing-PC | Lens-PC<br>Housing-PC | Lens-Tempered glass<br>Housing-Al                                                | Lens-Tempered glass<br>Housing-Al                                                | Lens-PC, Light diffusion<br>Lens-PC, Housing-Al,<br>Cover-Al | Lens-PC, Light diffusion<br>Lens-PC, Housing-Al,<br>Cover-Al |
| Light source & Operation | LED Steady/Flashing   | ●(Steady)             | ●                                                                                | ●                                                                                | ●                                                            | ●                                                            |
| Sound & Volume           | 1 buzzer sound        | -                     | Max.83dB at 1m                                                                   | -                                                                                | Max.90dB at 1m                                               | Max.90dB at 1m                                               |
| Mount bracket            | Direct mount          | Direct mount          | Self mount, Wall mount                                                           | Self mount, Wall mount                                                           | Direct mount                                                 | Direct mount                                                 |
| Cable entry              | -                     | -                     | 3/4" NPT 2WAY                                                                    | 3/4" NPT 2WAY                                                                    | M16xP1.5                                                     | M20xP1.5, 1/2" NPT                                           |
| Protection rating        | IP54                  | IP54                  | IP66                                                                             | IP66                                                                             | IP66/IP67                                                    | IP66/IP67                                                    |
| Usage place              | Indoor Use            | Indoor Use            | Indoor/Outdoor Use                                                               | Indoor/Outdoor Use                                                               | Indoor/Outdoor Use                                           | Indoor/Outdoor Use                                           |
| Usage area               | ZONE 2                | ZONE 2                | ZONE 1, ZONE 2, ZONE 21                                                          | ZONE 1, ZONE 2, ZONE 21                                                          | ZONE1,ZONE2,<br>ZONE21, ZONE22                               | ZONE1,ZONE2,<br>ZONE21, ZONE22                               |
| Certificates             | KCs, CCC, NEPSI       | KCs, CCC, NEPSI, CE   | IECEX, ATEX, KCs                                                                 | IECEX, ATEX, KCs, TIIS                                                           | IECEX, ATEX, KCs<br>CCC, NEPSI                               | IECEX, ATEX, KCs<br>CCC, NEPSI                               |
| Customization            | -                     | -                     | Explosion proof cable gland,<br>Cable entry 1/2"NPT,<br>M20X1.5, M25X1.5, 1/2"PF | Explosion proof cable gland,<br>Cable entry 1/2"NPT,<br>M20X1.5, M25X1.5, 1/2"PF | -                                                            | Explosion proof cable<br>gland,<br>Cable entry 3/4" NPT      |
| Transistor               | NPN/ PNP type         | NPN/ PNP type         | PNP type                                                                         | PNP type                                                                         | PNP type                                                     | PNP type                                                     |
| Page                     | P168                  | P169                  | P172-175                                                                         | P172-175                                                                         | P176-177                                                     | P178-179                                                     |

## References for Signal Tower Lights



| Model number             | QT50ML                                                                        | QT50L                                                                             | QT70ML                                                                        | QT70L                                                                             | QTG60ML-WV              | QTG60L-WV                             |
|--------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|---------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V, AC220V                                                | DC12V, DC24V<br>AC110V, AC220V                                                    | DC12V, DC24V<br>AC110V, AC220V                                                | DC12V, DC24V<br>AC110V, AC220V                                                    | DC24V                   | DC24V                                 |
| Dimension (mm)           |                                                                               |                                                                                   |                                                                               |                                                                                   |                         |                                       |
| Outdia                   | Ø50                                                                           | Ø50                                                                               | Ø70                                                                           | Ø70                                                                               | Ø60                     | Ø60                                   |
| Height                   | 83-255                                                                        | 297-469                                                                           | 98-322                                                                        | 237-461                                                                           | 210-410                 | 425-625                               |
| Depth                    |                                                                               |                                                                                   |                                                                               |                                                                                   |                         |                                       |
| Material                 | Lens-PC<br>Housing-PC                                                         | Lens-PC<br>Housing-PC                                                             | Lens-PC<br>Housing-PC                                                         | Lens-PC<br>Housing-PC                                                             | Lens-PC,<br>Housing-ABS | Lens-PC,<br>Housing-ABS               |
| Layers/Colors            | 1-5 Layers                                                                    | 1-5 Layers                                                                        | 1-5 Layers                                                                    | 1-5 Layers                                                                        | 1-5 Layers              | 1-5 Layers                            |
| Light source & Operation | LED Steady                                                                    | ●                                                                                 | ●                                                                             | ●                                                                                 | ●                       | ●                                     |
|                          | LED Steady/Flashing                                                           | ●                                                                                 | ●                                                                             | ●                                                                                 |                         |                                       |
|                          | LED Strobe                                                                    | ●                                                                                 | ●                                                                             | ●                                                                                 |                         |                                       |
|                          | LED Simulated revolving                                                       | ●                                                                                 | ●                                                                             | ●                                                                                 |                         |                                       |
| Sound & Volume           | 1 buzzer sound                                                                | Max.90dB at 1m                                                                    | Max.90dB at 1m                                                                | Max.90dB at 1m                                                                    |                         |                                       |
|                          | Signal sounds                                                                 | -                                                                                 | -                                                                             | -                                                                                 | Max.85dB at 1m          | Max.85dB at 1m                        |
| Layer color change       | Yes                                                                           | Yes                                                                               | Yes                                                                           | Yes                                                                               | Yes                     | Yes                                   |
| Mount bracket            | Pole mount                                                                    | Direct mount                                                                      | Pole mount                                                                    | Direct mount                                                                      | Direct mount            | Pole mount                            |
| Bracket                  | TWS45, TWA45                                                                  | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                             | TWS80, TWA80                                                                  | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                             | TWS45, TWA45            | LB18, LW18, QZ18,<br>SZ18, QL18, SL18 |
| Protection rating        | IP54(Buzzer type)<br>IP65(Standard)                                           | IP54(Buzzer type)<br>IP65(Standard)                                               | IP54(Buzzer type)<br>IP65(Standard)                                           | IP54(Buzzer type)<br>IP65(Standard)                                               | IP23                    | IP23                                  |
| Usage place              | Indoor/Outdoor Use                                                            | Indoor/Outdoor Use                                                                | Indoor/Outdoor Use                                                            | Indoor/Outdoor Use                                                                | Indoor Use              | Indoor Use                            |
| Certificates             | CE                                                                            | CE                                                                                | CE                                                                            | CE                                                                                | CE                      | CE                                    |
| Customization            | Beige color,<br>Wall mount bracket,<br>LED Strobe,<br>LED Simulated revolving | Beige color,<br>Pole length adjustment,<br>LED Strobe,<br>LED Simulated revolving | Beige color,<br>Wall mount bracket,<br>LED Strobe,<br>LED Simulated revolving | Beige color,<br>Pole length adjustment,<br>LED Strobe,<br>LED Simulated revolving | Wall mount bracket      | -                                     |
| Transistor               | NPN/ PNP type                                                                 | NPN/ PNP type                                                                     | NPN/ PNP type                                                                 | NPN/ PNP type                                                                     |                         |                                       |
| Page                     | P155-156                                                                      | P157-158                                                                          | P163-164                                                                      | P165-166                                                                          | P184                    | P185                                  |



STA25SLM

## PRODUCT SPECIFICATION

STA25SLM

**Materials** Lens-AS, Housing-Al

**Ambient operating temperature** -30°C to +50°C

**Protection rating** IP44

- 25mm direct mount tower lights
- Aesthetically pleasing design with aluminum housing
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation.
- Steady mode only with fixed user selected color arrangement (can operate flashing mode with External Contact)



### STA25SLM Ø25mm Direct mount, LED Steady

| Model number    | Layers | Voltage                            | Certificates | Weight | Color                                            |
|-----------------|--------|------------------------------------|--------------|--------|--------------------------------------------------|
| STA25SLM Steady | 1      | DC12V<br>DC24V<br>AC110V<br>AC220V | CE<br>UL     | 0.19kg | R-Red                                            |
|                 | 2      | DC12V<br>DC24V<br>AC110V<br>AC220V |              | 0.21kg | R-Red<br>G-Green                                 |
|                 | 3      | DC12V<br>DC24V<br>AC110V<br>AC220V |              | 0.23kg | R-Red<br>A-Amber<br>G-Green                      |
|                 | 4      | DC12V<br>DC24V<br>AC110V<br>AC220V |              | 0.24kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                 | 5      | DC12V<br>DC24V<br>AC110V<br>AC220V |              | 0.26kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

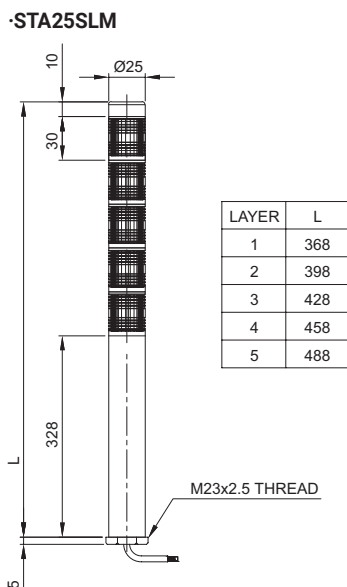
※ CE Compliant: DC24V, UL Listed: DC24V

### Wiring Instructions

- External power line/External signal line
- UL1007 AWG22(0.3sq) 400mm

### Technical Diagram

Units : mm



### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 70mA  | 35mA  | 25mA   | 20mA   |

### Customization

- Same lens color with LED (LED Color Lenses)
- Wall mount bracket options : Used for mounting on the vertical surface



### Ordering Specifications

|                |   |                                                                   |   |                                                  |   |                                                  |
|----------------|---|-------------------------------------------------------------------|---|--------------------------------------------------|---|--------------------------------------------------|
| STA25SLM       | - | 3                                                                 | - | 220                                              | - | RAG                                              |
| [Model number] |   | [Layers]                                                          |   | [Voltage]                                        |   | [Color]                                          |
| STA25SLM       |   | 1-1 Layer<br>2-2 Layers<br>3-3 Layers<br>4-4 Layers<br>5-5 Layers |   | 12-DC12V<br>24-DC24V<br>110-AC110V<br>220-AC220V |   | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |



### PRODUCT SPECIFICATION

STA35SL

**Materials** Lens-AS, Housing-ABS

**Ambient operating temperature** -30°C to +50°C

**Protection rating** IP44

- Ø35mm direct mount tower lights
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation
- Steady mode only with fixed user selected color arrangement (can operate flashing mode with External Contact)
- Easy mounting with the bolts/ screws located at the bottom of the product

### STA35SL Ø35mm Direct mount, LED Steady

| Model number   | Layers | Voltage        | Certificates | Weight | Color                                                      |
|----------------|--------|----------------|--------------|--------|------------------------------------------------------------|
| STA35SL Steady | 1      | DC12V<br>DC24V | CE           | 0.60kg | ● R-Red                                                    |
|                | 2      | DC12V<br>DC24V |              | 0.85kg | ● R-Red<br>● G-Green                                       |
|                | 3      | DC12V<br>DC24V |              | 1.05kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                | 4      | DC12V<br>DC24V |              | 1.30kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                | 5      | DC12V<br>DC24V |              | 1.53kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ CE Compliant: DC24V

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 100mA | 50mA  |

### Customization

- Wall mount bracket options : Used for mounting on the vertical surface



Wall mount bracket  
STAWB25

### Ordering Specifications

|                |   |            |   |           |   |           |
|----------------|---|------------|---|-----------|---|-----------|
| STA35SL        | - | 3          | - | 24        | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage] |   | [Color]   |
| STA35SL        |   | 1-1 Layer  |   | 12-DC12V  |   | ● R-Red   |
|                |   | 2-2 Layers |   | 24-DC24V  |   | ● A-Amber |
|                |   | 3-3 Layers |   |           |   | ● G-Green |
|                |   | 4-4 Layers |   |           |   | ● B-Blue  |
|                |   | 5-5 Layers |   |           |   | ○ W-White |



STA35SL

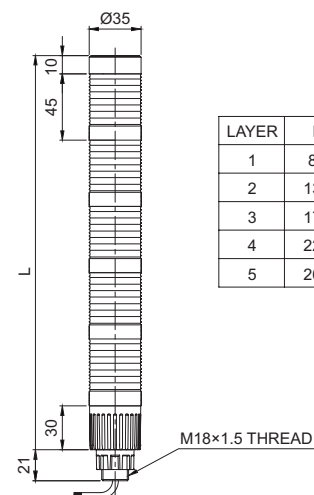
### Wiring Instructions

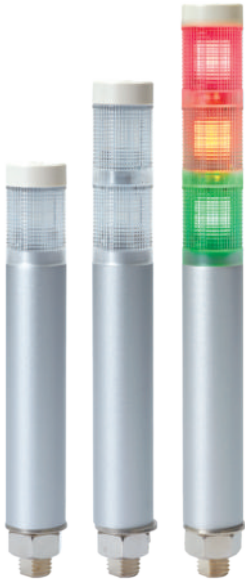
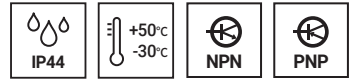
- External power line/External signal line
- UL1007 AWG22(0.3sq) 400mm

### Technical Diagram

Units : mm

· STA35SL





STA35SLM

## PRODUCT SPECIFICATION

STA35SLM

**Materials** Lens-AS, Housing-Al

**Ambient operating temperature** -30°C to +50°C

**Protection rating** IP44

- Ø35mm direct mount tower lights
- Aesthetically pleasing design with aluminum housing
- Fixed layer designs provides superior durability
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation
- Steady mode only with fixed user selected color arrangement (can operate flashing mode with External Contact)
- Easy mounting with the bolts/ screws located at the bottom of the product

### STA35SLM Ø35mm Direct mount, LED Steady

| Model number    | Layers | Voltage        | Certificates | Weight | Color                                            |
|-----------------|--------|----------------|--------------|--------|--------------------------------------------------|
| STA35SLM Steady | 1      | DC12V<br>DC24V | CE           | 0.38kg | R-Red                                            |
|                 | 2      | DC12V<br>DC24V |              | 0.40kg | R-Red<br>G-Green                                 |
|                 | 3      | DC12V<br>DC24V |              | 0.42kg | R-Red<br>A-Amber<br>G-Green                      |
|                 | 4      | DC12V<br>DC24V |              | 0.45kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                 | 5      | DC12V<br>DC24V |              | 0.48kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

※ CE Compliant: DC24V

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 100mA | 50mA  |

### Customization

- Wall mount bracket options : Used for mounting on the vertical surface



Wall mount bracket STAWB25

### Ordering Specifications

|                |   |                                                                   |   |                      |   |                                                  |
|----------------|---|-------------------------------------------------------------------|---|----------------------|---|--------------------------------------------------|
| STA35SLM       | - | 3                                                                 | - | 24                   | - | RAG                                              |
| [Model number] |   | [Layers]                                                          |   | [Voltage]            |   | [Color]                                          |
| STA35SLM       |   | 1-1 Layer<br>2-2 Layers<br>3-3 Layers<br>4-4 Layers<br>5-5 Layers |   | 12-DC12V<br>24-DC24V |   | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

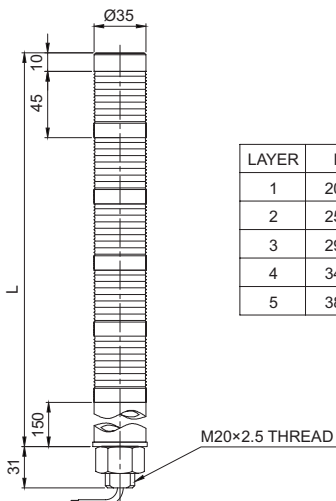
### Wiring Instructions

- External power line/External signal line
- UL1007 AWG22(0.3sq) 400mm

### Technical Diagram

Units : mm

·STA35SLM



| LAYER | L   |
|-------|-----|
| 1     | 205 |
| 2     | 250 |
| 3     | 295 |
| 4     | 340 |
| 5     | 385 |



## PRODUCT SPECIFICATION

STA45SLM | STA45SLMP

**Materials** Lens-Acrylic, Inner lens-AS, Housing-Al  
**Ambient operating temperature** -30°C to +50°C  
**Volume** Max.90dB at 1m  
**Protection rating**  
 Standard type-IP44, Built-in buzzer type-IP23

- Ø45mm direct mount/pole mount tower lights
- Aluminum housing displays a unique metallic luster that defines a high class product
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation
- Steady mode only with fixed user selected color arrangement (can operate flashing mode with External Contact)
- Easy mounting with the bolts/screws located at the bottom of the product
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.

### STA45SLM Ø45mm Direct mount, LED Steady

| Model number                                                | Layers | Voltage        | Certificates | Weight | Color                                                      |
|-------------------------------------------------------------|--------|----------------|--------------|--------|------------------------------------------------------------|
| STA45SLM Steady<br>STA45SLM-BZ Steady w/<br>built-in buzzer | 1      | DC12V<br>DC24V | CE<br>UL     | 0.50kg | ● R-Red                                                    |
|                                                             | 2      | DC12V<br>DC24V |              | 0.54kg | ● R-Red<br>● G-Green                                       |
|                                                             | 3      | DC12V<br>DC24V |              | 0.58kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                             | 4      | DC12V<br>DC24V |              | 0.63kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                             | 5      | DC12V<br>DC24V |              | 0.68kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ CE Compliant: DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

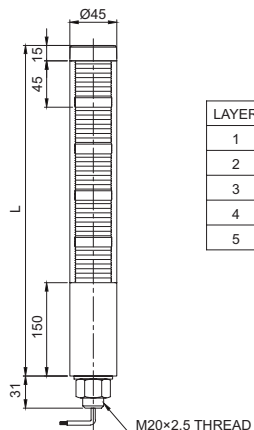
| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 100mA | 50mA  |
| Buzzer current                | 40mA  | 75mA  |

### Technical Diagram

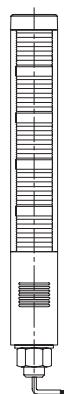
·STA45SLM

·STA45SLM-BZ

Units : mm



| LAYER | L   |
|-------|-----|
| 1     | 198 |
| 2     | 243 |
| 3     | 288 |
| 4     | 333 |
| 5     | 378 |



STA45SLM Series

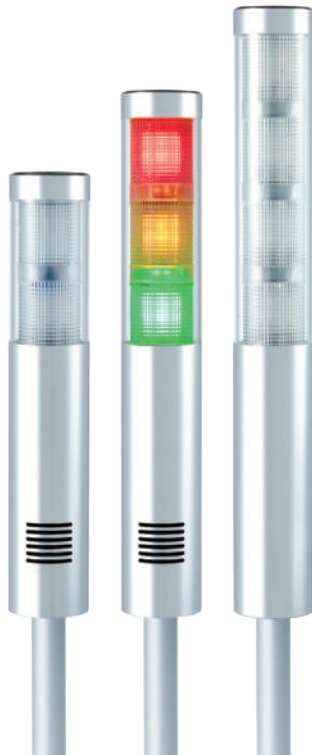
### Customization

- Wall mount bracket options :  
Used for mounting on the vertical surface



Wall mount bracket  
STAWB45

# STA45SLMP



STA45SLMP Series

## STA45SLMP Ø45mm Pole mount, LED Steady

| Model number                                                  | Layers | Voltage        | Certificates | Weight | Color                                                      |
|---------------------------------------------------------------|--------|----------------|--------------|--------|------------------------------------------------------------|
| STA45SLMP Steady<br>STA45SLMP-BZ Steady w/<br>built-in buzzer | 1      | DC12V<br>DC24V | CE<br>UL     | 0.56kg | ● R-Red                                                    |
|                                                               | 2      | DC12V<br>DC24V |              | 0.60kg | ● R-Red<br>● G-Green                                       |
|                                                               | 3      | DC12V<br>DC24V |              | 0.64kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                               | 4      | DC12V<br>DC24V |              | 0.69kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                               | 5      | DC12V<br>DC24V |              | 0.74kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ CE Compliant: DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 100mA | 50mA  |
| Buzzer current                | 40mA  | 75mA  |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| Al       | ABS   | Al   |      |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Wiring Instructions

- External power line/External signal line
- UL1007 AWG22(0.3sq) 400mm

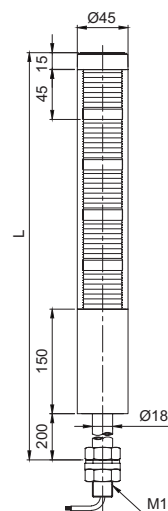
### Customization

- Customized pole length available

### Technical Diagram

Units : mm

·STA45SLMP



·STA45SLMP-BZ



| LAYER | L   |
|-------|-----|
| 1     | 398 |
| 2     | 443 |
| 3     | 488 |
| 4     | 533 |
| 5     | 578 |

### Ordering Specifications

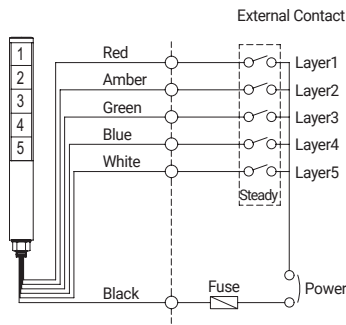
|                |   |            |   |           |   |           |   |               |
|----------------|---|------------|---|-----------|---|-----------|---|---------------|
| STA45SLMP      | - | 3          | - | 24        | - | RAG       | - | QZ18          |
| [Model number] |   | [Layers]   |   | [Voltage] |   | [Color]   |   | [Bracket]     |
| STA45SLM       |   | 1-1 Layer  |   | 12-DC12V  |   | ● R-Red   |   | None-Standard |
| STA45SLM-BZ    |   | 2-2 Layers |   | 24-DC24V  |   | ● A-Amber |   | Bracket       |
| STA45SLMP      |   | 3-3 Layers |   |           |   | ● G-Green |   | -LB18 -LW18   |
| STA45SLMP-BZ   |   | 4-4 Layers |   |           |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                |   | 5-5 Layers |   |           |   | ○ W-White |   | -QL18 -SL18   |

Wiring Instructions

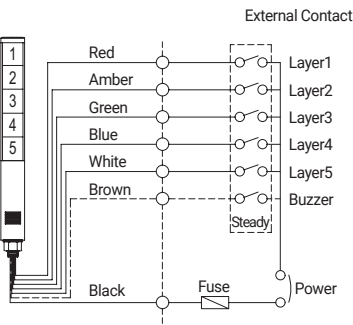
- STA25SLM, STA35SL, STA35SLM and STA45SLM can be wired by using both External Contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.

External Contact

·STA25SLM-DC  
·STA35SL-DC / STA35SLM-DC



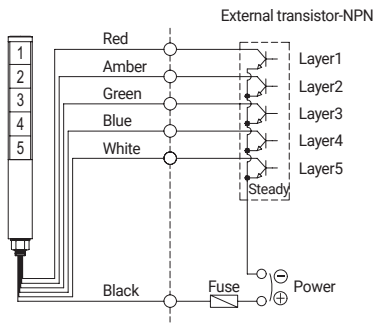
·STA45SLM / ST45SLMP-DC



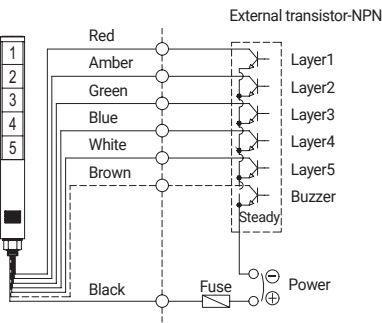
Transistor(I/O)

·STA25SLM-DC  
·STA35SL-DC / STA35SLM-DC

NPN  
Transistor

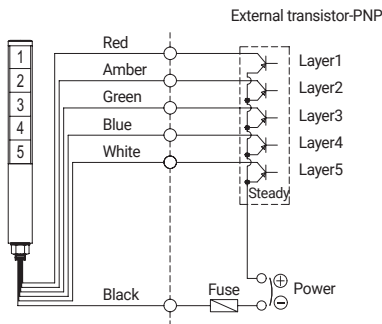


·STA45SLM / ST45SLMP-DC

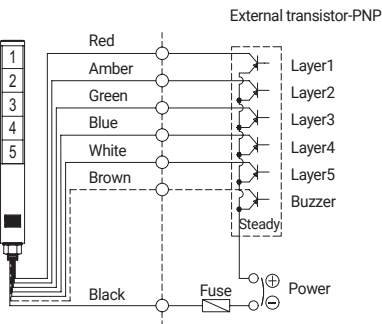


·STA25SLM-DC  
·STA35SL-DC / STA35SLM-DC

PNP  
Transistor



·STA45SLM / ST45SLMP-DC



Wiring Instructions

- External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

Transistor Rating

| Model number         | NPN or PNP       |
|----------------------|------------------|
| Withstanding voltage | $V_c \geq 35V$   |
| Current              | $I_c \geq 300mA$ |
| Leakage current      | $0.1mA \geq I_L$ |



## QTA56L



QTA56L

Built-in buzzer output  
holes formed on the  
housing of the product



## PRODUCT SPECIFICATION

QTA56L

**Materials** Lens-PC, Housing-Al, bracket-Al

**Ambient operating temperature** -30°C to +60°C

**Volume** Max.85dB at 1m

**Protection rating**

Standard type-IP44, Built-in buzzer type-IP23

- High brightness LED with hexagon type mounting pole
- Elegant design with hexagon shaped metal housing
- Aluminum housing provides excellent durability
- Folding type mount bracket can be utilized in various environments
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- M12 connector type is optionally available(Female M12 connector is not provided)

### QTA56L LED Steady Tower Lights

| Model number                              | Layers | Voltage | Certificates | Weight | Color                                                                                              |
|-------------------------------------------|--------|---------|--------------|--------|----------------------------------------------------------------------------------------------------|
| QTA56L<br>Steady                          |        |         |              | 0.45kg |                                                                                                    |
| QTA56L-BZ<br>Steady w/<br>built-in buzzer | 3      | DC24V   | CE           | 0.48kg | <div> <div></div> R-Red           <div></div> A-Amber           <div></div> G-Green         </div> |

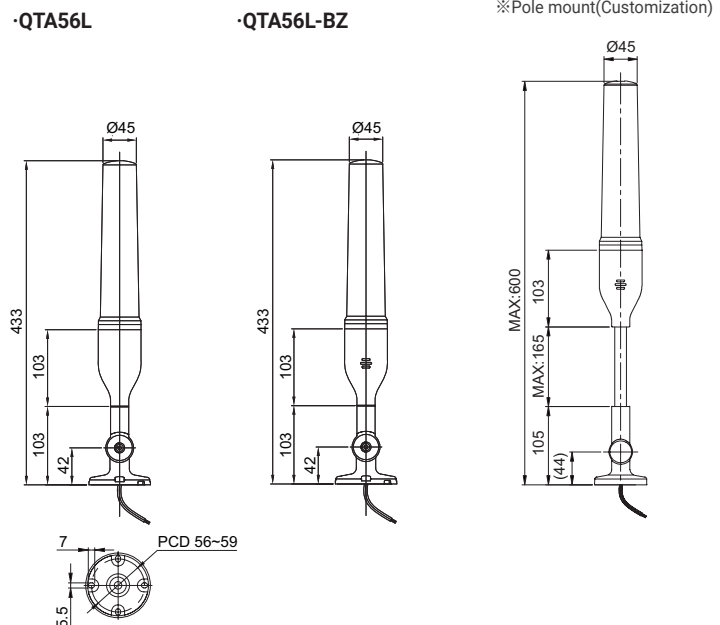
※ CE Compliant: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC24V |
|-------------------------------|-------|
| Light source current(1 layer) | 45mA  |
| Buzzer current                | 75mA  |

### Technical Diagram

Units : mm



### Customization

- Pole mount
- M12 connector attached type

### Ordering Specifications

|                     |   |            |   |           |   |                                                                                                    |
|---------------------|---|------------|---|-----------|---|----------------------------------------------------------------------------------------------------|
| QTA56L              | - | 3          | - | 24        | - | RAG                                                                                                |
| [Model number]      |   | [Layers]   |   | [Voltage] |   | [Color]                                                                                            |
| QTA56L<br>QTA56L-BZ |   | 3-3 Layers |   | 24-DC24V  |   | <div> <div></div> R-Red           <div></div> A-Amber           <div></div> G-Green         </div> |



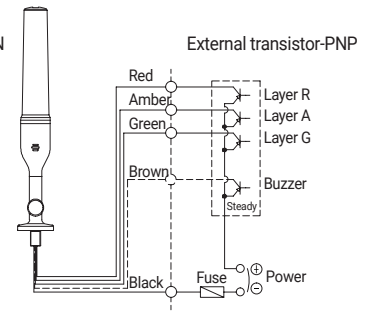
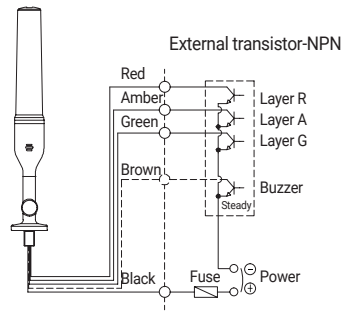
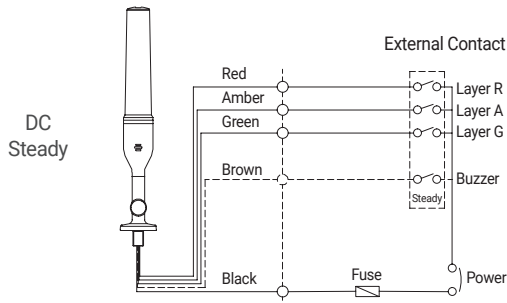
## Wiring Instructions

- QTA56L can be wired by using both External Contact and transistor
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below
- Product can be wired regardless of polarity.

### External Contact

### Transistor

·QTA56L



- External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

# QAT80L / QAT80ML



QAT80L

Built-in buzzer output holes formed on the housing of the product



## PRODUCT SPECIFICATION

QAT80L | QAT80ML

**Materials** Lens-PC, Housing-PA66, Pole-Al  
**Ambient operating temperature** -30°C ≤ T<sub>as</sub> ≤ +50°C  
**Volume** Max.95dB at 1m  
**Protection rating** IP65  
**Flashing rate** 60-80/min  
**Compliant with RoHS directive**

- LED Steady/Flashing Tower Lights
- Long product lifetime of over 20,000 hours with the application of a high intensity multiple color LED light source
- Built in 2 tone buzzer, Sound output according to LED color(Max.95dB at 1m).
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



### QAT80L LED Steady/Flashing Tower Lights

| Model number                                        | Layers | Voltage   | Certificates | Weight | Color                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------|--------|-----------|--------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| QAT80L<br>Steady                                    | 3      | DC12V-24V | CE           | 0.50Kg | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; background-color: red; border-radius: 50%; margin-bottom: 5px;"></div> R-Red                     <div style="width: 10px; height: 10px; background-color: yellow; border-radius: 50%; margin-bottom: 5px;"></div> A-Amber                     <div style="width: 10px; height: 10px; background-color: green; border-radius: 50%;"></div> G-Green                 </div> |
| QAT80L-BZ<br>Steady w/<br>built-in buzzer           |        |           |              | 1.10Kg |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| QAT80LF<br>Steady/Flashing                          |        |           |              | 0.50Kg |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| QAT80LF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |           |              | 1.10Kg |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

※ DC type model has a free-voltage range of 10V-30V.

※ CE Compliant: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V-24V |
|-------------------------------|-----------|
| Light source current(1 layer) | Max.200mA |
| Buzzer current                | Max.50mA  |

### Selectable sound patterns

| Built-in sound | Sound                       | Channel | Volume   |
|----------------|-----------------------------|---------|----------|
| 1 buzzer sound | prolonged (beep)            | Ch1     | Max.95dB |
| 2 buzzer sound | staccato (beep, beep, beep) | Ch2     |          |

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

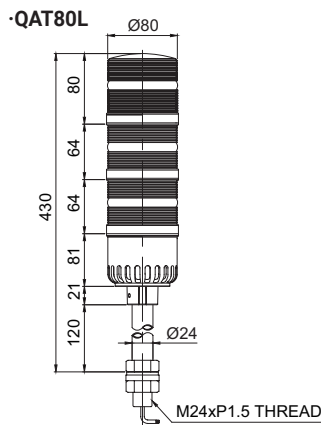
※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                                                                |   |                        |   |                              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |                                                                                              |
|----------------------------------------------------------------|---|------------------------|---|------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------|
| QAT80L                                                         | - | 3                      | - | 12/24                        | - | RAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - | LW24                                                                                         |
| [Model number]<br>QAT80L<br>QAT80L-BZ<br>QAT80LF<br>QAT80LF-BZ |   | [Layers]<br>3-3 Layers |   | [Voltage]<br>12/24-DC12V-24V |   | [Color]<br><div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; background-color: red; border-radius: 50%; margin-bottom: 5px;"></div> R-Red                     <div style="width: 10px; height: 10px; background-color: yellow; border-radius: 50%; margin-bottom: 5px;"></div> A-Amber                     <div style="width: 10px; height: 10px; background-color: green; border-radius: 50%;"></div> G-Green                 </div> |   | [Bracket]<br>· None-Standard<br>· Bracket<br>· LB24 · LW24<br>· QZ24 · SZ24<br>· QL24 · SL24 |

### Technical Diagram

Units : mm





## QAT80ML LED Steady/Flashing Tower Lights

| Model number                                         | Layers | Voltage   | Certificates | Weight | Color                                                                                   |
|------------------------------------------------------|--------|-----------|--------------|--------|-----------------------------------------------------------------------------------------|
| QAT80ML<br>Steady                                    | 3      | DC12V-24V | CE           | 0.50Kg | <div><div></div>R-Red</div> <div><div></div>A-Amber</div> <div><div></div>G-Green</div> |
| QAT80ML-BZ<br>Steady w/<br>built-in buzzer           |        |           |              | 0.62Kg |                                                                                         |
| QAT80MLF<br>Steady/Flashing                          |        |           |              | 0.50Kg |                                                                                         |
| QAT80MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |           |              | 0.62Kg |                                                                                         |

※ DC type model has a free-voltage range of 10V-30V.

※ CE Compliant: DC24V



QAT80ML

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V-24V |
|-------------------------------|-----------|
| Light source current(1 layer) | Max.200mA |
| Buzzer current                | Max.50mA  |

Built-in buzzer output  
holes formed on the  
housing of the product

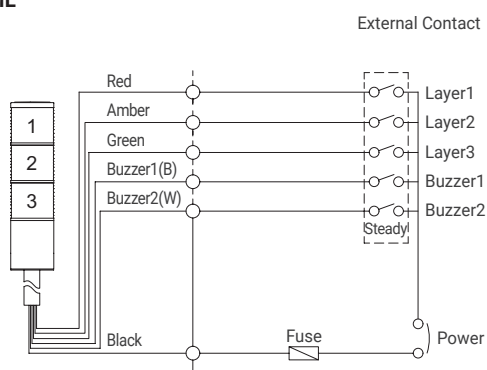


### Selectable sound patterns

| Built-in sound | Sound                       | Channel | Volume   |
|----------------|-----------------------------|---------|----------|
| 1 buzzer sound | prolonged (beep)            | Ch1     | Max.95dB |
| 2 buzzer sound | staccato (beep, beep, beep) | Ch2     |          |

### Wiring Instructions(External Contact)

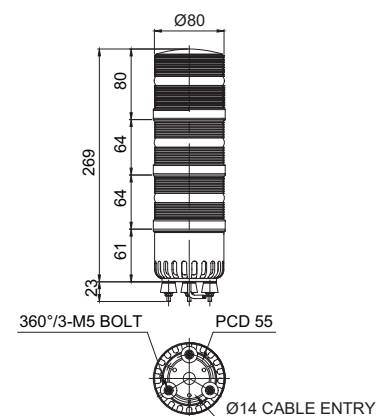
·QAT80L / QAT80ML



### Technical Diagram

Units : mm

·QAT80ML



### Ordering Specifications

|                                                  |   |            |   |                 |   |                                                                                         |
|--------------------------------------------------|---|------------|---|-----------------|---|-----------------------------------------------------------------------------------------|
| QAT80ML                                          | - | 3          | - | 12/24           | - | RAG                                                                                     |
| [Model number]                                   |   | [Layers]   |   | [Voltage]       |   | [Color]                                                                                 |
| QAT80ML<br>QAT80ML-BZ<br>QAT80MLF<br>QAT80MLF-BZ |   | 3-3 Layers |   | 12/24-DC12V-24V |   | <div><div></div>R-Red</div> <div><div></div>A-Amber</div> <div><div></div>G-Green</div> |

## SWT Series



SWT Series



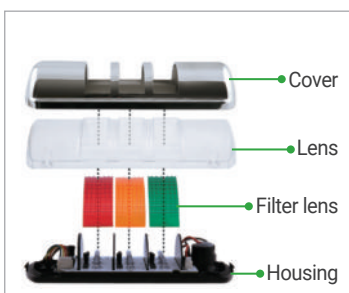
SWTE Series

### Customization

- Customized color combination
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Transparent inner lens
- DC24V voltage UL listed product

### SWT Lens Configuration

Adding a separate color filter lens inside the outer lens helps to provide a clear signal.



### PRODUCT SPECIFICATION

SWT | SWTE

**Materials** Lens-PC, Cover-ABS, Housing-ABS, Filter lens-PC

**Ambient operating temperature** -30°C to + 50°C

**Volume** Max.90dB at 1m

**Protection rating** IP55

**Standard color arrangements**

2 Colors : ● Red-R ● Green-G

3 Colors : ● Red-R ● Amber-A ● Green-G

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Wall mount model that minimizes the chance of damage from moving obstacles or personnel
- Clear light signals emitted by adding separate color diffusion lenses beneath the outer transparent lens
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Can be used outdoors with tightly sealed structure
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



### SWT / SWTE Wall Mount, LED Steady/Flashing

| Model number                      | Layers | Voltage   | Certificates | Weight | Color                             |
|-----------------------------------|--------|-----------|--------------|--------|-----------------------------------|
| SWT(E)L Steady                    | 2      | DC12V-24V | CE           | 0.27kg | ● R-Red<br>● G-Green              |
| SWT(E)L-BZ                        |        | AC110V    |              | 0.42kg |                                   |
| Steady w/built-in buzzer          |        | AC220V    |              | 0.42kg |                                   |
| SWT(E)LF                          | 3      | DC12V-24V | UL           | 0.30kg | ● R-Red<br>● A-Amber<br>● G-Green |
| Steady/Flashing                   |        | AC110V    |              | 0.45kg |                                   |
| SWT(E)LF-BZ                       |        | AC220V    |              | 0.45kg |                                   |
| Steady/Flashing/w built-in buzzer |        |           |              |        |                                   |

※ DC type model has a free-voltage range of 10V-30V.

※ CE Compliant: DC12V-24V, UL Listed: DC24V

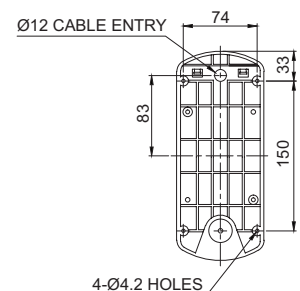
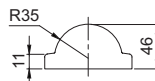
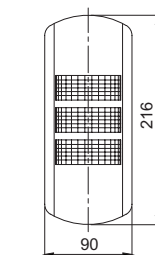
### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V-24V | AC110V | AC200V |
|-------------------------------|-----------|--------|--------|
| Light source current(1 layer) | Max.60mA  | 35mA   | 20mA   |
| Buzzer current                | Max.35mA  | 35mA   | 20mA   |

### Technical Diagram

Units : mm

·SWT / SWTE



### Ordering Specifications

| SWTL                                                                             | 3                       | 220                                         | RAG                               |
|----------------------------------------------------------------------------------|-------------------------|---------------------------------------------|-----------------------------------|
| [Model number]                                                                   | [Layers]                | [Voltage]                                   | [Color]                           |
| SWTL<br>SWTLF<br>SWTL-BZ<br>SWTLF-BZ<br>SWTEL<br>SWTELF<br>SWTEL-BZ<br>SWTELF-BZ | 2-2Layers<br>3-3 Layers | 12/24-DC12V-24V<br>110-AC110V<br>220-AC220V | ● R-Red<br>● A-Amber<br>● G-Green |



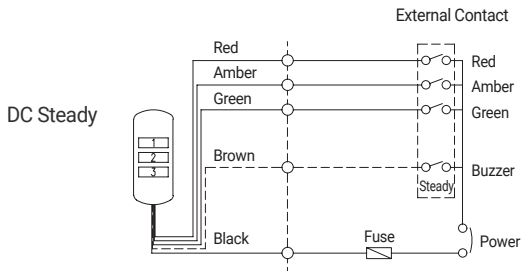
## Wiring Instructions

- SWT Series can be wired by using both External Contact and transistor
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below
- Product can be wired regardless of polarity

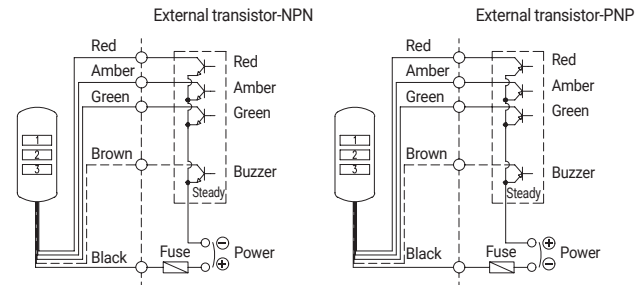
### External Contact

### Transistor

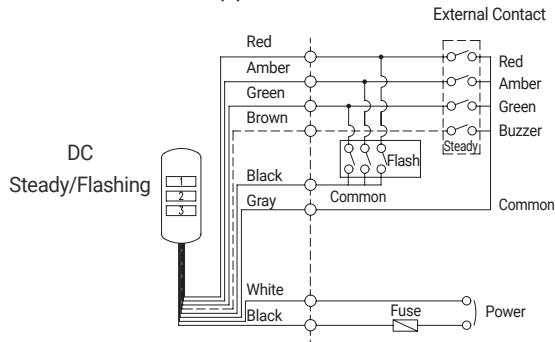
#### ·SWT(E)L-DC



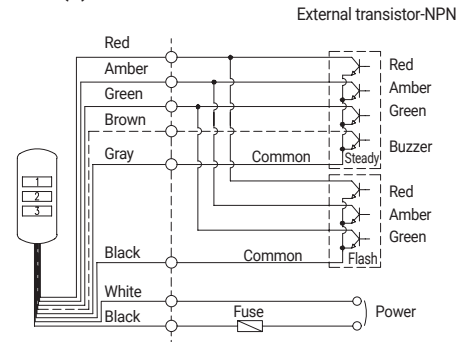
#### ·SWT(E)L-DC



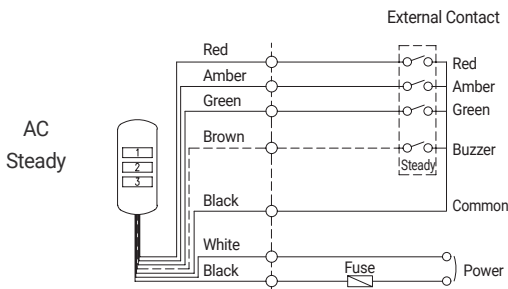
#### ·SWT(E)LF-DC



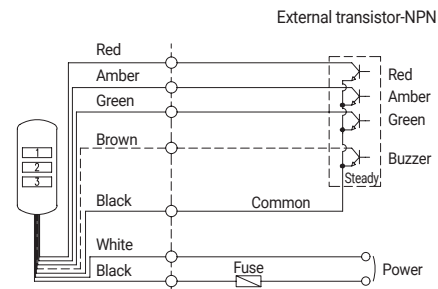
#### ·SWT(E)LF-DC



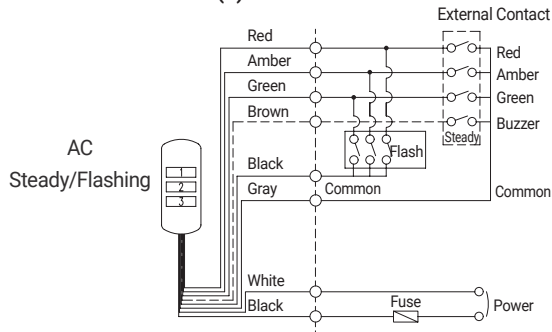
#### ·SWT(E)L-AC



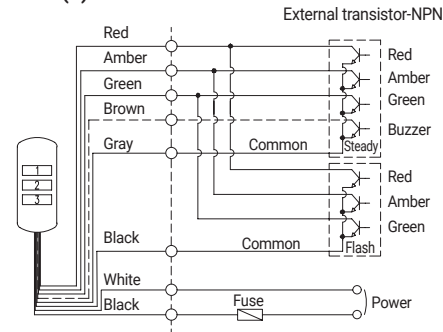
#### ·SWT(E)L-AC



#### ·SWT(E)LF-AC



#### ·SWT(E)LF-AC



- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm

## QWT Series



QWT Series

### PRODUCT SPECIFICATION

QWT

**Materials** Lens-PC, Housing-ABS

**Ambient operating temperature**  $-30^{\circ}\text{C} \leq T_{\text{as}} \leq +50^{\circ}\text{C}$

**Volume** Max.85dB at 1m

**Protection rating** IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Wall mount model that minimizes the chance of breakage from moving obstacles
- The use of a circular lens design for the product improves visibility at the sides
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.

### QWT Wall Mount, LED Steady/Flashing

| Model number                                     | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|--------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QWTL<br>Steady                                   | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.34kg<br>0.34kg<br>0.36kg | ● R-Red                                                    |
|                                                  | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.41kg<br>0.41kg<br>0.43kg | ● R-Red<br>● G-Green                                       |
|                                                  | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.48kg<br>0.48kg<br>0.50kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                  | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.55kg<br>0.55kg<br>0.57kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                  | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.62kg<br>0.62kg<br>0.64kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QWTL-BZ<br>Steady w/built-in buzzer              |        |                               |              |                            |                                                            |
| QWTLF<br>Steady/Flashing                         |        |                               |              |                            |                                                            |
| QWTLF-BZ<br>Steady/Flashing<br>w/built-in buzzer |        |                               |              |                            |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

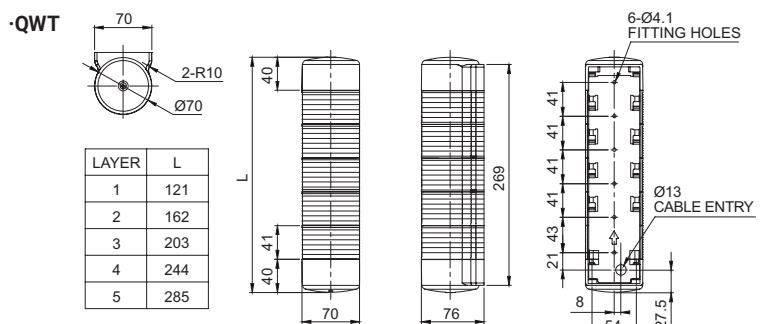
※ CE Compliant: DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 75mA  | 50mA  | Max.30mA    |
| Buzzer current                | 50mA  | 115mA | Max.15mA    |

### Technical Diagram

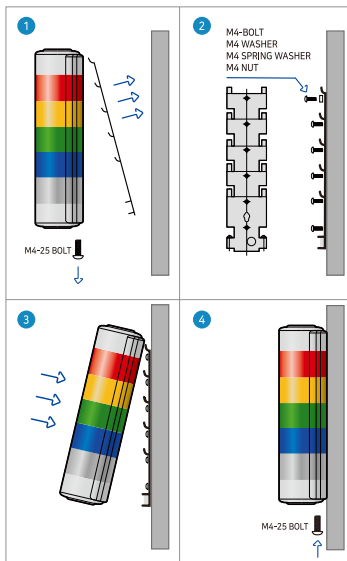
Units : mm



### Ordering Specifications

|                |   |            |   |              |   |           |
|----------------|---|------------|---|--------------|---|-----------|
| QWTL           | - | 3          | - | 110/220      | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage]    |   | [Color]   |
| QWTL           |   | 1-1 Layer  |   | 12-DC12V     |   | ● R-Red   |
| QWTL-BZ        |   | 2-2 Layers |   | 24-DC24V     |   | ● A-Amber |
| QWTLF          |   | 3-3 Layers |   | 110/220      |   | ● G-Green |
| QWTLF-BZ       |   | 4-4 Layers |   | -AC110V-220V |   | ● B-Blue  |
|                |   | 5-5 Layers |   |              |   | ○ W-White |

### Mount bracket



- Loosen the two M4 bolts on the bottom of the bracket and remove the body
- Attach the bracket to the wall with screws into the mounting holes
- Hang the unit onto the bracket
- After attaching the unit to the bracket, secure the two pieces together with the M4 bolts at the bottom of the product

### Customization

- Customized color combination



## Wiring Instructions

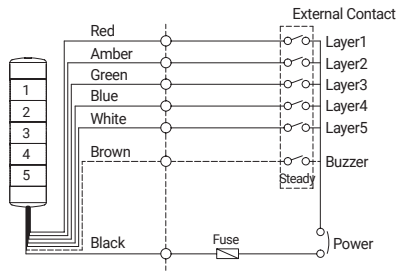
- QWT Series can be wired by using both External Contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.
- Product can be wired regardless of polarity.

### External Contact

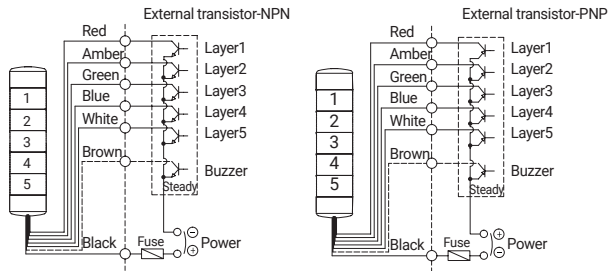
### Transistor

#### ·QWTL-DC

DC  
Steady

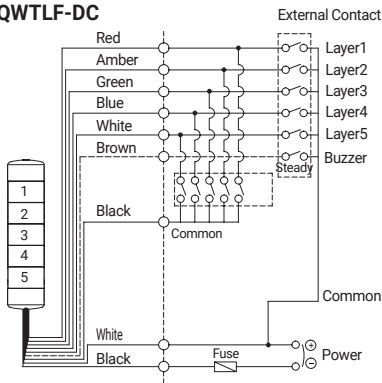


#### ·QWTL-DC

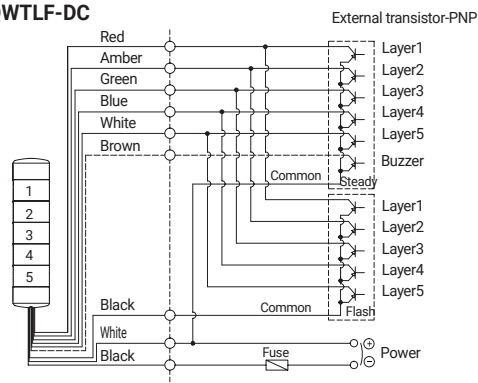


#### ·QWTLF-DC

DC  
Steady/Flashing

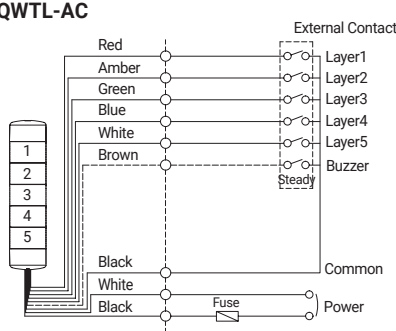


#### ·QWTLF-DC

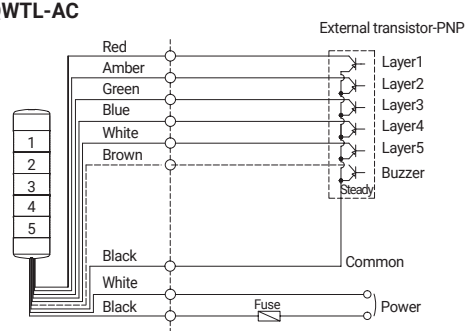


#### ·QWTL-AC

AC  
Steady

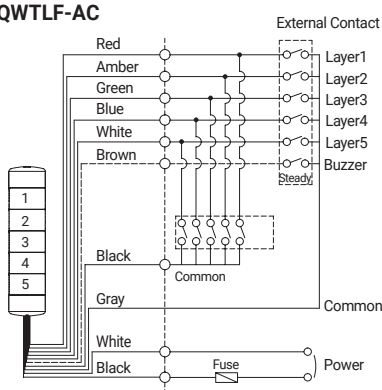


#### ·QWTL-AC

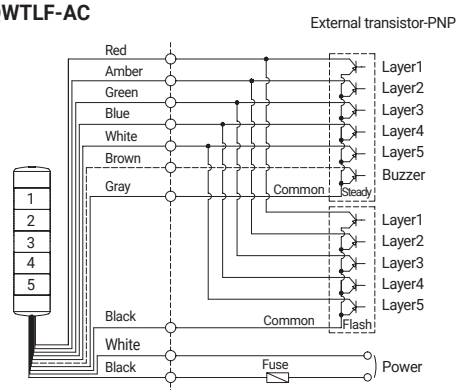


#### ·QWTLF-AC

AC  
Steady/Flashing



#### ·QWTLF-AC



- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm





MWTL

### PRODUCT SPECIFICATION

MWTL

**Materials** Lens-PC, Cover-ABS, Housing-ABS

**Ambient operating temperature** -30°C to + 50°C

**Volume** Max.90dB at 1m

**Protection rating** IP55

**Standard color arrangements**

● Red-R ● Amber-A ● Green-G ● Blue-B

**Flashing rate** 60-80/min

- Wall mount model that minimizes the chance of damage from moving obstacles or personnel
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Can be used outdoors with tightly sealed structure
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



### MWTL Wall Mount, LED Steady/Flashing

| Model number                                      | Layers | Voltage | Certificates | Weight | Color                                         |
|---------------------------------------------------|--------|---------|--------------|--------|-----------------------------------------------|
| MWTL<br>Steady                                    |        |         |              |        |                                               |
| MWTL-BZ<br>Steady w/built-in buzzer               |        |         |              |        |                                               |
| MWTLF<br>Steady/Flashing                          | 4      | DC24V   | CE           | 0.29kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |
| MWTLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |         |              |        |                                               |

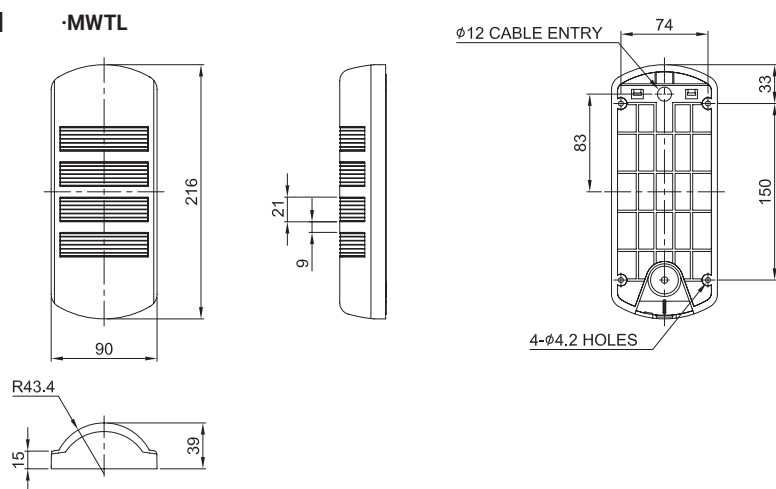
※ CE Compliant: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC24V |
|-------------------------------|-------|
| Light source current(1 layer) | 55mA  |
| Buzzer current                | 60mA  |

### Technical Diagram

Units : mm



### Ordering Specifications

|                                      |   |            |   |           |   |                                               |
|--------------------------------------|---|------------|---|-----------|---|-----------------------------------------------|
| MWTL                                 | - | 4          | - | 24        | - | RAGB                                          |
| [Model number]                       |   | [Layers]   |   | [Voltage] |   | [Color]                                       |
| MWTL<br>MWTLF<br>MWTL-BZ<br>MWTLF-BZ |   | 4-4 Layers |   | 24-DC24V  |   | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |

# Ø45mm Multiple Color LED Steady/Flashing Tower Lights

## STC45ML



### PRODUCT SPECIFICATION

STC45(M)L | STC56(M)L  
STC80(M)L

**Materials** Lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to + 60°C

**Volume** Max.90dB at 1m

**Protection rating** Standard type-IP44, Built-in buzzer type-IP23

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Economical tower light model that can deliver two to three signals with one layer
- Long product lifetime of over 20,000 hours with the application of a high intensity multiple color LED light source
- Can select from size of Ø45mm, Ø56mm, and Ø80mm to fit your sophisticated application needs
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Customized 2 buzzer sound type available
- M12 connector type is optionally available(Female M12 connector is not provided)
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



STC45ML Series

Built-in buzzer output holes formed on the housing of the product



### STC45ML Ø45mm Direct Mount, Multiple Color LED Steady/Flashing

| Model number                                     | Colors | Voltage | Certificates | Weight | Color   |
|--------------------------------------------------|--------|---------|--------------|--------|---------|
| STC45ML<br>Steady                                | 2      | DC12V   | CE           | 0.19kg | R-Red   |
| STC45ML-BZ<br>Steady w/built-in buzzer           |        | DC24V   |              |        | G-Green |
| STC45MLF<br>Steady/Flashing                      | 3      | AC110V  |              | 0.32kg | A-Amber |
| STC45MLF-BZ<br>Steady/Flashing w/built-in buzzer |        | AC220V  |              |        | G-Green |

※ CE Compliant: DC24V

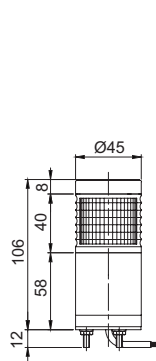
### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 95mA  | 100mA | 30mA   | 15mA   |
| Buzzer current       | 40mA  | 75mA  | 25mA   | 15mA   |

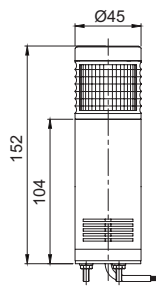
### Technical Diagram

Units : mm

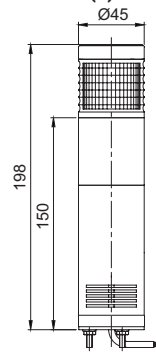
·STC45ML-DC



·STC45ML-AC  
·STC45MLF-AC/DC  
·STC45ML(F)-BZ-DC



·STC45ML(F)-BZ-AC



### Customization

- Available in customized color arrangements
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

### WiringInstructions

- External power line
- UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line
- UL1007 AWG22(0.3sq) 400mm

### Ordering Specifications

|                |   |            |   |            |   |         |
|----------------|---|------------|---|------------|---|---------|
| STC45ML        | - | 3          | - | 220        | - | RAG     |
| [Model number] |   | [Colors]   |   | [Voltage]  |   | [Color] |
| STC45ML        |   | 2-2 Colors |   | 12-DC12V   |   | R-Red   |
| STC45ML-BZ     |   | 3-3 Colors |   | 24-DC24V   |   | A-Amber |
| STC45MLF       |   |            |   | 110-AC110V |   | G-Green |
| STC45MLF-BZ    |   |            |   | 220-AC220V |   |         |

# Ø45mm Multiple Color LED Steady/Flashing Tower Lights

## STC45L



STC45L Series

Built-in buzzer output holes formed on the housing of the product



### STC45L Ø45mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number                      | Colors | Voltage          | Certificates | Weight | Color                                                                                                                                     |
|-----------------------------------|--------|------------------|--------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| STC45L Steady                     | 2      | DC12V            | CE           | 0.33kg | <span style="color: red;">●</span> R-Red<br><span style="color: green;">●</span> G-Green                                                  |
| STC45L-BZ                         |        | DC24V            |              |        |                                                                                                                                           |
| Steady w/built-in buzzer          |        | AC110V<br>AC220V |              |        |                                                                                                                                           |
| STC45LF                           | 3      | DC12V            | CE           | 0.47kg | <span style="color: red;">●</span> R-Red<br><span style="color: yellow;">●</span> A-Amber<br><span style="color: green;">●</span> G-Green |
| Steady/Flashing                   |        | DC24V            |              |        |                                                                                                                                           |
| STC45LF-BZ                        |        | AC110V<br>AC220V |              |        |                                                                                                                                           |
| Steady/Flashing w/built-in buzzer |        |                  |              |        |                                                                                                                                           |

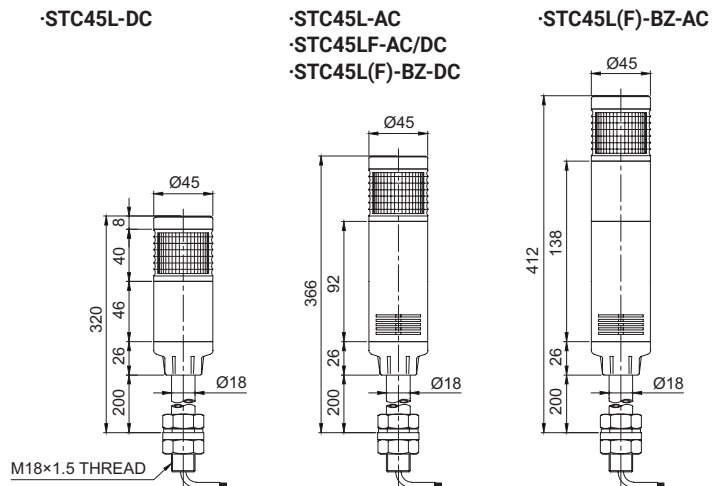
※ CE Compliant: DC24V

#### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 95mA  | 100mA | 30mA   | 15mA   |
| Buzzer current       | 40mA  | 75mA  | 25mA   | 15mA   |

#### Technical Diagram

Units : mm



#### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- Available in customized color arrangements
- M12 connector attached type
- Customized pole length available

#### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

#### Wiring Instructions

- External power line
  - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line
  - UL1007 AWG22(0.3sq) 400mm

#### Ordering Specifications

| STC45L         | - | 3          | - | 24         | - | RAG                                           | - | LW18            |
|----------------|---|------------|---|------------|---|-----------------------------------------------|---|-----------------|
| [Model number] |   | [Colors]   |   | [Voltage]  |   | [Color]                                       |   | [Bracket]       |
| STC45L         |   | 2-2 Colors |   | 12-DC12V   |   | <span style="color: red;">●</span> R-Red      |   | · None-Standard |
| STC45L-BZ      |   | 3-3 Colors |   | 24-DC24V   |   | <span style="color: yellow;">●</span> A-Amber |   | · Bracket       |
| STC45LF        |   |            |   | 110-AC110V |   | <span style="color: green;">●</span> G-Green  |   | -LB18 -LW18     |
| STC45LF-BZ     |   |            |   | 220-AC220V |   |                                               |   | -QZ18 -SZ18     |
|                |   |            |   |            |   |                                               |   | -QL18 -SL18     |

# Ø56mm Multiple Color LED Steady/Flashing Tower Lights

## STC56ML



### STC56ML Ø56mm Direct Mount, Multiple Color LED Steady/Flashing

| Model number                                                                       | Colors | Voltage                            | Certificates | Weight | Color                       |
|------------------------------------------------------------------------------------|--------|------------------------------------|--------------|--------|-----------------------------|
| STC56ML Steady<br>STC56ML-BZ<br>Steady w/built-in buzzer                           | 2      | DC12V<br>DC24V<br>AC110V<br>AC220V | CE           | 0.29kg | R-Red<br>G-Green            |
| STC56MLF<br>Steady/Flashing<br>STC56MLF-BZ<br>Steady/Flashing<br>w/built-in buzzer | 3      | DC12V<br>DC24V<br>AC110V<br>AC220V |              | 0.49kg | R-Red<br>A-Amber<br>G-Green |

※ CE Compliant: DC24V

#### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 240mA | 210mA | 50mA   | 25mA   |
| Buzzer current       | 40mA  | 75mA  | 40mA   | 20mA   |



STC56ML Series

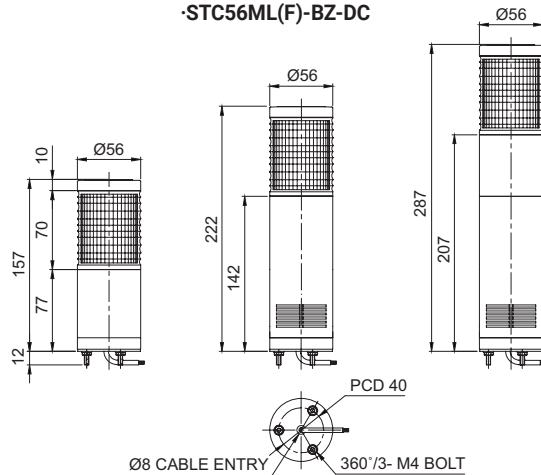
#### Technical Diagram

Units : mm

·STC56ML-DC  
·STC56MLF-DC

·STC56ML-AC  
·STC56MLF-AC  
·STC56ML(F)-BZ-DC

·STC56ML(F)-BZ-AC



Built-in buzzer output holes formed on the housing of the product



#### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm

#### Customization

- Available in customized color arrangements
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- Lens height 40mm(Model number: STC56MEL)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket TWS45



Wall mount bracket TWA45

#### Ordering Specifications

| STC56ML        | - | 3          | - | 220        | - | RAG     |
|----------------|---|------------|---|------------|---|---------|
| [Model number] |   | [Colors]   |   | [Voltage]  |   | [Color] |
| STC56ML        |   | 2-2 Colors |   | 12-DC12V   |   | R-Red   |
| STC56ML-BZ     |   | 3-3 Colors |   | 24-DC24V   |   | A-Amber |
| STC56MLF       |   |            |   | 110-AC110V |   | G-Green |
| STC56MLF-BZ    |   |            |   | 220-AC220V |   |         |

40mm lens height  
Standard height of lens is 70mm. 40mm lens can optionally be provided.  
(Model number: STC56MEL)



# Ø56mm Multiple Color LED Steady/Flashing Tower Lights

## STC56L



STC56L Series

Built-in buzzer output holes formed on the housing of the product



### Wiring Instructions

- External power line  
- UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line  
- UL1007 AWG22(0.3sq) 400mm

### Customization

- 2 buzzer sound types :  
Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- Available in customized color arrangements
- M12 connector attached type
- Customized pole length available
- Lens height 40mm  
(Model number: STC56EL)

40mm lens height  
Standard height of lens is 70mm. 40mm lens can optionally be provided.  
(Model number: STC56EL)



### STC56L Ø56mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number                       | Colors | Voltage          | Certificates | Weight | Color                                                                                                                                                                                                                                                                                  |
|------------------------------------|--------|------------------|--------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STC56L Steady                      | 2      | DC12V            | CE           | 0.43kg | <div style="display: flex; justify-content: space-around;"> <span style="color: red;">●</span> R-Red                             <span style="color: green;">●</span> G-Green                         </div>                                                                           |
| STC56L-BZ                          |        | DC24V            |              |        |                                                                                                                                                                                                                                                                                        |
| Steady w/built-in buzzer           |        | AC110V<br>AC220V |              |        |                                                                                                                                                                                                                                                                                        |
| STC56LF                            | 3      | DC12V            | CE           | 0.62kg | <div style="display: flex; justify-content: space-around;"> <span style="color: red;">●</span> R-Red                             <span style="color: yellow;">●</span> A-Amber                             <span style="color: green;">●</span> G-Green                         </div> |
| Steady/Flashing                    |        | DC24V            |              |        |                                                                                                                                                                                                                                                                                        |
| STC56LF-BZ                         |        | AC110V<br>AC220V |              |        |                                                                                                                                                                                                                                                                                        |
| Steady/Flashing w/ built-in buzzer |        |                  |              |        |                                                                                                                                                                                                                                                                                        |

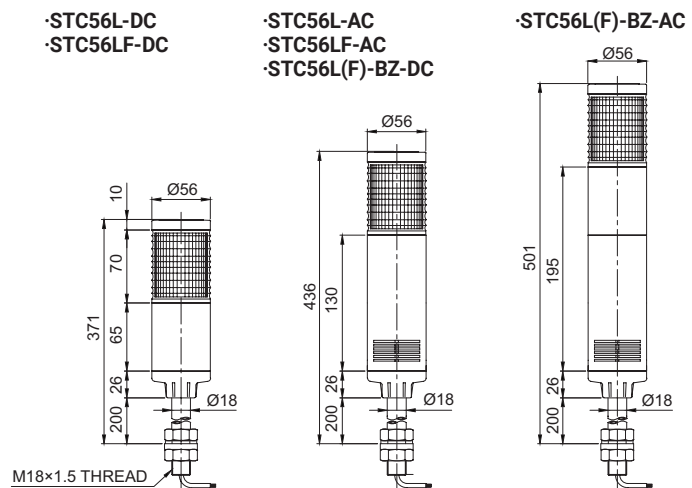
※ CE Compliant: DC24V

### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 240mA | 210mA | 50mA   | 25mA   |
| Buzzer current       | 40mA  | 75mA  | 40mA   | 20mA   |

### Technical Diagram

Units : mm



### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| STC56L         | 3          | 220        | RAG       | LW18          |
|----------------|------------|------------|-----------|---------------|
| [Model number] | [Colors]   | [Voltage]  | [Color]   | [Bracket]     |
| STC56L         | 2-2 Colors | 12-DC12V   | ● R-Red   | None-Standard |
| STC56L-BZ      | 3-3 Colors | 24-DC24V   | ● A-Amber | Bracket       |
| STC56LF        |            | 110-AC110V | ● G-Green | -LB18 -LW18   |
| STC56LF-BZ     |            | 220-AC220V |           | -QZ18 -SZ18   |
|                |            |            |           | -QL18 -SL18   |

# Ø80mm Multiple Color LED Steady/Flashing Tower Lights

## STC80ML



### STC80ML Ø80mm Direct Mount, Multiple Color LED Steady/Flashing

| Model number             | Colors | Voltage | Certificates | Weight | Color                                                  |
|--------------------------|--------|---------|--------------|--------|--------------------------------------------------------|
| STC80ML Steady           | 2      | DC12V   | CE           | 0.40kg | <div>R-Red</div> <div>G-Green</div>                    |
| STC80ML-BZ               |        | DC24V   |              |        |                                                        |
| Steady w/built-in buzzer |        | AC110V  |              |        |                                                        |
| STC80MLF                 |        | AC220V  |              |        |                                                        |
| STC80MLF Steady/Flashing | 3      | DC12V   |              | 0.60kg | <div>R-Red</div> <div>A-Amber</div> <div>G-Green</div> |
| STC80MLF-BZ              |        | DC24V   |              |        |                                                        |
| Steady/Flashing          |        | AC110V  |              |        |                                                        |
| w/ built-in buzzer       |        | AC220V  |              |        |                                                        |

※ CE Compliant: DC24V

### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 310mA | 250mA | 60mA   | 30mA   |
| Buzzer current       | 40mA  | 75mA  | 45mA   | 25mA   |



STC80ML Series

Built-in buzzer output holes formed on the housing of the product

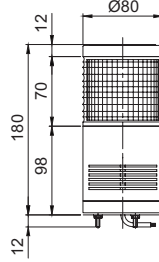
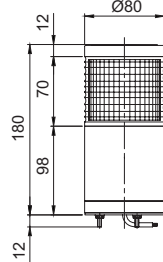


### Technical Diagram

Units : mm

·STC80ML-AC/DC  
·STC80MLF-AC/DC

·STC80ML-BZ-AC  
·STC80MLF-BZ-DC



### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm

### Customization

- Available in customized color arrangements
- M12 connector attached type
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- Lens height 40mm(Model number: STC56MEL)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket TWS80



Wall mount bracket TWA80

### Ordering Specifications

| STC80ML        | 3          | 220        | RAG                |
|----------------|------------|------------|--------------------|
| [Model number] | [Colors]   | [Voltage]  | [Color]            |
| STC80ML        | 2-2 Colors | 12-DC12V   | <div>R-Red</div>   |
| STC80ML-BZ     | 3-3 Colors | 24-DC24V   | <div>A-Amber</div> |
| STC80MLF       |            | 110-AC110V | <div>G-Green</div> |
| STC80MLF-BZ    |            | 220-AC220V |                    |

40mm lens height  
Standard height of lens is 70mm. 40mm lens can optionally be provided.  
(Model number: STC80MEL)



# Ø80mm Multiple Color LED Steady/Flashing Tower Lights

## STC80L



STC80L Series

Built-in buzzer output holes formed on the housing of the product



### Wiring Instructions

- External power line  
- UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line  
- UL1007 AWG22(0.3sq) 400mm

### Customization

- 2 buzzer sound types :  
Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- Available in customized color arrangements
- M12 connector attached type
- Customized pole length available
- Lens height 40mm  
(Model number: STC80EL)

40mm lens height  
Standard height of lens is 70mm. 40mm lens can optionally be provided.  
(Model number: STC80EL)



### STC80L Ø80mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number                      | Colors | Voltage          | Certificates | Weight | Color                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------|--------|------------------|--------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STC80L Steady                     | 2      | DC12V            | CE           | 0.64kg | <div style="display: flex; justify-content: space-around;"> <span style="color: red;">●</span> R-Red</div> <div style="display: flex; justify-content: space-around;"> <span style="color: green;">●</span> G-Green                 </div>                                                                                                                                                   |
| STC80L-BZ                         |        | DC24V            |              |        |                                                                                                                                                                                                                                                                                                                                                                                              |
| Steady w/built-in buzzer          |        | AC110V<br>AC220V |              |        |                                                                                                                                                                                                                                                                                                                                                                                              |
| STC80LF                           | 3      | DC12V            | CE           | 0.83kg | <div style="display: flex; justify-content: space-around;"> <span style="color: red;">●</span> R-Red                 </div> <div style="display: flex; justify-content: space-around;"> <span style="color: yellow;">●</span> A-Amber                 </div> <div style="display: flex; justify-content: space-around;"> <span style="color: green;">●</span> G-Green                 </div> |
| Steady/Flashing                   |        | DC24V            |              |        |                                                                                                                                                                                                                                                                                                                                                                                              |
| STC80LF-BZ                        |        | AC110V           |              |        |                                                                                                                                                                                                                                                                                                                                                                                              |
| Steady/Flashing w/built-in buzzer |        | AC220V           |              |        |                                                                                                                                                                                                                                                                                                                                                                                              |

※ CE Compliant: DC24V

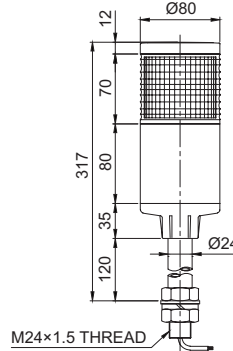
### Light source/buzzer current(Each LED module's current)

| Voltage              | DC12V | DC24V | AC110V | AC220V |
|----------------------|-------|-------|--------|--------|
| Light source current | 310mA | 250mA | 60mA   | 30mA   |
| Buzzer current       | 40mA  | 75mA  | 45mA   | 25mA   |

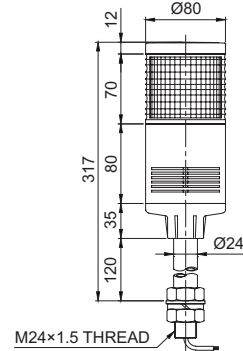
### Technical Diagram

Units : mm

·STC80L-AC/DC  
·STC80LF-AC/DC



·STC80L-BZ-AC  
·STC80LF-BZ-DC



### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

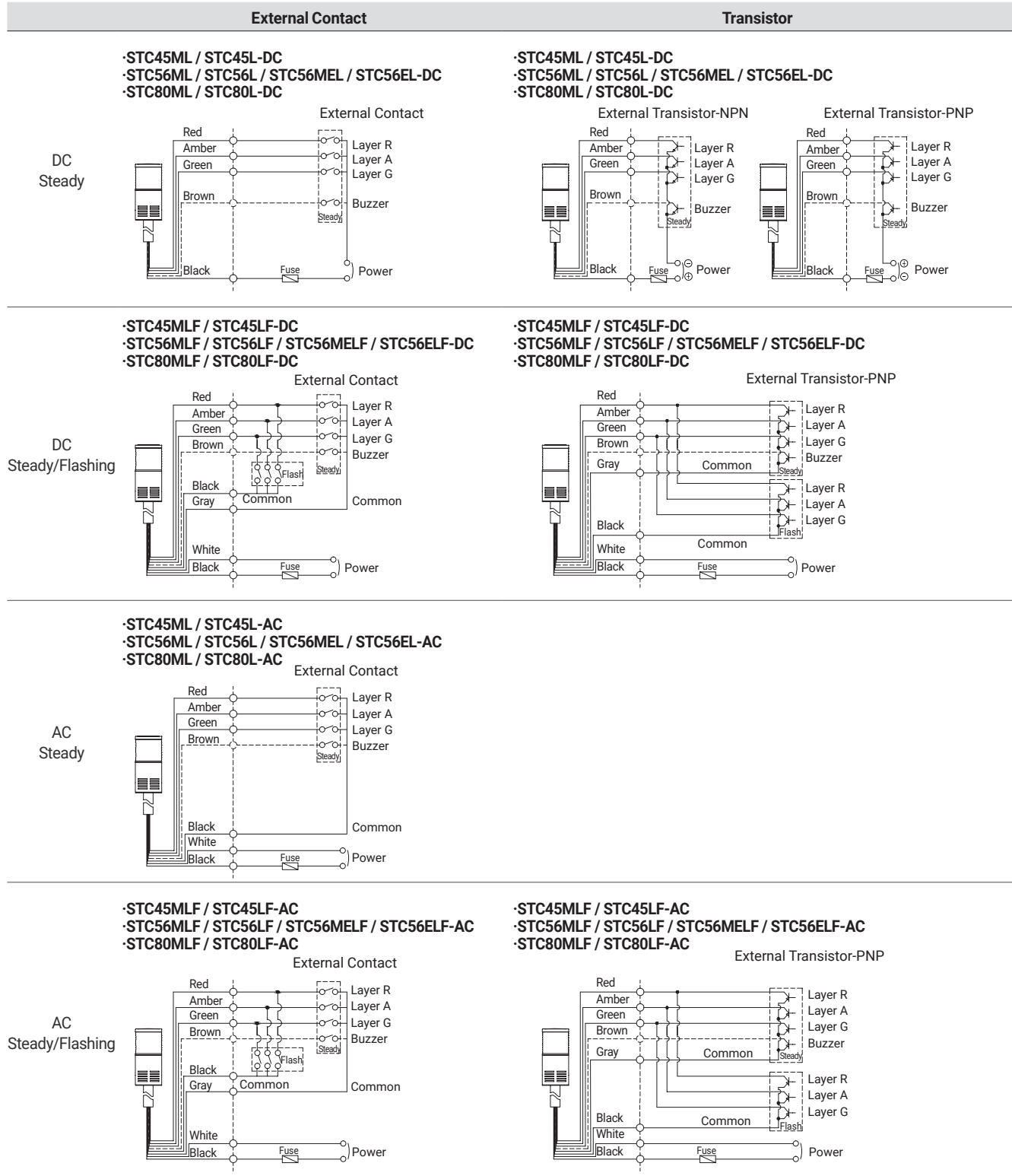
### Ordering Specifications

| STC80L         | 3          | 220        | RAG       | LW24            |
|----------------|------------|------------|-----------|-----------------|
| [Model number] | [Colors]   | [Voltage]  | [Color]   | [Bracket]       |
| STC80L         | 2-2 Colors | 12-DC12V   | ● R-Red   | · None-Standard |
| STC80L-BZ      | 3-3 Colors | 24-DC24V   | ● A-Amber | · Bracket       |
| STC80LF        |            | 110-AC110V | ● G-Green | -LB24 -LW24     |
| STC80LF-BZ     |            | 220-AC220V |           | -QZ24 -SZ24     |
|                |            |            |           | -QL24 -SL24     |



### Wiring Instructions

- STC Series can be wired by using both External Contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.
- Product can be wired regardless of polarity.



- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm



## QT56MCL

Signal light that can be configured with 7 colors in 1 tower light



QT56MCL Series

Built-in buzzer output holes formed on the housing of the product



### PRODUCT SPECIFICATION

QT56MCL

**Materials** Lens-PC, Housing-Al, bracket-Al  
**Ambient operating temperature** -30°C to + 60°C  
**Volume** Max.90dB at 1m  
**Protection rating** Standard type-IP44, Built-in buzzer type-IP23

- Helps reduce the costs of installation by reducing the space needed to emit seven color signals in a single tower light
- Compact pole-mounted product adopting high-brightness LED as a light source
- Elegant design with hexagon shaped metal housing
- Aluminum housing provides excellent durability
- Soft LED illuminates designated colors when on
- When off, milky translucent color lens provides a comfortable and stable viewing condition for workers in close proximity
- Folding type mount bracket can be utilized in various environments
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- M12 connector type is optionally available(Female M12 connector is not provided)

### QT56MCL Multiple Color LED Steady

| Model number                         | Voltage | Certificates | Weight | Color    |
|--------------------------------------|---------|--------------|--------|----------|
| QT56MCL Steady                       | DC24V   | CE           | 0.45kg | 7 Colors |
| QT56MCL-BZ Steady w/ built-in buzzer | DC24V   |              | 0.48kg |          |

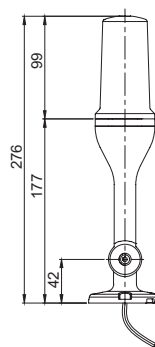
### Light source/buzzer current(Each LED module's current)

| Voltage              | DC24V |
|----------------------|-------|
| Light source current | 50mA  |
| Buzzer current       | 75mA  |

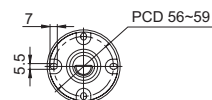
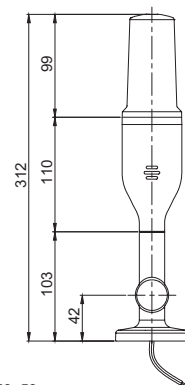
### Technical Diagram

Units : mm

·QT56MCL



·QT56MCL-BZ



### Customization

- M12 connector attached type

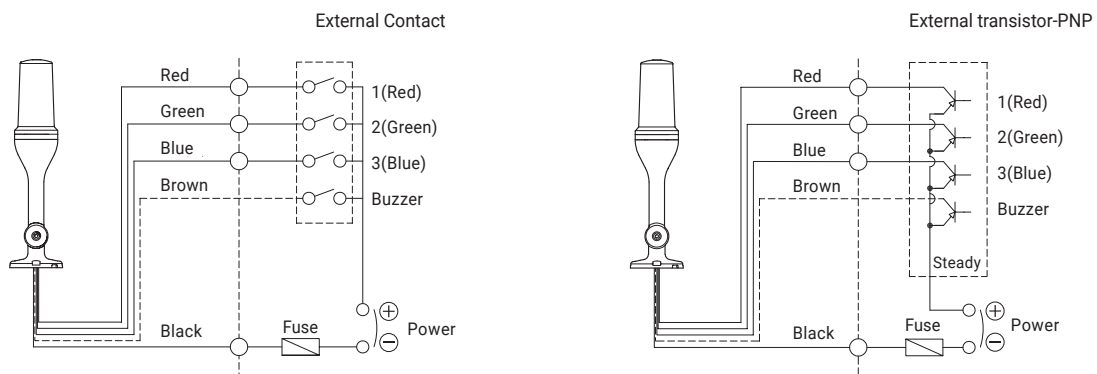
### Ordering Specifications

|                |   |           |
|----------------|---|-----------|
| QT56MCL        | - | 24        |
| [Model number] |   | [Voltage] |
| QT56MCL        |   | 24-DC24V  |
| QT56MCL-BZ     |   |           |

## Wiring Instructions

- QT56MCL can be wired by using both External Contact and transistor.
- In case of wiring by transistor, please make sure if it is PNP type. Please carefully follow wiring instructions below.
- External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

### QT56MCL



#### < Wiring Configuration for Signal Color >

| No. | Signal color | Wiring Configuration for |
|-----|--------------|--------------------------|
| 1   | RED          | 1(RED)                   |
| 2   | GREEN        | 2(GREEN)                 |
| 3   | BLUE         | 3(BLUE)                  |
| 4   | AMBER        | 1(RED)+2(GREEN)          |
| 5   | CYAN         | 2(GREEN)+3(BLUE)         |
| 6   | PURPLE       | 1(RED)+3(BLUE)           |
| 7   | WHITE        | 1(RED)+2(GREEN)+3(BLUE)  |

※ Please refer to 'M12 Connector-type tower light PIN-MAP' from this catalogue regarding wiring diagram of M12 connector type model.

## Signal Color Options

- 7 Color modes available via wiring
- QT56MCL Series can configure seven color signals by combining the 3 signal wires (red, green, blue) attached to the tower light.



# ST45L / ST56L / ST80L Series

Universal LED tower light with a wide selection of audio and visual signaling options according to the application environment and intended use



## PRODUCT SPECIFICATION

STL Series

**Materials** Lens-AS, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to + 60°C

**Volume**

Max.90dB at 1m

Max.85dB at 1m(Speaker output type, Based on WA-Ch1)

**Protection rating** Standard type-IP44, Built-in buzzer type-IP23

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- LED steady/flashing tower lights
- Long product lifetime of over 20,000hours with the application of a high intensity LED light source
- Can select from size selections of Ø45mm, Ø56mm, and Ø80mm to fit your sophisticated application needs
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Built-in alarm available: Can select from 5 warning sounds, 5 alarms, 5 melodies to fit your application needs
- Customized color arrangement available (LED light distribution system and lens is integrated into a combined structure)
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment

### 1 Different sizes of LED steady/flashing lenses

- You can select from a variety of indicators depending on the working environment and application needs.

| Model number | Lens diameter | Lens height |
|--------------|---------------|-------------|
| ST45(M)L     | 45mm          | 40mm        |
| ST45(M)LF    | 45mm          | 40mm        |
| ST56(M)EL    | 56mm          | 40mm        |
| ST56(M)ELF   | 56mm          | 40mm        |
| ST56(M)L     | 56mm          | 70mm        |
| ST56(M)LF    | 56mm          | 70mm        |
| ST80(M)EL    | 80mm          | 40mm        |
| ST80(M)ELF   | 80mm          | 40mm        |
| ST80(M)L     | 80mm          | 70mm        |
| ST80(M)LF    | 80mm          | 70mm        |

### 2 Buzzer and sound patterns with 15 different tones

- Concrete messages can be clearly conveyed with the option of 15 types of audible signals.

| Main | Built-in sound                   | Channel                         | Sound                                                                            |
|------|----------------------------------|---------------------------------|----------------------------------------------------------------------------------|
| BZ   | 1 buzzer sound<br>2 buzzer sound | -                               | ※ Customized 2 tone Buzzer available                                             |
| WS   | 5 Warning sounds                 | Ch1<br>Ch2<br>Ch3<br>Ch4<br>Ch5 | Fire.A-ANG<br>Emergency<br>Ambulance<br>Machinery Fault<br>High Expansion        |
| WM   | 5 Melodies                       | Ch1<br>Ch2<br>Ch3<br>Ch4<br>Ch5 | Sweet Home<br>For Elise<br>Cuckoo's Waltz<br>Piano Sonata<br>Turkish March       |
| WA   | 5 Alarms                         | Ch1<br>Ch2<br>Ch3<br>Ch4<br>Ch5 | Beep Intermittent<br>Door Chime<br>Phone Ring<br>PI.PI.PI Short<br>Tripping Beat |

### 3 A variety of Mounting bracket selection

- Wall mount type model allows for contained and tidy wiring with no exposed wires
- A number of pole mounting stands are available for a variety of environments depending on location and mounting needs
- Specifically, the QL-type and SL-type tower lights can be applied in a variety of environments as it can be folded up to 90 degrees in the horizontal direction. These products can avoid damage due to external forces when movement of the equipment is required

#### ·Wall mount bracket

TWS45 TWS80 TWA45 TWA80



Steel

PC

#### ·Pole Mount Brackets

Standard LB18 LB24 LW18 LW24 QZ18 QZ24 SZ18 SZ24 QL18 QL24 SL18 SL24



Steel

Steel

ABS

ABS

Al

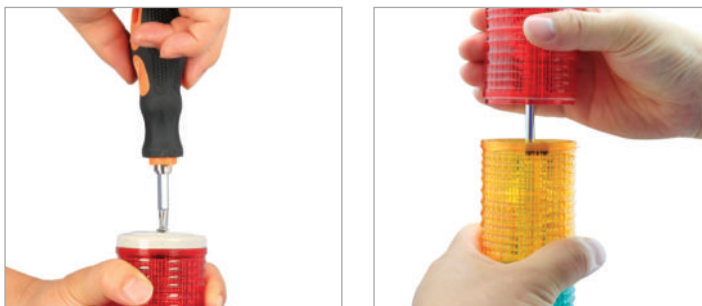
ABS

Al

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

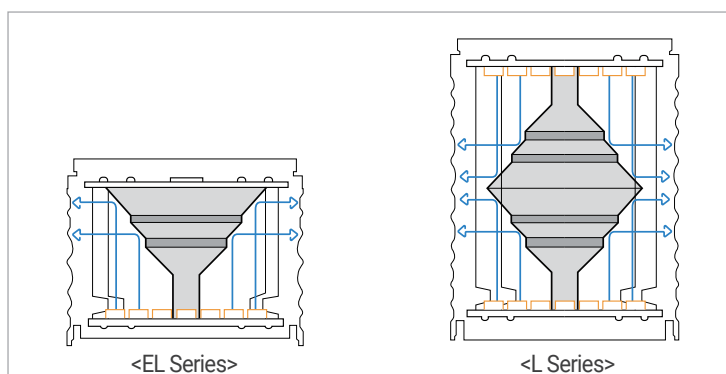
## Interchangeable Lens Concept

STL Series product allows for the lens arrangement to be adjusted after removing the bolt that secures the cover. If additional lenses are required for this product please reach out to us. ST45L / ST56L / ST80L series can be stacked up to 5 layers.



## Reflection System

- Qlight's special light distribution system with multi-tiered reflector provides linear and balanced light transmission to the lens for strong LED illumination throughout the product
- The special light diffusion structure inside the product creates the brightest signal light at the center of the lens



## References

| Mount bracket                                                                                       | Sound                                                                               | Buzzer and sound patterns | Lens dimension |                |                |                |                |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------|----------------|----------------|----------------|----------------|----------------|
|                                                                                                     |                                                                                     |                           | Ø45mm<br>H40mm | Ø56mm<br>H40mm | Ø56mm<br>H70mm | Ø80mm<br>H40mm | Ø80mm<br>H70mm |
| <br>Direct mount | No sound                                                                            | Standard                  | ST45ML(F)      | ST56MEL(F)     | ST56ML(F)      | ST80MEL(F)     | ST80ML(F)      |
|                                                                                                     |  | Built-in buzzer           | ST45ML(F)-BZ   | ST56MEL(F)-BZ  | ST56ML(F)-BZ   | ST80MEL(F)-BZ  | ST80ML(F)-BZ   |
|                                                                                                     |  | 5 Warning sounds          | ST45ML(F)-WS   | ST56MEL(F)-WS  | ST56ML(F)-WS   | ST80MEL(F)-WS  | ST80ML(F)-WS   |
|                                                                                                     |                                                                                     | 5 Melodies                | ST45ML(F)-WM   | ST56MEL(F)-WM  | ST56ML(F)-WM   | ST80MEL(F)-WM  | ST80ML(F)-WM   |
|                                                                                                     |                                                                                     | 5 Alarms                  | ST45ML(F)-WA   | ST56MEL(F)-WA  | ST56ML(F)-WA   | ST80MEL(F)-WA  | ST80ML(F)-WA   |
| <br>Pole mount   | No sound                                                                            | Standard                  | ST45L(F)       | ST56EL(F)      | ST56L(F)       | ST80EL(F)      | ST80L(F)       |
|                                                                                                     |  | Built-in buzzer           | ST45L(F)-BZ    | ST56EL(F)-BZ   | ST56L(F)-BZ    | ST80EL(F)-BZ   | ST80L(F)-BZ    |
|                                                                                                     |  | 5 Warning sounds          | ST45L(F)-WS    | ST56EL(F)-WS   | ST56L(F)-WS    | ST80EL(F)-WS   | ST80L(F)-WS    |
|                                                                                                     |                                                                                     | 5 Melodies                | ST45L(F)-WM    | ST56EL(F)-WM   | ST56L(F)-WM    | ST80EL(F)-WM   | ST80L(F)-WM    |
|                                                                                                     |                                                                                     | 5 Alarms                  | ST45L(F)-WA    | ST56EL(F)-WA   | ST56L(F)-WA    | ST80EL(F)-WA   | ST80L(F)-WA    |

# ST45ML / ST45L



ST45ML Series

Built-in buzzer output holes formed on the housing of the product



## ST45ML Ø45mm Direct mount, LED Steady/Flashing

| Model number                                 | Layers | Voltage  | Certificates | Weight | Color                                                      |
|----------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST45ML Steady                                | 1      | AC/DC12V | CE           | 0.19kg | ● R-Red                                                    |
| ST45ML-BZ Steady w/built-in buzzer           |        | AC/DC24V |              | 0.19kg |                                                            |
| ST45ML-WS Steady/5 Warning sounds            |        | AC110V   |              | 0.25kg |                                                            |
| ST45ML-WM Steady/5 Melodies                  |        | AC220V   |              | 0.25kg |                                                            |
| ST45ML-WS Steady/5 Warning sounds            | 2      | AC/DC12V | CE           | 0.21kg | ● R-Red<br>● G-Green                                       |
| ST45ML-WM Steady/5 Melodies                  |        | AC/DC24V |              | 0.21kg |                                                            |
| ST45ML-WS Steady/5 Warning sounds            |        | AC110V   |              | 0.29kg |                                                            |
| ST45ML-WM Steady/5 Melodies                  |        | AC220V   |              | 0.29kg |                                                            |
| ST45ML-WA Steady/5 Alarms                    | 3      | AC/DC12V | CE<br>UL     | 0.25kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST45ML-WS Steady/5 Warning sounds            |        | AC/DC24V |              | 0.25kg |                                                            |
| ST45ML-WM Steady/5 Melodies                  |        | AC110V   |              | 0.34kg |                                                            |
| ST45ML-WA Steady/5 Alarms                    |        | AC220V   |              | 0.34kg |                                                            |
| ST45MLF Steady/Flashing                      | 4      | AC/DC12V | CE           | 0.30kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST45MLF-BZ Steady/Flashing w/built-in buzzer |        | AC/DC24V |              | 0.30kg |                                                            |
| ST45MLF-WS Steady/Flashing/5 Warning sounds  |        | AC110V   |              | 0.38kg |                                                            |
| ST45MLF-WM Steady/Flashing/5 Melodies        |        | AC220V   |              | 0.38kg |                                                            |
| ST45MLF-WA Steady/Flashing/5 Alarms          | 5      | AC/DC12V | CE           | 0.34kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST45MLF-BZ Steady/Flashing w/built-in buzzer |        | AC/DC24V |              | 0.34kg |                                                            |
| ST45MLF-WS Steady/Flashing/5 Warning sounds  |        | AC110V   |              | 0.42kg |                                                            |
| ST45MLF-WM Steady/Flashing/5 Melodies        |        | AC220V   |              | 0.42kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 40mA         | 55mA         | 45mA   | 30mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 35mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



### Ordering Specifications

|                |   |            |   |            |   |           |
|----------------|---|------------|---|------------|---|-----------|
| ST45ML         | - | 3          | - | 24         | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| ST45ML         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| ST45ML-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
| ST45ML-WS      |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
| ST45ML-WM      |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |
| ST45ML-WA      |   | 5-5 Layers |   |            |   | ○ W-White |
| ST45MLF        |   |            |   |            |   |           |
| ST45MLF-BZ     |   |            |   |            |   |           |
| ST45MLF-WS     |   |            |   |            |   |           |
| ST45MLF-WM     |   |            |   |            |   |           |
| ST45MLF-WA     |   |            |   |            |   |           |



## ST45L Ø45mm Pole mount, LED Steady/Flashing

| Model number                      | Layers | Voltage  | Certificates | Weight | Color                                                      |
|-----------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST45L                             | 1      | AC/DC12V | CE<br>UL     | 0.35kg | ● R-Red                                                    |
| Steady                            |        | AC/DC24V |              | 0.35kg |                                                            |
| ST45L-BZ                          |        | AC110V   |              | 0.45kg |                                                            |
| Steady w/built-in buzzer          |        | AC220V   |              | 0.45kg |                                                            |
| ST45L-WS                          | 2      | AC/DC12V |              | 0.39kg | ● R-Red<br>● G-Green                                       |
| Steady/5 Warning sounds           |        | AC/DC24V |              | 0.39kg |                                                            |
| ST45L-WM                          |        | AC110V   |              | 0.49kg |                                                            |
| Steady/5 Melodies                 |        | AC220V   |              | 0.49kg |                                                            |
| ST45L-WA                          | 3      | AC/DC12V |              | 0.44kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| Steady/5 Alarms                   |        | AC/DC24V |              | 0.44kg |                                                            |
| ST45LF                            |        | AC110V   |              | 0.54kg |                                                            |
| Steady/Flashing                   |        | AC220V   |              | 0.54kg |                                                            |
| ST45LF-BZ                         | 4      | AC/DC12V |              | 0.48kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| Steady/Flashing w/built-in buzzer |        | AC/DC24V |              | 0.48kg |                                                            |
| ST45LF-WS                         |        | AC110V   |              | 0.58kg |                                                            |
| Steady/Flashing/5 Warning sounds  |        | AC220V   |              | 0.58kg |                                                            |
| ST45LF-WM                         | 5      | AC/DC12V |              | 0.52kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| Steady/Flashing/5 Melodies        |        | AC/DC24V |              | 0.52kg |                                                            |
| ST45LF-WA                         |        | AC110V   |              | 0.62kg |                                                            |
| Steady/Flashing/5 Alarms          |        | AC220V   |              | 0.62kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)



ST45L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 40mA         | 55mA         | 45mA   | 30mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 35mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

Built-in buzzer output holes formed on the housing of the product



### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| ST45L          | - | 3          | - | 24         | - | RAG       | - | LW18            |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| ST45L          |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| ST45L-BZ       |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
| ST45L-WS       |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | -LB18 -LW18     |
| ST45L-WM       |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | -QZ18 -SZ18     |
| ST45L-WA       |   | 5-5 Layers |   |            |   | ○ W-White |   | -QL18 -SL18     |
| ST45LF         |   |            |   |            |   |           |   |                 |
| ST45LF-BZ      |   |            |   |            |   |           |   |                 |
| ST45LF-WS      |   |            |   |            |   |           |   |                 |
| ST45LF-WM      |   |            |   |            |   |           |   |                 |
| ST45LF-WA      |   |            |   |            |   |           |   |                 |

### Customization

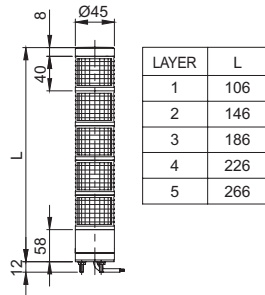
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

# ST45ML / ST45L

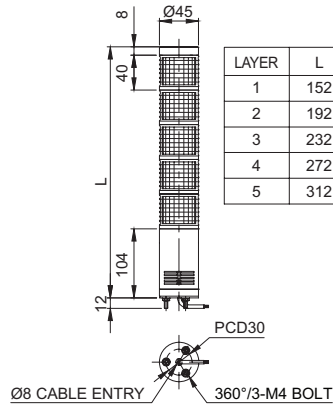
## Technical Diagram

Units : mm

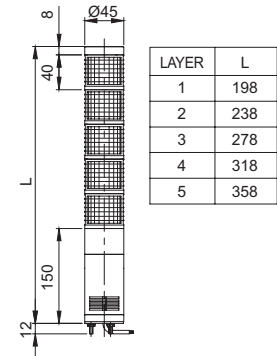
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·ST45ML-BZ-DC  
·ST45MLF-DC



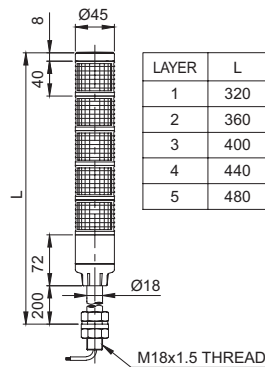
·ST45ML-BZ-AC  
·ST45MLF-AC  
·ST45MLF-BZ-DC



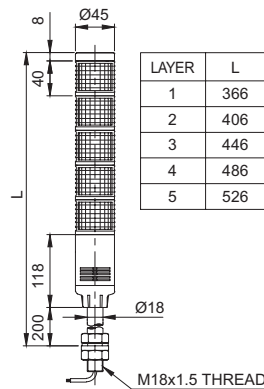
·ST45MLF-BZ-AC



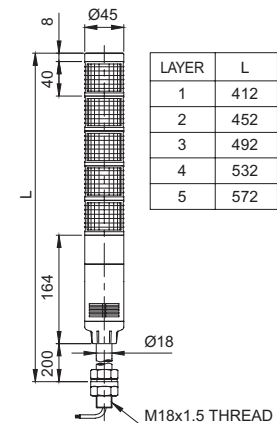
·ST45L-AC/DC  
·ST45L-BZ-DC  
·ST45LF-DC



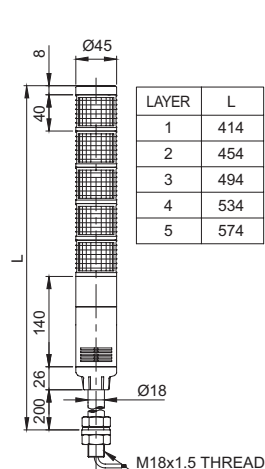
·ST45L-BZ-AC  
·ST45LF-AC  
·ST45LF-BZ-DC



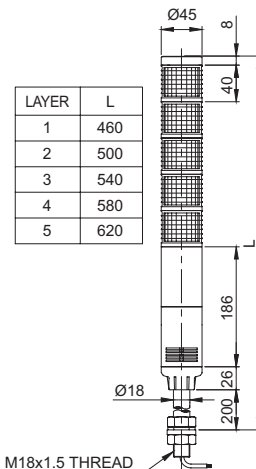
·ST45LF-BZ-AC



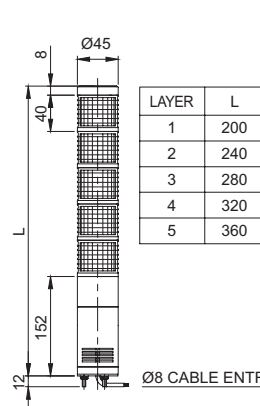
·ST45L-W□-DC  
·ST45LF-W□-DC



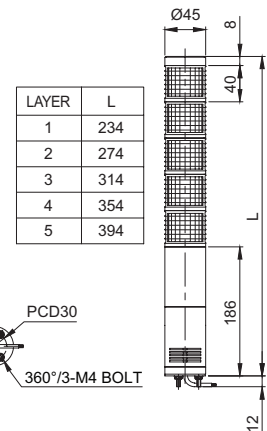
·ST45L-W□-AC  
·ST45LF-W□-AC



·ST45ML-W□-DC  
·ST45MLF-W□-DC



·ST45ML-W□-AC  
·ST45MLF-W□-AC



## Wiring Instructions

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact



# Ø56mm LED Steady/Flashing Tower Lights

## ST56MEL



### ST56MEL Ø56mm Direct mount, LED Steady/Flashing

| Model number                                         | Layers | Voltage  | Certificates | Weight | Color                                                      |
|------------------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST56MEL<br>Steady                                    | 1      | AC/DC12V |              | 0.26kg | ● R-Red                                                    |
| ST56MEL-BZ<br>Steady w/built-in buzzer               |        | AC/DC24V |              | 0.26kg |                                                            |
|                                                      |        | AC110V   |              | 0.42kg |                                                            |
| ST56MEL-WA<br>Steady/5 Alarms                        | 2      | AC/DC12V |              | 0.32kg | ● R-Red<br>● G-Green                                       |
| ST56MEL-WS<br>Steady/5 Warning sounds                |        | AC/DC24V |              | 0.32kg |                                                            |
| ST56MEL-WM<br>Steady/5 Melodies                      |        | AC110V   |              | 0.48kg |                                                            |
| ST56MELF<br>Steady/Flashing                          | 3      | AC/DC12V | CE<br>UL     | 0.37kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST56MELF-BZ<br>Steady/Flashing w/<br>built-in buzzer |        | AC/DC24V |              | 0.37kg |                                                            |
| ST56MELF-WS<br>Steady/Flashing/<br>5 Warning sounds  |        | AC110V   |              | 0.54kg |                                                            |
| ST56MELF-WM<br>Steady/Flashing/5 Melodies            | 4      | AC/DC12V |              | 0.43kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST56MELF-WA<br>Steady/Flashing/5 Alarms              |        | AC/DC24V |              | 0.43kg |                                                            |
|                                                      |        | AC110V   |              | 0.59kg |                                                            |
| ST56MELF-WA<br>Steady/Flashing/5 Alarms              | 5      | AC/DC12V |              | 0.49kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                                                      |        | AC/DC24V |              | 0.49kg |                                                            |
|                                                      |        | AC110V   |              | 0.65kg |                                                            |
|                                                      |        | AC220V   |              | 0.65kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)



ST56MEL Series

Built-in buzzer output  
holes formed on the  
housing of the product



### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 60mA         | 60mA         | 50mA   | 40mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



### Ordering Specifications

| ST56MEL        | - | 3          | - | 24         | - | RAG       |
|----------------|---|------------|---|------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| ST56MEL        |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| ST56MEL-BZ     |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
| ST56MEL-WS     |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
| ST56MEL-WM     |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |
| ST56MEL-WA     |   | 5-5 Layers |   |            |   | ○ W-White |
| ST56MELF       |   |            |   |            |   |           |
| ST56MELF-BZ    |   |            |   |            |   |           |
| ST56MELF-WS    |   |            |   |            |   |           |
| ST56MELF-WM    |   |            |   |            |   |           |
| ST56MELF-WA    |   |            |   |            |   |           |

# Ø56mm LED Steady/Flashing Tower Lights

## ST56EL



ST56EL Series

Built-in buzzer output holes formed on the housing of the product



### ST56EL Ø56mm Pole mount, LED Steady/Flashing

| Model number                                        | Layers | Voltage  | Certificates | Weight | Color                                                      |
|-----------------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST56EL<br>Steady                                    | 1      | AC/DC12V |              | 0.41kg | ● R-Red                                                    |
| ST56EL-BZ<br>Steady w/built-in buzzer               |        | AC/DC24V |              | 0.41kg |                                                            |
| ST56EL-WS<br>Steady/5 Warning sounds                |        | AC110V   |              | 0.57kg |                                                            |
| ST56EL-WM<br>Steady/5 Melodies                      | 2      | AC220V   |              | 0.57kg | ● R-Red<br>● G-Green                                       |
| ST56EL-WA<br>Steady/5 Alarms                        |        | AC/DC12V |              | 0.47kg |                                                            |
| ST56ELF<br>Steady/Flashing                          |        | AC/DC24V |              | 0.47kg |                                                            |
| ST56ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 3      | AC110V   | CE<br>UL     | 0.52kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST56ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC220V   |              | 0.52kg |                                                            |
| ST56ELF-WM<br>Steady/Flashing/5 Melodies            |        | AC110V   |              | 0.62kg |                                                            |
| ST56ELF-WA<br>Steady/Flashing/5 Alarms              | 4      | AC220V   |              | 0.62kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST56ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer |        | AC/DC12V |              | 0.58kg |                                                            |
| ST56ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC/DC24V |              | 0.58kg |                                                            |
| ST56ELF-WM<br>Steady/Flashing/5 Melodies            | 5      | AC110V   |              | 0.74kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST56ELF-WA<br>Steady/Flashing/5 Alarms              |        | AC220V   |              | 0.74kg |                                                            |
| ST56ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer |        | AC/DC12V |              | 0.63kg |                                                            |
| ST56ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   | 5      | AC/DC24V |              | 0.63kg |                                                            |
| ST56ELF-WM<br>Steady/Flashing/5 Melodies            |        | AC110V   |              | 0.75kg |                                                            |
| ST56ELF-WA<br>Steady/Flashing/5 Alarms              |        | AC220V   |              | 0.75kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 60mA         | 60mA         | 50mA   | 40mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

### Ordering Specifications

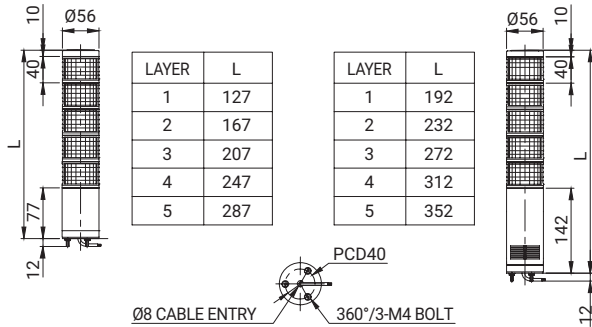
|                |   |            |   |            |   |           |   |                 |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| ST56EL         | - | 3          | - | 220        | - | RAG       | - | LW18            |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| ST56EL         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| ST56EL-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
| ST56EL-WS      |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | -LB18 -LW18     |
| ST56EL-WM      |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | -QZ18 -SZ18     |
| ST56EL-WA      |   | 5-5 Layers |   |            |   | ○ W-White |   | -QL18 -SL18     |
| ST56ELF        |   |            |   |            |   |           |   |                 |
| ST56ELF-BZ     |   |            |   |            |   |           |   |                 |
| ST56ELF-WS     |   |            |   |            |   |           |   |                 |
| ST56ELF-WM     |   |            |   |            |   |           |   |                 |
| ST56ELF-WA     |   |            |   |            |   |           |   |                 |

# ST56MEL / ST56EL

## Technical Diagram

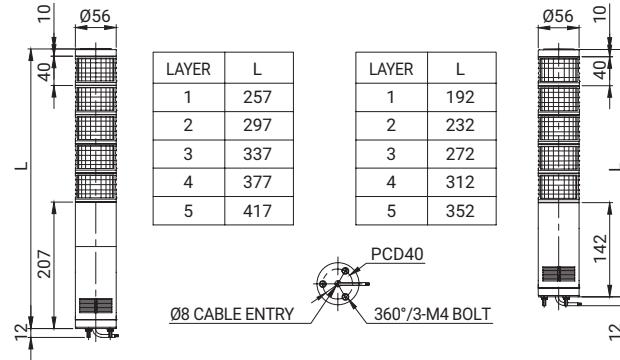
Units : mm

·ST56MEL-AC/DC  
·ST56MEL-BZ-DC  
·ST56MELF-DC

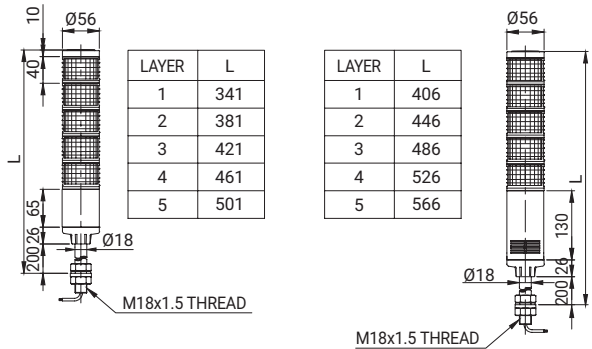


·ST56MEL-BZ-AC  
·ST56MELF-BZ-AC/DC  
·ST56MELF-AC

·ST56MEL-W□-AC  
·ST56MELF-W□-AC

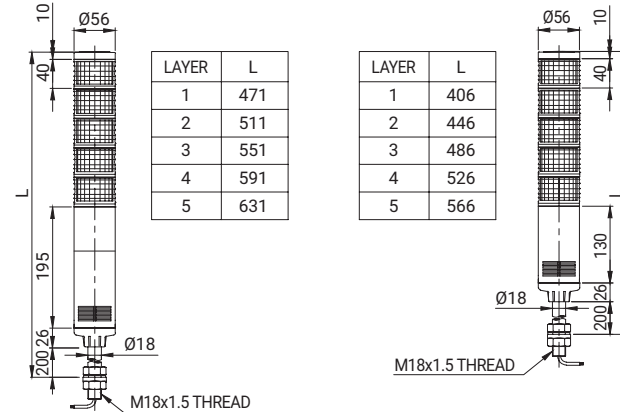


·ST56EL-AC/DC  
·ST56EL-BZ-DC  
·ST56ELF-DC



·ST56EL-BZ-AC  
·ST56ELF-BZ-AC/DC  
·ST56ELF-AC

·ST56EL-W□-AC  
·ST56ELF-W□-AC



## Wiring Instructions

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

# ST56ML / ST56L



ST56ML Series

Built-in buzzer output holes formed on the housing of the product



## ST56ML Ø56mm Direct mount, LED Steady/Flashing

| Model number                                        | Layers | Voltage  | Certificates | Weight | Color                                                      |
|-----------------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST56ML<br>Steady                                    | 1      | AC/DC12V |              | 0.22kg | ● R-Red                                                    |
| ST56ML-BZ<br>Steady w/built-in buzzer               |        | AC/DC24V |              | 0.22kg |                                                            |
|                                                     |        | AC110V   |              | 0.45kg |                                                            |
| ST56ML-WS<br>Steady/5 Warning sounds                | 2      | AC/DC12V |              | 0.30kg | ● R-Red                                                    |
| ST56ML-WM<br>Steady/5 Melodies                      |        | AC/DC24V |              | 0.30kg |                                                            |
| ST56ML-WA<br>Steady/5 Alarms                        |        | AC110V   |              | 0.53kg |                                                            |
| ST56MLF<br>Steady/Flashing                          | 3      | AC/DC12V | CE<br>UL     | 0.38kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST56MLF-BZ<br>Steady/Flashing w/<br>built-in buzzer |        | AC/DC24V |              | 0.38kg |                                                            |
| ST56MLF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC110V   |              | 0.61kg |                                                            |
| ST56MLF-WM<br>Steady/Flashing/5 Melodies            | 4      | AC/DC12V |              | 0.46kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST56MLF-WA<br>Steady/Flashing/5 Alarms              |        | AC/DC24V |              | 0.46kg |                                                            |
|                                                     |        | AC110V   |              | 0.70kg |                                                            |
| ST56MLF-WM<br>Steady/Flashing/5 Melodies            | 5      | AC/DC12V |              | 0.54kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST56MLF-WA<br>Steady/Flashing/5 Alarms              |        | AC/DC24V |              | 0.54kg |                                                            |
|                                                     |        | AC110V   |              | 0.78kg |                                                            |
|                                                     |        | AC220V   |              | 0.78kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 120mA        | 95mA         | 70mA   | 55mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



### Ordering Specifications

| ST56ML         | - | 3          | - | 110        | - | RAG       |
|----------------|---|------------|---|------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| ST56ML         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| ST56ML-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
| ST56ML-WS      |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
| ST56ML-WM      |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |
| ST56ML-WA      |   | 5-5 Layers |   |            |   | ○ W-White |
| ST56MLF        |   |            |   |            |   |           |
| ST56MLF-BZ     |   |            |   |            |   |           |
| ST56MLF-WS     |   |            |   |            |   |           |
| ST56MLF-WM     |   |            |   |            |   |           |
| ST56MLF-WA     |   |            |   |            |   |           |



## ST56L Ø56mm Pole mount, LED Steady/Flashing

| Model number                                      | Layers | Voltage  | Certificates | Weight | Color                                                      |
|---------------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST56L<br>Steady                                   | 1      | AC/DC12V | CE<br>UL     | 0.44kg | ● R-Red                                                    |
| ST56L-BZ<br>Steady w/built-in buzzer              |        | AC/DC24V |              | 0.44kg |                                                            |
| ST56L-WA                                          |        | AC110V   |              | 0.60kg |                                                            |
| ST56L-WM                                          |        | AC220V   |              | 0.60kg |                                                            |
| ST56L-WS<br>Steady/5 Warning sounds               | 2      | AC/DC12V |              | 0.52kg | ● R-Red<br>● G-Green                                       |
| ST56L-WM                                          |        | AC/DC24V |              | 0.52kg |                                                            |
| ST56L-WA                                          |        | AC110V   |              | 0.68kg |                                                            |
| ST56L-WM                                          |        | AC220V   |              | 0.68kg |                                                            |
| ST56L-WS<br>Steady/5 Alarms                       | 3      | AC/DC12V |              | 0.60kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST56L-BZ                                          |        | AC/DC24V |              | 0.60kg |                                                            |
| ST56L-WA                                          |        | AC110V   |              | 0.76kg |                                                            |
| ST56L-WM                                          |        | AC220V   |              | 0.76kg |                                                            |
| ST56L-WS<br>Steady/Flashing w/<br>built-in buzzer | 4      | AC/DC12V |              | 0.68kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST56L-WM                                          |        | AC/DC24V |              | 0.68kg |                                                            |
| ST56L-WA                                          |        | AC110V   |              | 0.84kg |                                                            |
| ST56L-WM                                          |        | AC220V   |              | 0.84kg |                                                            |
| ST56L-WS<br>Steady/Flashing/5 Melodies            | 5      | AC/DC12V |              | 0.77kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST56L-BZ                                          |        | AC/DC24V |              | 0.77kg |                                                            |
| ST56L-WA                                          |        | AC110V   |              | 0.93kg |                                                            |
| ST56L-WM                                          |        | AC220V   |              | 0.93kg |                                                            |

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 120mA        | 95mA         | 70mA   | 55mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |            |   |           |   |                 |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| ST56L          | - | 3          | - | 220        | - | RAG       | - | LW18            |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| ST56L          |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| ST56L-BZ       |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
| ST56L-WS       |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | · LB18-LW18     |
| ST56L-WM       |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | · QZ18-SZ18     |
| ST56L-WA       |   | 5-5 Layers |   |            |   | ○ W-White |   | · QL18-SL18     |
| ST56L-BZ       |   |            |   |            |   |           |   |                 |
| ST56L-WS       |   |            |   |            |   |           |   |                 |
| ST56L-WM       |   |            |   |            |   |           |   |                 |
| ST56L-WA       |   |            |   |            |   |           |   |                 |



ST56L Series

Built-in buzzer output holes formed on the housing of the product



### Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided (same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

# ST56ML / ST56L

## Technical Diagram

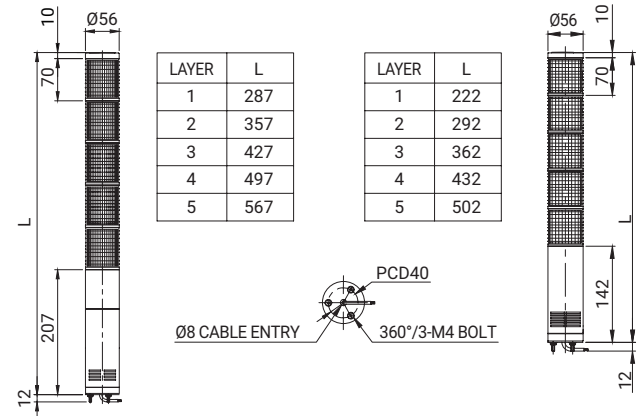
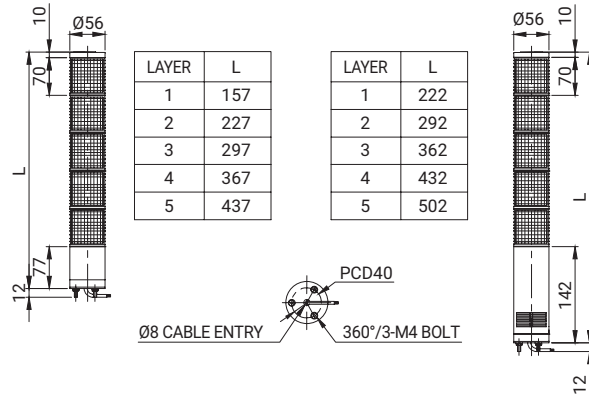
Units : mm

·ST56ML-AC/DC  
·ST56ML-BZ-DC  
·ST56MLF-DC

·ST56ML-BZ-AC  
·ST56MLF-BZ-AC/DC  
·ST56MLF-AC

·ST56ML-W□-AC  
·ST56MLF-W□-AC

·ST56ML-W□-DC  
·ST56MLF-W□-DC

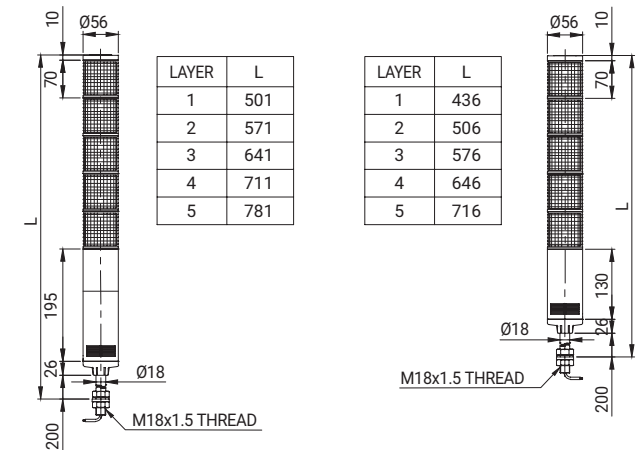
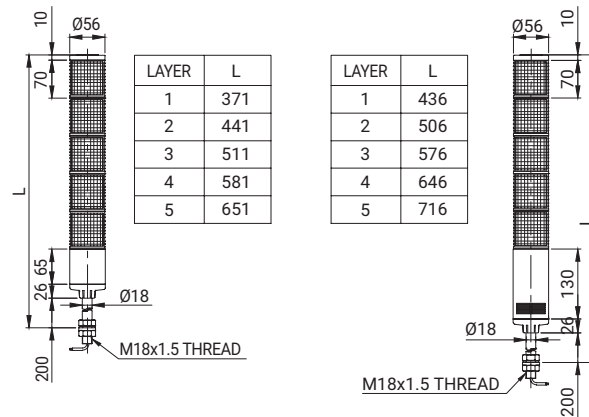


·ST56L-AC/DC  
·ST56L-BZ-DC  
·ST56LF-DC

·ST56L-BZ-AC  
·ST56LF-BZ-AC/DC  
·ST56LF-AC

·ST56L-W□-AC  
·ST56LF-W□-AC

·ST56L-W□-DC  
·ST56LF-W□-DC



## Wiring Instructions

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact



# Ø80mm LED Steady/Flashing Tower Lights

## ST80MEL



### ST80MEL Ø80mm Direct mount, LED Steady/Flashing

| Model number                                  | Layers | Voltage  | Certificates | Weight | Color                                            |
|-----------------------------------------------|--------|----------|--------------|--------|--------------------------------------------------|
| ST80MEL Steady                                | 1      | AC/DC12V | CE<br>UL     | 0.36kg | R-Red                                            |
| ST80MEL-BZ Steady w/built-in buzzer           |        | AC/DC24V |              | 0.36kg |                                                  |
| ST80MEL-WS Steady/5 Warning sounds            |        | AC110V   |              | 0.59kg |                                                  |
| ST80MEL-WM Steady/5 Melodies                  | 2      | AC220V   |              | 0.59kg | R-Red<br>G-Green                                 |
| ST80MEL-WA Steady/5 Alarms                    |        | AC/DC12V |              | 0.45kg |                                                  |
| ST80MELF Steady/Flashing                      |        | AC/DC24V |              | 0.45kg |                                                  |
| ST80MELF-BZ Steady/Flashing w/built-in buzzer | 3      | AC110V   |              | 0.68kg | R-Red<br>G-Green                                 |
| ST80MELF-WS Steady/Flashing/5 Warning sounds  |        | AC220V   |              | 0.68kg |                                                  |
| ST80MELF-WM Steady/Flashing/5 Melodies        |        | AC/DC12V |              | 0.55kg | R-Red<br>A-Amber<br>G-Green                      |
| ST80MELF-WA Steady/Flashing/5 Alarms          | 4      | AC/DC24V |              | 0.55kg |                                                  |
| ST80MELF-BZ Steady/Flashing w/built-in buzzer |        | AC110V   |              | 0.76kg |                                                  |
| ST80MELF-WS Steady/Flashing/5 Warning sounds  |        | AC220V   |              | 0.76kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
| ST80MELF-WM Steady/Flashing/5 Melodies        | 5      | AC/DC12V |              | 0.64kg |                                                  |
| ST80MELF-WA Steady/Flashing/5 Alarms          |        | AC/DC24V |              | 0.64kg |                                                  |
| ST80MELF-BZ Steady/Flashing w/built-in buzzer |        | AC110V   |              | 0.87kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |
| ST80MELF-WS Steady/Flashing/5 Warning sounds  |        | AC220V   |              | 0.87kg |                                                  |
| ST80MELF-WM Steady/Flashing/5 Melodies        |        | AC/DC12V |              | 0.73kg |                                                  |
| ST80MELF-WA Steady/Flashing/5 Alarms          |        | AC/DC24V |              | 0.73kg |                                                  |
| ST80MELF-BZ Steady/Flashing w/built-in buzzer |        | AC110V   |              | 0.96kg |                                                  |
| ST80MELF-WS Steady/Flashing/5 Warning sounds  |        | AC220V   |              | 0.96kg |                                                  |
| ST80MELF-WM Steady/Flashing/5 Melodies        |        | AC/DC12V |              | 0.73kg |                                                  |
| ST80MELF-WA Steady/Flashing/5 Alarms          |        | AC/DC24V |              | 0.73kg |                                                  |

※ CE Compliant: DC12V, DC24V(Except sound types)

※ UL Listed: DC24V(Except sound types)



ST80MEL Series

Built-in buzzer output holes formed on the housing of the product

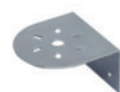


### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 80mA         | 60mA         | 50mA   | 40mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep)buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket TWS80



Wall mount bracket TWA80

### Ordering Specifications

| ST80MEL        | - | 3          | - | 24         | - | RAG     |
|----------------|---|------------|---|------------|---|---------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color] |
| ST80MEL        |   | 1-1 Layer  |   | 12-DC12V   |   | R-Red   |
| ST80MEL-BZ     |   | 2-2 Layers |   | 24-DC24V   |   | A-Amber |
| ST80MEL-WS     |   | 3-3 Layers |   | 110-AC110V |   | G-Green |
| ST80MEL-WM     |   | 4-4 Layers |   | 220-AC220V |   | B-Blue  |
| ST80MEL-WA     |   | 5-5 Layers |   |            |   | W-White |
| ST80MELF       |   |            |   |            |   |         |
| ST80MELF-BZ    |   |            |   |            |   |         |
| ST80MELF-WS    |   |            |   |            |   |         |
| ST80MELF-WM    |   |            |   |            |   |         |
| ST80MELF-WA    |   |            |   |            |   |         |



# Ø80mm LED Steady/Flashing Tower Lights

## ST80EL



ST80EL Series

Built-in buzzer output holes formed on the housing of the product



### ST80EL Ø80mm Pole mount, LED Steady/Flashing

| Model number                                        | Layers | Voltage  | Certificates | Weight | Color                                                      |
|-----------------------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST80EL<br>Steady                                    | 1      | AC/DC12V |              | 0.58kg | ● R-Red                                                    |
| ST80EL-BZ<br>Steady w/built-in buzzer               |        | AC/DC24V |              | 0.58kg |                                                            |
|                                                     |        | AC110V   |              | 0.81kg |                                                            |
|                                                     |        | AC220V   |              | 0.81kg |                                                            |
| ST80EL-WS<br>Steady/5 Warning sounds                | 2      | AC/DC12V |              | 0.67kg | ● R-Red<br>● G-Green                                       |
| ST80EL-WM<br>Steady/5 Melodies                      |        | AC/DC24V |              | 0.67kg |                                                            |
| ST80EL-WA<br>Steady/5 Alarms                        |        | AC110V   |              | 0.91kg |                                                            |
| ST80ELF<br>Steady/Flashing                          |        | AC220V   |              | 0.91kg |                                                            |
| ST80ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 3      | AC/DC12V | CE<br>UL     | 0.77kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST80ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC/DC24V |              | 0.77kg |                                                            |
| ST80ELF-WM<br>Steady/Flashing/5 Melodies            |        | AC110V   |              | 1.00kg |                                                            |
| ST80ELF-WA<br>Steady/Flashing/5 Alarms              |        | AC220V   |              | 1.00kg |                                                            |
| ST80ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 4      | AC/DC12V |              | 0.86kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST80ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC/DC24V |              | 0.86kg |                                                            |
| ST80ELF-WM<br>Steady/Flashing/5 Melodies            |        | AC110V   |              | 1.09kg |                                                            |
| ST80ELF-WA<br>Steady/Flashing/5 Alarms              |        | AC220V   |              | 1.09kg |                                                            |
| ST80ELF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 5      | AC/DC12V |              | 0.95kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST80ELF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC/DC24V |              | 0.95kg |                                                            |
| ST80ELF-WM<br>Steady/Flashing/5 Melodies            |        | AC110V   |              | 1.19kg |                                                            |
| ST80ELF-WA<br>Steady/Flashing/5 Alarms              |        | AC220V   |              | 1.19kg |                                                            |

※ CE Compliant: DC12V, DC24V(Except sound types)

※ UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 80mA         | 60mA         | 50mA   | 40mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided (same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

### Ordering Specifications

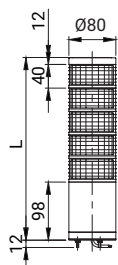
| ST80EL         | - | 3          | - | 220        | - | RAG       | - | LW24            |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| ST80EL         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| ST80EL-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
| ST80EL-WS      |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | · LB24-LW24     |
| ST80EL-WM      |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | · QZ24-SZ24     |
| ST80EL-WA      |   | 5-5 Layers |   |            |   | ○ W-White |   | · QL24-SL24     |
| ST80ELF        |   |            |   |            |   |           |   |                 |
| ST80ELF-BZ     |   |            |   |            |   |           |   |                 |
| ST80ELF-WS     |   |            |   |            |   |           |   |                 |
| ST80ELF-WM     |   |            |   |            |   |           |   |                 |
| ST80ELF-WA     |   |            |   |            |   |           |   |                 |

# ST80MEL / ST80EL

## Technical Diagram

Units : mm

·ST80MEL-AC/DC  
·ST80MELF-AC/DC

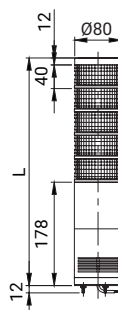


| LAYER | L   |
|-------|-----|
| 1     | 150 |
| 2     | 190 |
| 3     | 230 |
| 4     | 270 |
| 5     | 310 |



·ST80MEL-BZ-AC/DC  
·ST80MELF-BZ-AC/DC

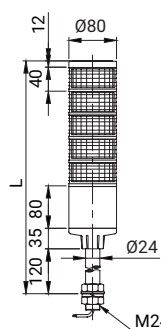
·ST80MEL-W□  
·ST80MELF-W□



| LAYER | L   |
|-------|-----|
| 1     | 230 |
| 2     | 270 |
| 3     | 310 |
| 4     | 350 |
| 5     | 390 |



·ST80EL-AC/DC  
·ST80ELF-AC/DC

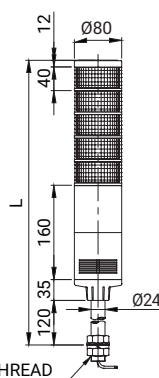


| LAYER | L   |
|-------|-----|
| 1     | 287 |
| 2     | 327 |
| 3     | 367 |
| 4     | 407 |
| 5     | 447 |



·ST80EL-BZ-AC/DC  
·ST80ELF-BZ-AC/DC

·ST80EL-W□  
·ST80ELF-W□



| LAYER | L   |
|-------|-----|
| 1     | 367 |
| 2     | 407 |
| 3     | 447 |
| 4     | 487 |
| 5     | 527 |

M24x1.5 THREAD

## Wiring Instructions

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

# ST80ML / ST80L



ST80ML Series

Built-in buzzer output holes formed on the housing of the product



## ST80ML Ø80mm Direct mount, LED Steady/Flashing

| Model number                                        | Layers | Voltage          | Certificates | Weight           | Color                                                      |
|-----------------------------------------------------|--------|------------------|--------------|------------------|------------------------------------------------------------|
| ST80ML<br>Steady                                    | 1      | AC/DC12V         | CE<br>UL     | 0.40kg           | ● R-Red                                                    |
| ST80ML-BZ<br>Steady w/built-in buzzer               |        | AC/DC24V         |              | 0.40kg           |                                                            |
|                                                     |        | AC110V           |              | 0.64kg           |                                                            |
|                                                     |        | AC220V           |              | 0.64kg           |                                                            |
| ST80ML-WS<br>Steady/5 Warning sounds                | 2      | AC/DC12V         |              | 0.54kg           | ● R-Red<br>● G-Green                                       |
| ST80ML-WM<br>Steady/5 Melodies                      |        | AC/DC24V         |              | 0.54kg           |                                                            |
|                                                     |        | AC110V<br>AC220V |              | 0.78kg<br>0.78kg |                                                            |
| ST80ML-WA<br>Steady/5 Alarms                        | 3      | AC/DC12V         |              | 0.68kg           | ● R-Red<br>● A-Amber<br>● G-Green                          |
| ST80MLF<br>Steady/Flashing                          |        | AC/DC24V         |              | 0.68kg           |                                                            |
|                                                     |        | AC110V           |              | 0.92kg           |                                                            |
|                                                     |        | AC220V           |              | 0.92kg           |                                                            |
| ST80MLF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 4      | AC/DC12V         |              | 0.83kg           | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| ST80MLF-WS<br>Steady/Flashing/5 Warning<br>sounds   |        | AC/DC24V         |              | 0.83kg           |                                                            |
|                                                     |        | AC110V           |              | 1.06kg           |                                                            |
|                                                     |        | AC220V           |              | 1.06kg           |                                                            |
| ST80MLF-WM<br>Steady/Flashing/5 Melodies            | 5      | AC/DC12V         |              | 0.97kg           | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| ST80MLF-WA<br>Steady/Flashing/5 Alarms              |        | AC/DC24V         |              | 0.97kg           |                                                            |
|                                                     |        | AC110V           |              | 1.20kg           |                                                            |
|                                                     |        | AC220V           |              | 1.20kg           |                                                            |

※ CE Compliant: DC12V, DC24V(Except sound types)

※ UL Listed: DC24V(Except sound types)

## Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 160mA        | 95mA         | 70mA   | 55mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

## Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep)buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

## Ordering Specifications

|                |   |            |   |            |   |           |
|----------------|---|------------|---|------------|---|-----------|
| ST80ML         | - | 3          | - | 110        | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| ST80ML         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| ST80ML-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
| ST80ML-WS      |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
| ST80ML-WM      |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |
| ST80ML-WA      |   | 5-5 Layers |   |            |   | ○ W-White |
| ST80MLF        |   |            |   |            |   |           |
| ST80MLF-BZ     |   |            |   |            |   |           |
| ST80MLF-WS     |   |            |   |            |   |           |
| ST80MLF-WM     |   |            |   |            |   |           |
| ST80MLF-WA     |   |            |   |            |   |           |



## ST80L Ø80mm Pole mount, LED Steady/Flashing

| Model number                          | Layers | Voltage  | Certificates | Weight | Color                                                      |
|---------------------------------------|--------|----------|--------------|--------|------------------------------------------------------------|
| ST80L                                 | 1      | AC/DC12V | CE<br>UL     | 0.62kg | ● R-Red                                                    |
| Steady                                |        | AC/DC24V |              | 0.62kg |                                                            |
| ST80L-BZ                              |        | AC110V   |              | 0.86kg |                                                            |
| Steady w/built-in buzzer              |        | AC220V   |              | 0.86kg |                                                            |
| ST80L-WS                              | 2      | AC/DC12V |              | 0.77kg | ● R-Red<br>● G-Green                                       |
| Steady/5 Warning sounds               |        | AC/DC24V |              | 0.77kg |                                                            |
| ST80L-WM                              |        | AC110V   |              | 1.00kg |                                                            |
| Steady/5 Melodies                     |        | AC220V   |              | 1.00kg |                                                            |
| ST80L-WA                              | 3      | AC/DC12V |              | 0.91kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| Steady/5 Alarms                       |        | AC/DC24V |              | 0.91kg |                                                            |
| ST80LF                                |        | AC110V   |              | 1.14kg |                                                            |
| Steady/Flashing                       |        | AC220V   |              | 1.14kg |                                                            |
| ST80LF-BZ                             | 4      | AC/DC12V |              | 1.05kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| Steady/Flashing w/<br>built-in buzzer |        | AC/DC24V |              | 1.05kg |                                                            |
| ST80LF-WS                             |        | AC110V   |              | 1.29kg |                                                            |
| Steady/Flashing/5 Warning<br>sounds   |        | AC220V   |              | 1.29kg |                                                            |
| ST80LF-WM                             | 5      | AC/DC12V |              | 1.19kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| Steady/Flashing/5 Melodies            |        | AC/DC24V |              | 1.19kg |                                                            |
| ST80LF-WA                             |        | AC110V   |              | 1.14kg |                                                            |
| Steady/Flashing/5 Alarms              |        | AC220V   |              | 1.14kg |                                                            |

※ CE Compliant: DC12V, DC24V(Except sound types)

※ UL Listed: DC24V(Except sound types)

### Light source/buzzer current(based on 1 layer)

| Voltage                       | AC/DC12V     | AC/DC24V     | AC110V | AC220V |
|-------------------------------|--------------|--------------|--------|--------|
| Light source current(1 layer) | 160mA        | 95mA         | 70mA   | 55mA   |
| Buzzer current                | 40mA         | 75mA         | 50mA   | 40mA   |
| Signal sound current          | 200mA(DC12V) | 135mA(DC24V) | 50mA   | 35mA   |

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| ST80L          | - | 3          | - | 220        | - | RAG       | - | LW24            |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| ST80L          |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| ST80L-BZ       |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
| ST80L-WS       |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | · LB24-LW24     |
| ST80L-WM       |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | · QZ24-SZ24     |
| ST80L-WA       |   | 5-5 Layers |   |            |   | ○ W-White |   | · QL24-SL24     |
| ST80LF         |   |            |   |            |   |           |   |                 |
| ST80LF-BZ      |   |            |   |            |   |           |   |                 |
| ST80LF-WS      |   |            |   |            |   |           |   |                 |
| ST80LF-WM      |   |            |   |            |   |           |   |                 |
| ST80LF-WA      |   |            |   |            |   |           |   |                 |



ST80L Series

Built-in buzzer output  
holes formed on the  
housing of the product



### Customization

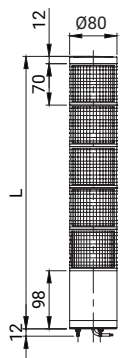
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided (same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

# ST80ML / ST80L

## Technical Diagram

Units : mm

·ST80ML-AC/DC  
·ST80MLF-AC/DC

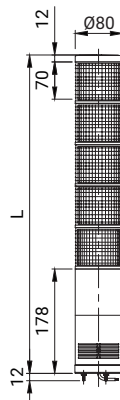


| LAYER | L   |
|-------|-----|
| 1     | 180 |
| 2     | 250 |
| 3     | 320 |
| 4     | 390 |
| 5     | 460 |

·ST80ML-BZ-AC/DC  
·ST80MLF-BZ-AC/DC

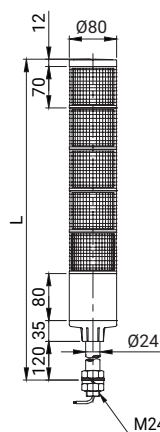


·ST80ML-W□  
·ST80MLF-W□



| LAYER | L   |
|-------|-----|
| 1     | 260 |
| 2     | 330 |
| 3     | 400 |
| 4     | 470 |
| 5     | 540 |

·ST80L-AC/DC  
·ST80LF-AC/DC

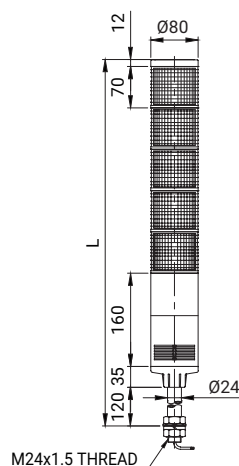


| LAYER | L   |
|-------|-----|
| 1     | 317 |
| 2     | 387 |
| 3     | 457 |
| 4     | 527 |
| 5     | 597 |

·ST80L-BZ-AC/DC  
·ST80LF-BZ-AC/DC



·ST80L-W□  
·ST80LF-W□



| LAYER | L   |
|-------|-----|
| 1     | 397 |
| 2     | 467 |
| 3     | 537 |
| 4     | 607 |
| 5     | 677 |

## Wiring Instructions

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

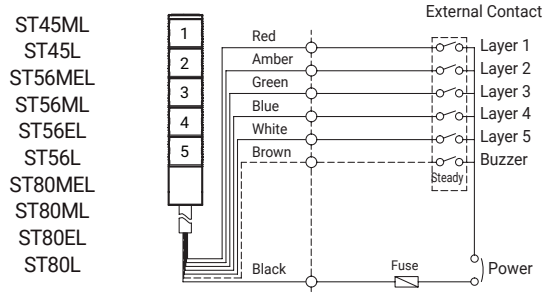
# ST45L / ST56L / ST80L Series

## Wiring Instructions

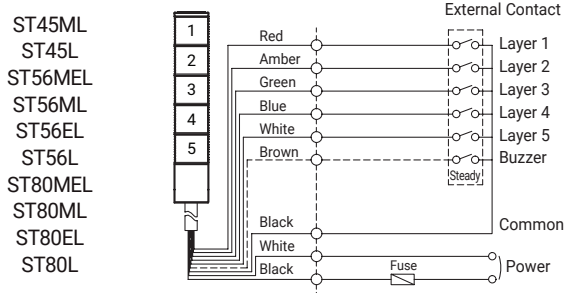
- In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.
- Customized AC each layer power supply type wiring is same as DC steady type.

### Wiring Instructions

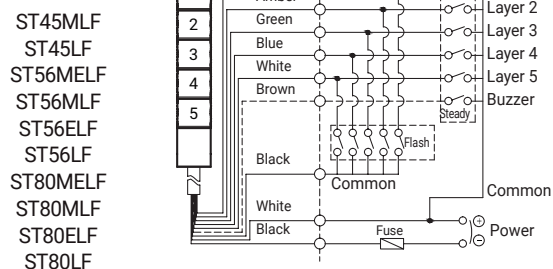
#### DC Steady



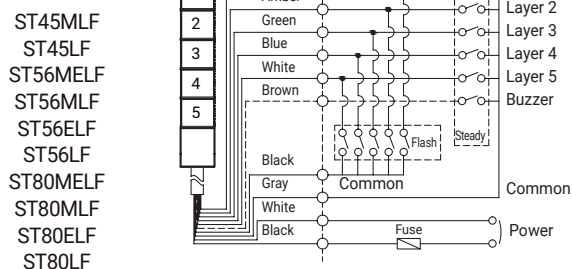
#### AC Steady



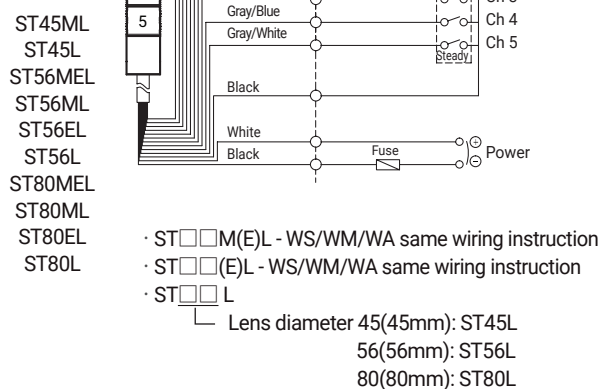
#### DC Steady/ Flashing



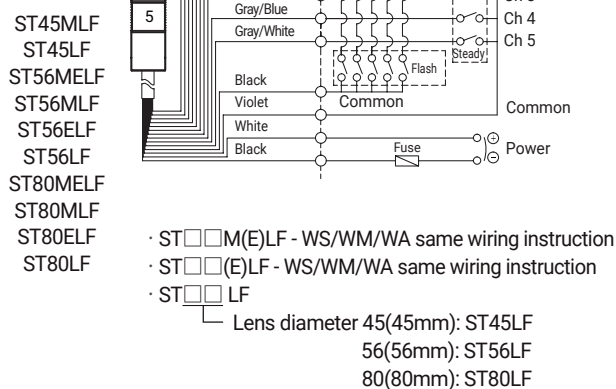
#### AC Steady/ Flashing



#### DC/AC Steady Built-in Signal Sound



#### DC/AC Steady/ Flashing Built-in Signal Sound



· DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

· AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm

External signal line - UL1007 AWG22(0.3sq) 400mm

# ST45L / ST56L / ST80L Series

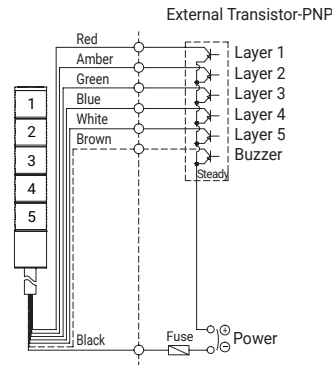
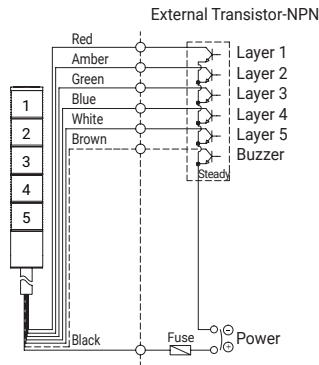
## Wiring Instructions

· In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.

### Wiring Instructions

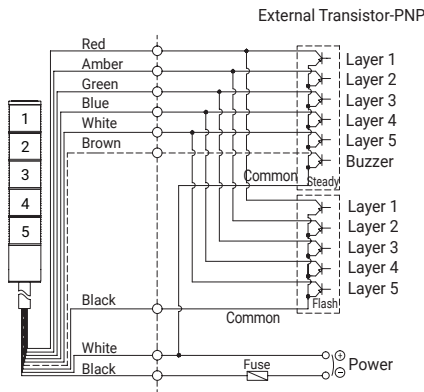
#### DC Steady

ST45ML  
ST45L  
ST56MEL  
ST56ML  
ST56EL  
ST56L  
ST80MEL  
ST80ML  
ST80EL  
ST80L



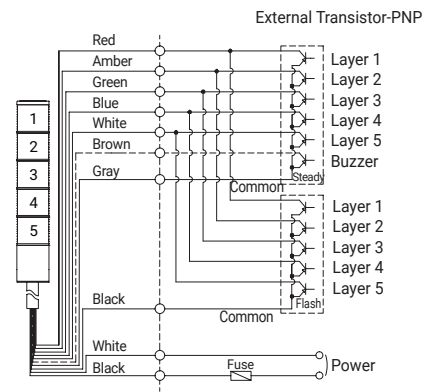
#### DC Steady/ Flashing

ST45MLF  
ST45LF  
ST56MLF  
ST56MLF  
ST56ELF  
ST56LF  
ST80MLF  
ST80MLF  
ST80ELF  
ST80LF



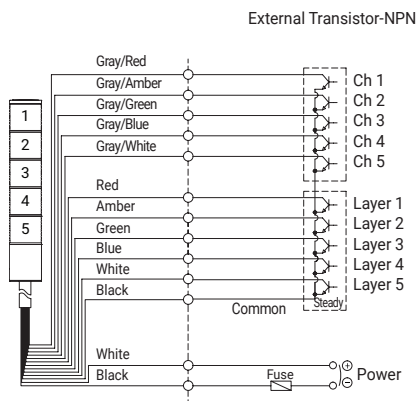
#### AC Steady/ Flashing

ST45MLF  
ST45LF  
ST56MLF  
ST56MLF  
ST56ELF  
ST56LF  
ST80MLF  
ST80MLF  
ST80ELF  
ST80LF



#### DC/AC Steady Built-in Signal Sound

ST45ML  
ST45L  
ST56MEL  
ST56ML  
ST56EL  
ST56L  
ST80MEL  
ST80ML  
ST80EL  
ST80L

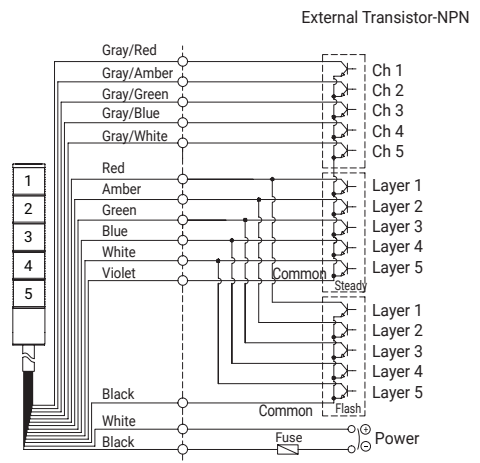


· ST□□M(E)L - WS/WM/WA same wiring instruction  
· ST□□(E)L - WS/WM/WA same wiring instruction  
· ST□□L

Lens diameter 45(45mm): ST45L  
56(56mm): ST56L  
80(80mm): ST80L

#### DC/AC Steady/ Flashing Built-in Signal Sound

ST45MLF  
ST45LF  
ST56MLF  
ST56MLF  
ST56ELF  
ST56LF  
ST80MLF  
ST80MLF  
ST80ELF  
ST80LF



· ST□□M(E)L - WS/WM/WA same wiring instruction  
· ST□□(E)L - WS/WM/WA same wiring instruction  
· ST□□L

Lens diameter 45(45mm): ST45L  
56(56mm): ST56L  
80(80mm): ST80L

· DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

· AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm

External signal line - UL1007 AWG22(0.3sq) 400mm



# Ø56mm LED Steady/Flashing Tower Lights

## EST56L



### PRODUCT SPECIFICATION

EST56L

**Materials** Lens-AS, Housing-ABS, Pole-Al  
**Ambient operating temperature** -30°C to +50°C  
**Volume** Max.90dB at 1m(Built-in buzzer type)  
**Protection rating** IP23  
**Flashing rate** 60-80/min  
**Compliant with RoHS directive**

- Ø56mm LED Steady/Flashing Tower Lights
- Built-in buzzer available upon request : audible signal can be delivered
- Transistors can be connected and can be operated on PLC directly  
 DC type : Steady-NPN/PNP, Steady/Flashing-PNP
- Base module and Cover color are available between Ivory and Black

### EST56L Ø56mm Pole mount, LED Steady/Flashing

| Model number                                 | Layers | Voltage | Certificates | Weight | Color                       |
|----------------------------------------------|--------|---------|--------------|--------|-----------------------------|
| EST56L Steady                                | 1      |         |              | 0.29kg | R-Red                       |
| EST56L-BZ Steady w/built-in buzzer           | 2      | DC24V   | CE           | 0.32kg | R-Red<br>G-Green            |
| EST56LF Steady/Flashing                      |        |         |              |        | R-Red<br>A-Amber<br>G-Green |
| EST56LF-BZ Steady/Flashing w/built-in buzzer | 3      |         |              | 0.36kg |                             |
| EST56L Steady                                | 1      |         |              | 0.30kg | R-Red                       |
| EST56L-BZ Steady w/built-in buzzer           | 2      | AC220V  | -            | 0.33kg | R-Red<br>G-Green            |
| EST56LF Flashing                             |        |         |              |        | R-Red<br>A-Amber<br>G-Green |
| EST56LF-BZ Flashing w/built-in buzzer        | 3      |         |              | 0.37kg |                             |

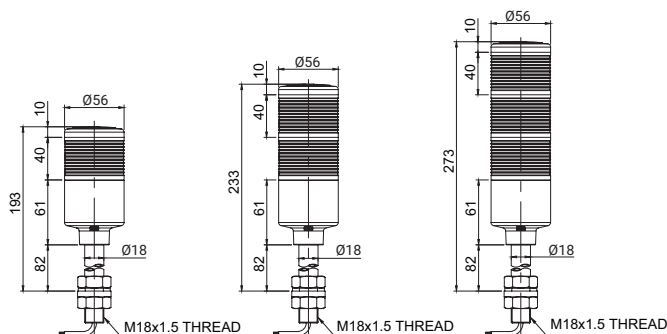
### Technical Diagram

Units : mm

·EST56LF-BZ-1-R : DC/AC  
 ·EST56LF-1-R : DC/AC  
 ·EST56L-BZ-1-R : DC/AC  
 ·EST56L-1-R : DC/AC

·EST56LF-BZ-2-RG : DC/AC  
 ·EST56LF-2-RG : DC/AC  
 ·EST56L-BZ-2-RG : DC/AC  
 ·EST56L-2-RG : DC/AC

·EST56LF-BZ-3-RAG : DC/AC  
 ·EST56LF-3-RAG : DC/AC  
 ·EST56L-BZ-3-RAG : DC/AC  
 ·EST56L-3-RAG : DC/AC



### Ordering Specifications

| EST56L         | 3          | 220        | RAG     | LW18          | BK                        |
|----------------|------------|------------|---------|---------------|---------------------------|
| [Model number] | [Layers]   | [Voltage]  | [Color] | [Bracket]     | [Base module/cover color] |
| EST56L         | 1-1 Layer  | 24-DC24V   | R-Red   | None-Standard | None-Ivory                |
| EST56LF        | 2-2 Layers | 220-AC220V | A-Amber | Bracket       | BK-Black                  |
| EST56L-BZ      | 3-3 Layers |            | G-Green | LB18-LW18     |                           |
| EST56LF-BZ     |            |            |         | QZ18-SZ18     |                           |
|                |            |            |         | QL18-SL18     |                           |
|                |            |            |         | FB18          |                           |



EST56L

### Signal/Audible Line Current (per each layer)

|                      | Voltage | DC24V | AC220V |
|----------------------|---------|-------|--------|
| Signal line current  |         | 60mA  | 25mA   |
| Audible line current |         | 75mA  | 25mA   |

### Wiring Instructions

- External power line
- UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line
- UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- Support for DC12V type products (Customization : EST56L, EST56L-BZ 3layers)

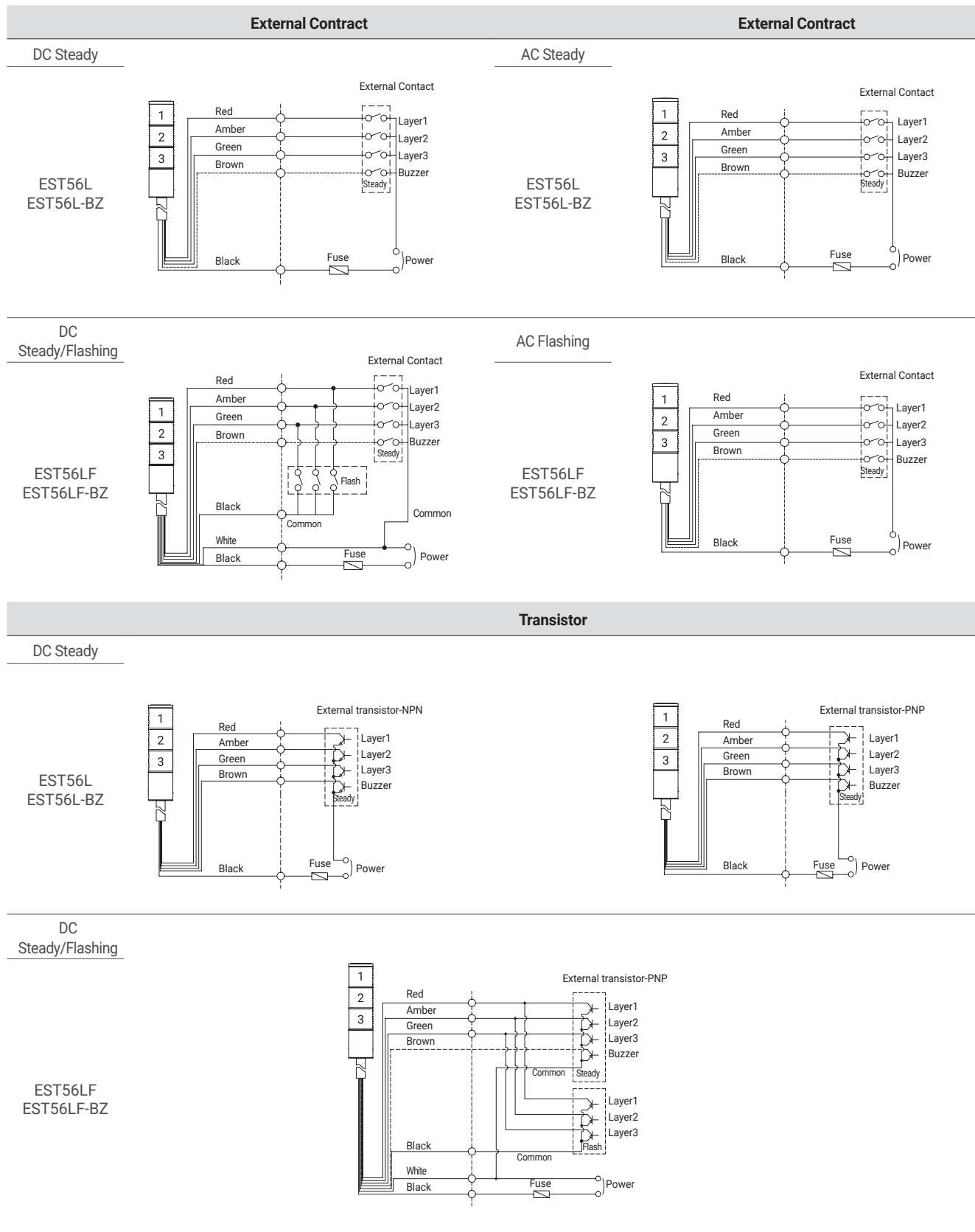
### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 | FB18 |
|          |       |      |      |
| Al       | ABS   | Al   | ABS  |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### Wiring Instructions

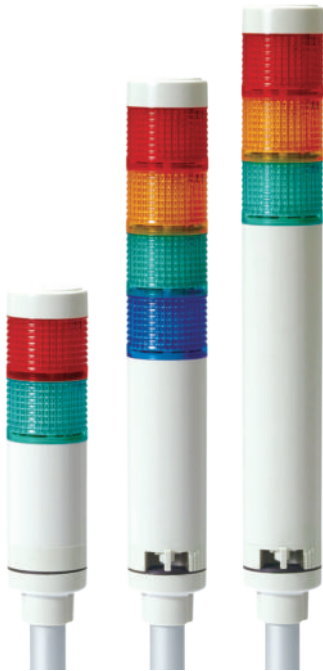
- In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.





# Ø40mm LED Steady/Flashing Tower Lights

## STG40L



STG40L Series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



### Customization

- Customized pole length available
- DC24V voltage UL listed product
- M12 connector type: Standard entry cable included. Can customize the product with the M12 connector if requested (Female M12 connector is not provided)

### Mounting bracket

Standard LB18 LW18 QZ18



Steel Steel ABS ABS

SZ18 QL18 SL18



AI ABS AI

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### STG40L Ø40mm Pole mount, LED Steady/Flashing

| Model number                                                                                                                                   | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| STG40L<br>Steady<br>STG40L-BZ<br>Steady w/built-in buzzer<br>STG40LF<br>Steady/Flashing<br>STG40LF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.27kg<br>0.27kg<br>0.33kg | ● R-Red                                                    |
|                                                                                                                                                | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.30kg<br>0.30kg<br>0.36kg | ● R-Red<br>● G-Green                                       |
|                                                                                                                                                | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.33kg<br>0.33kg<br>0.39kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                                                                                                                | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.36kg<br>0.36kg<br>0.42kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                                                                                                                | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.39kg<br>0.39kg<br>0.45kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ AC type model has a free-voltage range of 100V-240V.

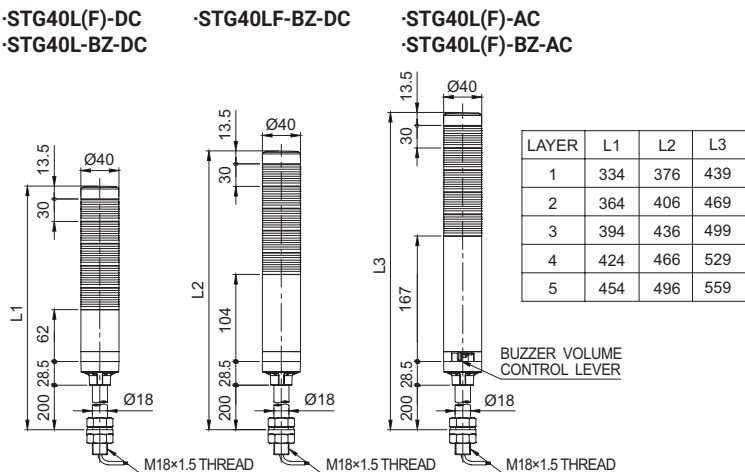
※ CE compliant: DC12V, DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 95mA  | 55mA  | Max.45mA    |
| Buzzer current                | 50mA  | 75mA  | Max.55mA    |

### Technical Diagram

Units : mm



### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Ordering Specifications

|                |   |            |   |                     |   |           |   |                 |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| STG40L         | - | 3          | - | 24                  | - | RAG       | - | LW18            |
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| STG40ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| STG40ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| STG40MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18-LW18      |
| STG40MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18-SZ18      |
| STG40L         |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18-SL18      |
| STG40L-BZ      |   |            |   |                     |   |           |   |                 |
| STG40LF        |   |            |   |                     |   |           |   |                 |
| STG40LF-BZ     |   |            |   |                     |   |           |   |                 |

# Ø50mm LED Steady/Flashing Tower Lights

## STG50ML



### PRODUCT SPECIFICATION

STG50ML | STG50L

**Materials** Lens-AS, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

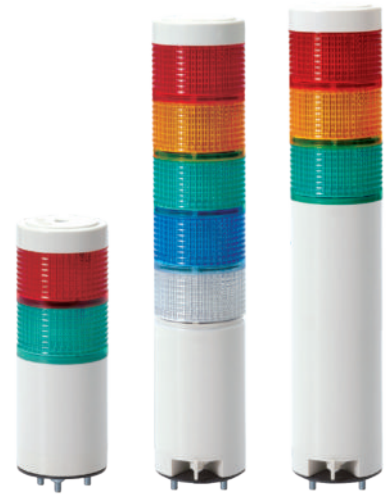
**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Ø50mm LED steady/flashing tower lights
- The special vertical contact structure of the lens allows for easy assembly and disassembly
- Built-in buzzer available upon request: audible signal can be delivered
- Transistors can be connected and can be operated on PLC directly
- Customized color arrangement available(LED light distribution system and lens is integrated into a combined structure)
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



STG50ML Series

### STG50ML Ø50mm Direct mount, LED Steady/Flashing

| Model number                                                                                                                                       | Layers | Voltage                       | Certificates | Weight                     | Color                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|--------------------------------------------------|
| STG50ML<br>Steady<br>STG50ML-BZ<br>Steady w/built-in buzzer<br>STG50MLF<br>Steady/Flashing<br>STG50MLF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.15kg<br>0.15kg<br>0.21kg | R-Red                                            |
|                                                                                                                                                    | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.18kg<br>0.18kg<br>0.24kg | R-Red<br>G-Green                                 |
|                                                                                                                                                    | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.21kg<br>0.21kg<br>0.27kg | R-Red<br>A-Amber<br>G-Green                      |
|                                                                                                                                                    | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.24kg<br>0.24kg<br>0.30kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                                                                                                                                                    | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.27kg<br>0.27kg<br>0.33kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)

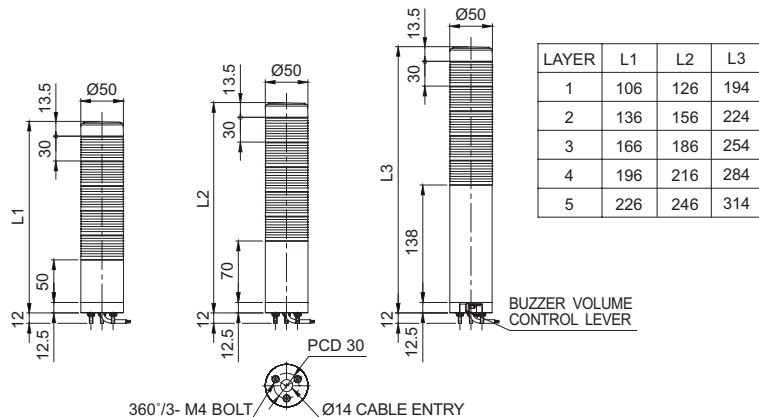


### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 55mA  | 50mA  | Max.40mA    |
| Buzzer current                | 40mA  | 75mA  | Max.60mA    |

### Technical Diagram

Units : mm



### Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) output available
- DC24V voltage UL listed product
- M12 connector type: Standard entry cable included. Can customize the product with the M12 connector if requested(Female M12 connector is not provided)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket TWS45



Wall mount bracket TWA45



# Ø50mm LED Steady/Flashing Tower Lights

## STG50L



STG50L Series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



### Customization

- Customized pole length available
- DC24V voltage UL listed product
- M12 connector type: Standard entry cable included. Can customize the product with the M12 connector if requested (Female M12 connector is not provided)

### Mounting bracket

Standard LB18 LW18 QZ18



Steel Steel ABS ABS

SZ18 QL18 SL18



※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### STG50L Ø50mm Pole mount, LED Steady/Flashing

| Model number                      | Layers | Voltage     | Certificates | Weight | Color                                                      |
|-----------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| STG50L                            | 1      | DC12V       | CE<br>UL     | 0.29kg | ● R-Red                                                    |
|                                   |        | DC24V       |              | 0.29kg |                                                            |
| Steady                            | 2      | AC110V-220V |              | 0.36kg | ● R-Red<br>● G-Green                                       |
|                                   |        | DC12V       |              | 0.32kg |                                                            |
| STG50L-BZ                         | 3      | DC24V       |              | 0.32kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                   |        | AC110V-220V |              | 0.39kg |                                                            |
| Steady w/built-in buzzer          | 4      | DC12V       |              | 0.35kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                   |        | DC24V       |              | 0.35kg |                                                            |
| STG50LF                           | 5      | AC110V-220V |              | 0.42kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                                   |        | DC12V       |              | 0.38kg |                                                            |
| Steady/Flashing                   | 4      | DC12V       |              | 0.38kg |                                                            |
|                                   |        | DC24V       |              | 0.38kg |                                                            |
| STG50LF-BZ                        | 5      | AC110V-220V |              | 0.45kg |                                                            |
|                                   |        | DC12V       |              | 0.41kg |                                                            |
| Steady/Flashing w/built-in buzzer | 5      | DC12V       |              | 0.41kg |                                                            |
|                                   |        | DC24V       |              | 0.48kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

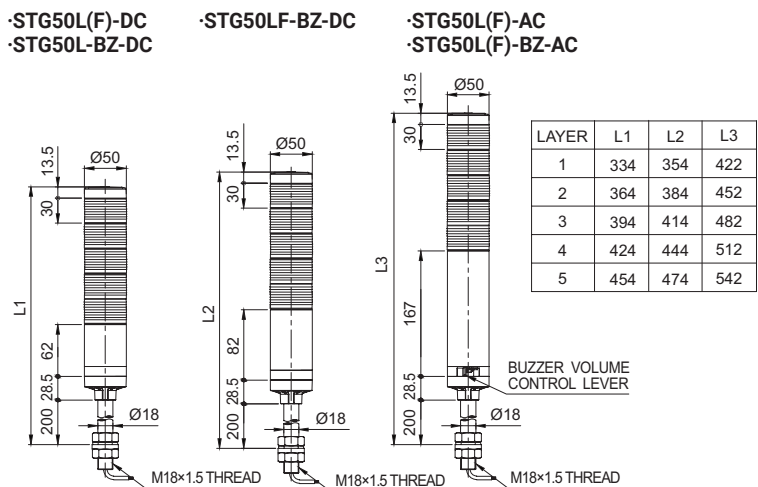
※ CE compliant: DC12, DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 55mA  | 50mA  | Max.40mA    |
| Buzzer current                | 40mA  | 75mA  | Max.60mA    |

### Technical Diagram

Units : mm



### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Ordering Specifications

| STG50L         | 3          | 24                  | RAG       | LW18            |
|----------------|------------|---------------------|-----------|-----------------|
| [Model number] | [Layers]   | [Voltage]           | [Color]   | [Bracket]       |
| STG50ML        | 1-1 Layer  | 12-DC12V            | ● R-Red   | · None-Standard |
| STG50ML-BZ     | 2-2 Layers | 24-DC24V            | ● A-Amber | · Bracket       |
| STG50MLF       | 3-3 Layers | 110/220-AC110V-220V | ● G-Green | -LB18 -LW18     |
| STG50MLF-BZ    | 4-4 Layers |                     | ● B-Blue  | -QZ18 -SZ18     |
| STG50L         | 5-5 Layers |                     | ○ W-White | -QL18 -SL18     |
| STG50L-BZ      |            |                     |           |                 |
| STG50LF        |            |                     |           |                 |
| STG50LF-BZ     |            |                     |           |                 |

# Ø60mm LED Steady/Flashing Tower Lights

## STG60ML



### PRODUCT SPECIFICATION

STG60ML | STG60L

**Materials** Lens-AS, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

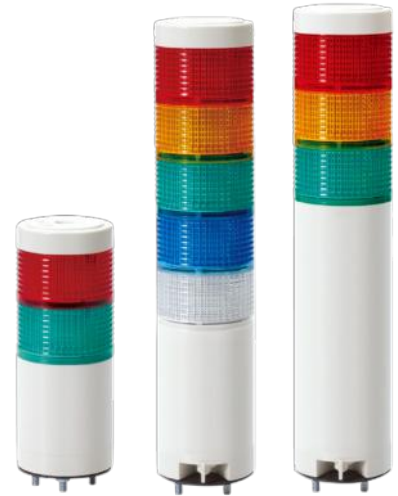
**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Ø60mm LED steady/flashing tower lights
- The special vertical contact structure of the lens allows for easy assembly and disassembly
- Built-in buzzer available upon request: audible signal can be delivered
- Transistors can be connected and can be operated on PLC directly
- Customized color arrangement available(LED light distribution system and lens is integrated into a combined structure)
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.



STG60ML Series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



### STG60ML Ø60mm Direct mount, LED Steady/Flashing

| Model number                                                                                                                                           | Layers | Voltage                       | Certificates | Weight                     | Color                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|--------------------------------------------------|
| STG60ML<br>Steady<br>STG60ML-BZ<br>Steady w/<br>built-in buzzer<br>STG60MLF<br>Steady/Flashing<br>STG60MLF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.25kg<br>0.25kg<br>0.34kg | R-Red                                            |
|                                                                                                                                                        | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.28kg<br>0.28kg<br>0.37kg | R-Red<br>G-Green                                 |
|                                                                                                                                                        | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.31kg<br>0.31kg<br>0.40kg | R-Red<br>A-Amber<br>G-Green                      |
|                                                                                                                                                        | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.34kg<br>0.34kg<br>0.43kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                                                                                                                                                        | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.37kg<br>0.37kg<br>0.46kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

※ AC type model has a free-voltage range of 100V-240V.

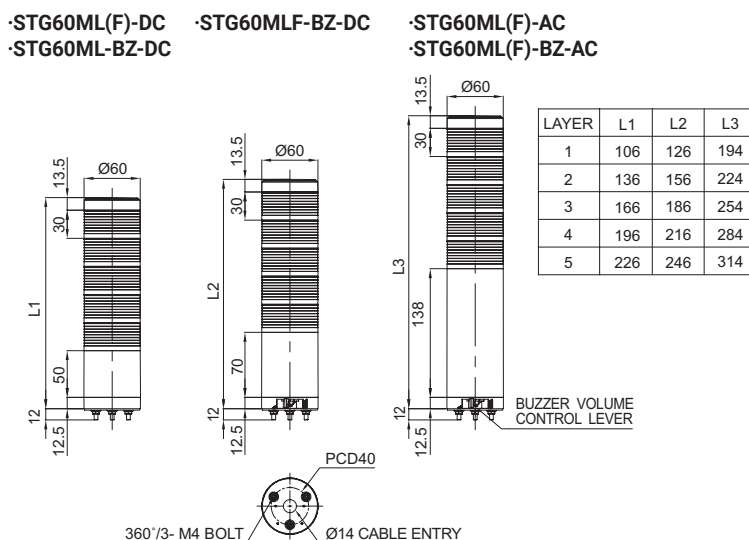
※ CE compliant: DC12, DC24V, UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 85mA  | 60mA  | Max.50mA    |
| Buzzer current                | 40mA  | 75mA  | Max.60mA    |

### Technical Diagram

Units : mm



### Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector type: Standard entry cable included. Can customize the product with the M12 connector if requested(Female M12 connector is not provided)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



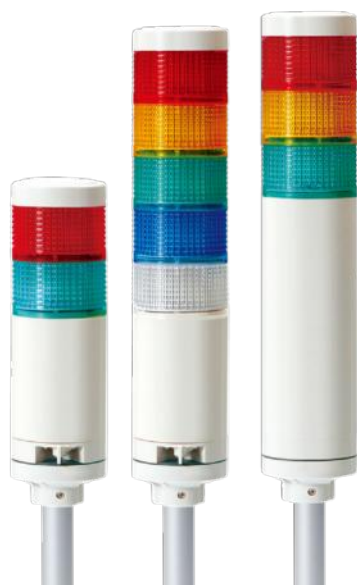
Wall mount bracket TWS45



Wall mount bracket TWA45



# STG60L



## STG60L Series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



## Customization

- Customized pole length available
- DC24V voltage UL listed product
- M12 connector type: Standard entry cable included. Can customize the product with the M12 connector if requested(Female M12 connector is not provided)

## Mounting bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|------|------|------|
|----------|------|------|------|



|       |       |      |     |
|-------|-------|------|-----|
| Steel | Steel | ABS  | ABS |
| SZ18  | QL18  | SL18 |     |



AI                      ABS                      AI

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

**STG60L** Ø60mm Pole mount, LED Steady/Flashing

| Model number                                                                                                                                       | Layers      | Voltage     | Certificates                                                                                                                                                                              | Weight                                                                              | Color                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STG60L<br>Steady<br>STG60L-BZ<br>Steady w/built-in buzzer<br><br>STG60LF<br>Steady/Flashing<br>STG60LF-BZ<br>Steady/Flashing w/<br>built-in buzzer | 1           | DC12V       | <br><br>            | 0.40kg                                                                              |  R-Red                                                                                                                                                                                               |
|                                                                                                                                                    |             | DC24V       |                                                                                                                                                                                           | 0.40kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    | 2           | AC110V-220V |                                                                                                                                                                                           | 0.48kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    |             | DC12V       |                                                                                                                                                                                           | 0.43kg                                                                              |  R-Red<br> G-Green                                                                                                |
|                                                                                                                                                    |             | DC24V       |                                                                                                                                                                                           | 0.43kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    |             | AC110V-220V |                                                                                                                                                                                           | 0.51kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    | 3           | DC12V       |                                                                                                                                                                                           | 0.46kg                                                                              |  R-Red<br> A-Amber<br> G-Green |
|                                                                                                                                                    |             | DC24V       |                                                                                                                                                                                           | 0.46kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    |             | AC110V-220V |                                                                                                                                                                                           | 0.54kg                                                                              |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    | 4           | DC12V       |                                                                                                                                                                                           |  | 0.49kg                                                                                                                                                                                                                                                                                  |
| DC24V                                                                                                                                              |             | 0.49kg      |                                                                                                                                                                                           |                                                                                     |                                                                                                                                                                                                                                                                                         |
| AC110V-220V                                                                                                                                        |             | 0.57kg      |                                                                                                                                                                                           |                                                                                     |                                                                                                                                                                                                                                                                                         |
| 5                                                                                                                                                  |             | DC12V       | 0.52kg                                                                                                                                                                                    |                                                                                     |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    |             | DC24V       | 0.52kg                                                                                                                                                                                    |                                                                                     |                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                    | AC110V-220V | 0.61kg      |  B-Blue<br> W-White |                                                                                     |                                                                                                                                                                                                                                                                                         |

※ AC type model has a free-voltage range of 100V-240V.

※ CE Compliant: DC12V, DC24V, UL Listed: DC24V

**Light source/buzzer current(based on 1 layer)**

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 85mA  | 60mA  | Max.50mA    |
| Buzzer current                | 40mA  | 75mA  | Max.60mA    |

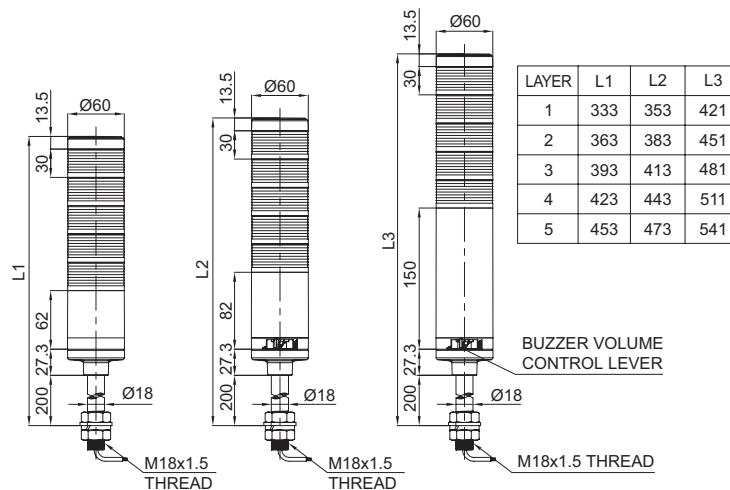
## Technical Diagram

Units : mm

- STG60L(F)-DC
- STG60L-BZ-DC

·STG60LF-BZ-DC

- STG60L(F)-AC
- STG60L(F)-BZ-AC



## Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

## Ordering Specifications

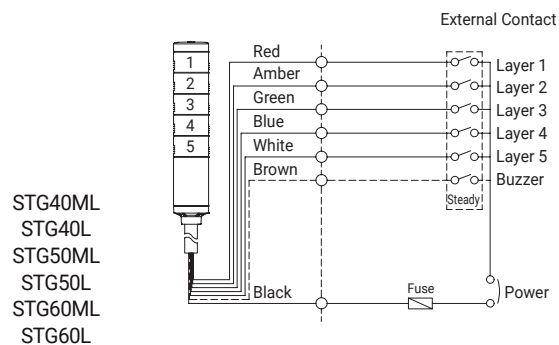
| STG60L             | - | 3            | - | 24            | - | RAG         | - | LW18            |
|--------------------|---|--------------|---|---------------|---|-------------|---|-----------------|
| [Model number]<br> |   | [Layers]<br> |   | [Voltage]<br> |   | [Color]<br> |   | [Bracket]<br>   |
| STG60ML            |   | 1-1 Layer    |   | 12-DC12V      |   | ● R-Red     |   | · None-Standard |
| STG60ML-BZ         |   | 2-2 Layers   |   | 24-DC24V      |   | ● A-Amber   |   | · Bracket       |
| STG60MLF           |   | 3-3 Layers   |   | 110/220       |   | ● G-Green   |   | -LB18 -LW18     |
| STG60MLF-BZ        |   | 4-4 Layers   |   | -AC110V-220V  |   | ● B-Blue    |   | -QZ18 -SZ18     |
| STG60L             |   | 5-5 Layers   |   |               |   | ○ W-White   |   | -QL18 -SL18     |
| STG60L-BZ          |   |              |   |               |   |             |   |                 |
| STG60LF            |   |              |   |               |   |             |   |                 |
| STG60LF-BZ         |   |              |   |               |   |             |   |                 |

## Wiring Instructions(using External Contact)

· In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

## Wiring Instructions

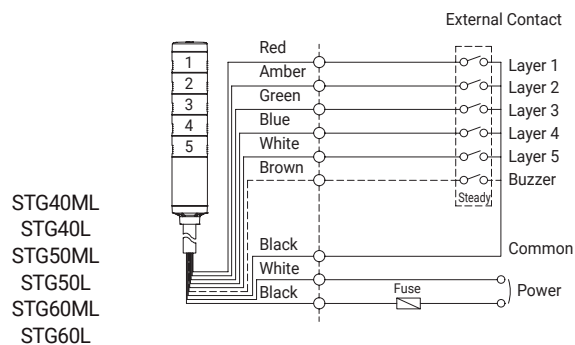
## DC Steady



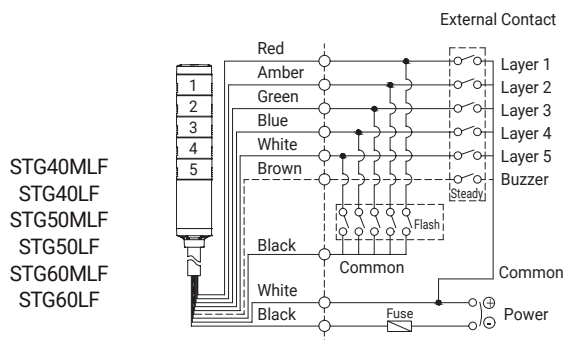
- STG □□ (M)L - Buzzer same wiring instruction
- STG □□ L
  - └ Lens diameter 40(40mm): STG40(M)L
  - 50(50mm): STG50(M)L
  - 60(60mm): STG60(M)L

## Wiring Instructions

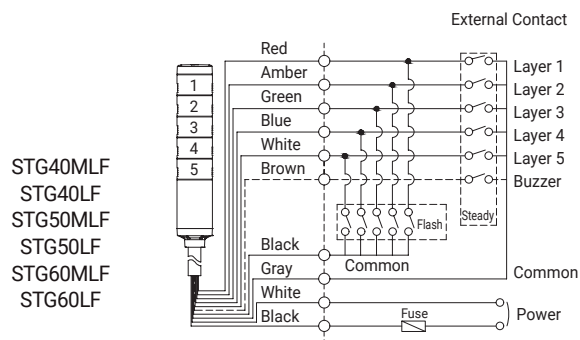
## AC Steady



- STG □□ (M)L - Buzzer same wiring instruction
- STG □□ L
  - └ Lens diameter 40(40mm): STG40(M)L
  - 50(50mm): STG50(M)L
  - 60(60mm): STG60(M)L

DC Steady/  
Flashing

- STG □□ (M)LF - Buzzer same wiring instruction
- STG □□ LF
  - └ Lens diameter 40(40mm): STG40(M)LF
  - 50(50mm): STG50(M)LF
  - 60(60mm): STG60(M)LF

AC Steady/  
Flashing

- STG □□ (M)LF - Buzzer same wiring instruction
- STG □□ LF
  - └ Lens diameter 40(40mm): STG40(M)LF
  - 50(50mm): STG50(M)LF
  - 60(60mm): STG60(M)LF

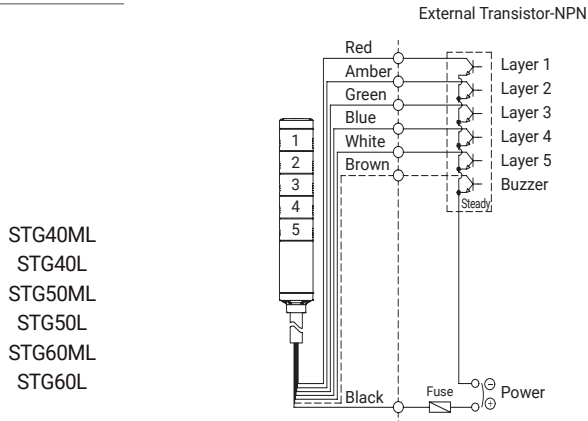
- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm

## Wiring Instructions(using transistor)

· In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.

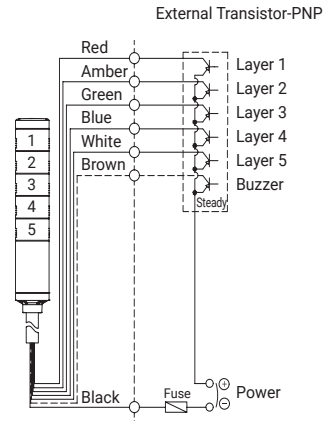
## Wiring Instructions

## DC Steady

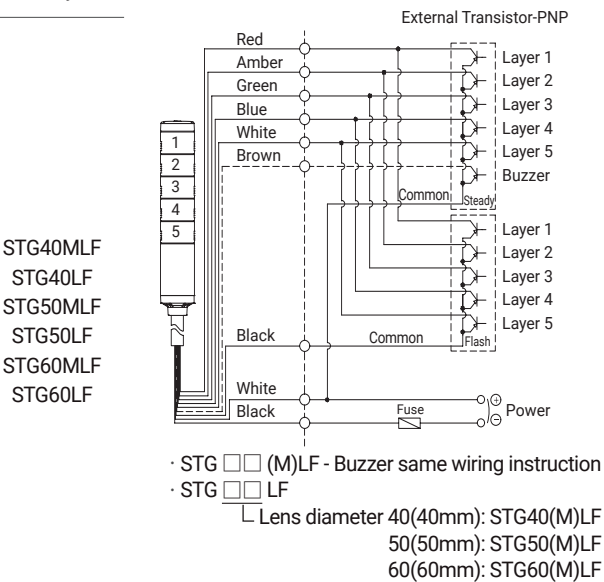


STG40ML  
STG40L  
STG50ML  
STG50L  
STG60ML  
STG60L

- STG □□ (M)L - Buzzer same wiring instruction
- STG □□ L
  - └ Lens diameter 40(40mm): STG40(M)L
  - 50(50mm): STG50(M)L
  - 60(60mm): STG60(M)L

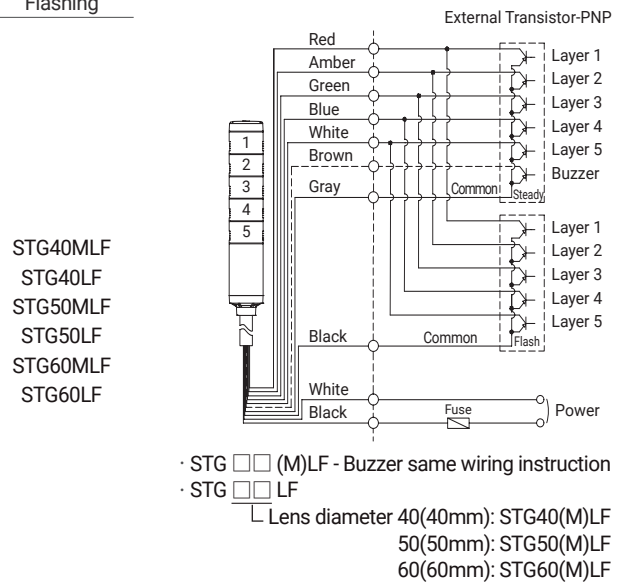


## DC Steady/Flas



STG40MLF  
STG40LF  
STG50MLF  
STG50LF  
STG60MLF  
STG60LF

- STG □□ (M)LF - Buzzer same wiring instruction
- STG □□ LF
  - └ Lens diameter 40(40mm): STG40(M)LF
  - 50(50mm): STG50(M)LF
  - 60(60mm): STG60(M)LF

AC Steady/  
Flashing

STG40MLF  
STG40LF  
STG50MLF  
STG50LF  
STG60MLF  
STG60LF

- STG □□ (M)LF - Buzzer same wiring instruction
- STG □□ LF
  - └ Lens diameter 40(40mm): STG40(M)LF
  - 50(50mm): STG50(M)LF
  - 60(60mm): STG60(M)LF

- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm

### PRODUCT SPECIFICATION

QTG Series

**Materials** Lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Modular LED steady/flashing type signal tower lights
- Excellent visibility from a distance with the use of a special color diffusing lens
- Can select from size selections of Ø50mm, Ø60mm, and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTGA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- Available in 2 customized options; sounds buzzer type and high volume(100dB) buzzer type
- Wired type and M12 connector type allow for a customized model that M12 connector can be attached at the end of wires.
- Transistors can be connected and can be operated on PLC directly



### Each modular color lens can be added without additional tools



QTG model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.



**1 High volume buzzer(100dB) option can be fitted to the top of the product(Customization).**  
High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted)

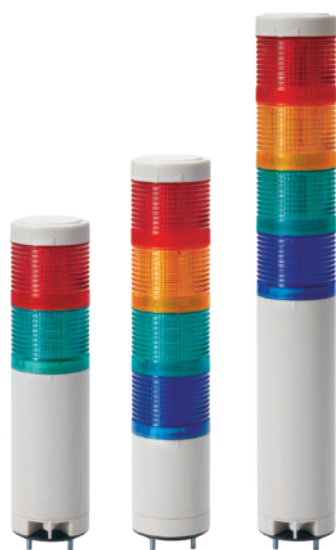
**2 Integrated cover and lens model(QTGA50 / QTGA60 / QTGA70)**  
QTGA50 / QTGA60 / QTGA70 the sleek lens cover model is made of one piece for a simple unified look.

**3 Buzzer volume is adjusted via the volume control lever**  
QTG type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

**4 M12 connector attached type(Customization)**  
Pre-wired is standard. Can customize the product with the M12 connector if requested.

**5 Can select from a variety of Mounting brackets option to fit your application needs and build environment**  
There are a variety of Mounting bracket options available depending on cost and installation requirements.

# QTG50ML / QTG50L



QTG50ML Series



QTGA50ML Series



High-volume buzzer module

## QTG50ML Ø50mm Direct mount, LED Steady/Flashing

| Model number                                          | Layers | Voltage     | Certificates | Weight | Color                                                      |
|-------------------------------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| QTG50ML<br>Steady                                     | 1      | DC12V       | CE<br>UL     | 0.19kg | ● R-Red                                                    |
| QTG50ML-BZ<br>Steady w/built-in buzzer                |        | DC24V       |              | 0.19kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.29kg |                                                            |
| QTG50MLF<br>Steady/Flashing                           | 2      | DC12V       |              | 0.27kg | ● R-Red<br>● G-Green                                       |
| QTG50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer  |        | DC24V       |              | 0.27kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.37kg |                                                            |
| QTGA50ML<br>Steady                                    | 3      | DC12V       |              | 0.36kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTGA50ML-BZ<br>Steady w/built-in buzzer               |        | DC24V       |              | 0.36kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.46kg |                                                            |
| QTGA50MLF<br>Steady/Flashing                          | 4      | DC12V       |              | 0.44kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA50MLF-BZ<br>Steady w/built-in buzzer              |        | DC24V       |              | 0.44kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.54kg |                                                            |
| QTGA50MLF<br>Steady/Flashing                          | 5      | DC12V       |              | 0.53kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTGA50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        | DC24V       |              | 0.53kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.63kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

## Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

## Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

## Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

## Ordering Specifications

| QTG50ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTG50ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTG50ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTG50MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTG50MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTGA50ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTGA50ML-BZ    |   |            |   |                     |   |           |
| QTGA50MLF      |   |            |   |                     |   |           |
| QTGA50MLF-BZ   |   |            |   |                     |   |           |





## QTG50L Ø50mm Pole mount, LED Steady/Flashing

| Model number                                | Layers | Voltage     | Certificates | Weight | Color     |
|---------------------------------------------|--------|-------------|--------------|--------|-----------|
| QTG50L Steady                               | 1      | DC12V       | CE<br>UL     | 0.34kg | ● R-Red   |
| QTG50L Steady w/built-in buzzer             |        | DC24V       |              | 0.34kg |           |
| QTG50L-BZ                                   |        | AC110V-220V |              | 0.44kg |           |
| QTG50LF Steady/Flashing                     | 2      | DC12V       |              | 0.43kg | ● R-Red   |
| QTG50LF Steady/Flashing w/ built-in buzzer  |        | DC24V       |              | 0.43kg | ● G-Green |
| QTG50LF-BZ                                  |        | AC110V-220V |              | 0.53kg |           |
| QTGA50L Steady                              | 3      | DC12V       |              | 0.51kg | ● R-Red   |
| QTGA50L Steady w/built-in buzzer            |        | DC24V       |              | 0.51kg | ● A-Amber |
| QTGA50L-BZ                                  |        | AC110V-220V |              | 0.61kg | ● G-Green |
| QTGA50LF Steady/Flashing                    | 4      | DC12V       |              | 0.60kg | ● R-Red   |
| QTGA50LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.60kg | ● A-Amber |
| QTGA50LF-BZ                                 |        | AC110V-220V |              | 0.70kg | ● G-Green |
| QTGA50LF Steady/Flashing w/ built-in buzzer | 5      | DC12V       |              | 0.68kg | ● R-Red   |
| QTGA50LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.68kg | ● A-Amber |
| QTGA50LF-BZ                                 |        | AC110V-220V |              | 0.78kg | ● G-Green |
|                                             |        |             |              |        | ● B-Blue  |
|                                             |        |             |              |        | ○ W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTG50L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



QTGA50L Series

### Ordering Specifications

| QTG50L         | - | 3          | - | 110/220             | - | RAG       | - | LW18            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTG50L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTG50L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTG50LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | · LB18-LW18     |
| QTG50LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | · QZ18-SZ18     |
| QTGA50L        |   | 5-5 Layers |   |                     |   | ○ W-White |   | · QL18-SL18     |
| QTGA50L-BZ     |   |            |   |                     |   |           |   |                 |
| QTGA50LF       |   |            |   |                     |   |           |   |                 |
| QTGA50LF-BZ    |   |            |   |                     |   |           |   |                 |

### Customization

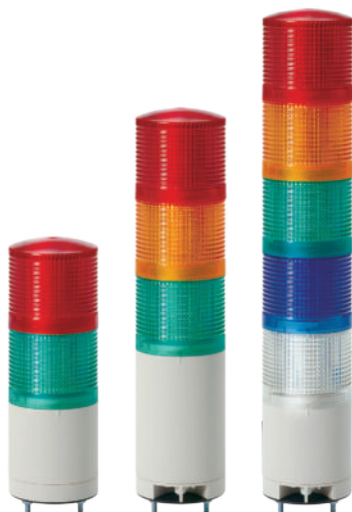
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

# Ø60mm LED Steady/Flashing Tower Lights

## QTG60ML / QTG60L



QTG60ML Series



QTGA60ML Series



High-volume buzzer module

### QTG60ML Ø60mm Direct mount, LED Steady/Flashing

| Model number                                          | Layers | Voltage     | Certificates | Weight | Color                                                      |
|-------------------------------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| QTG60ML<br>Steady                                     | 1      | DC12V       |              | 0.26kg | ● R-Red                                                    |
| QTG60ML-BZ<br>Steady w/built-in buzzer                |        | DC24V       |              | 0.26kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.36kg |                                                            |
| QTG60MLF<br>Steady/Flashing                           | 2      | DC12V       |              | 0.34kg | ● R-Red<br>● G-Green                                       |
| QTG60MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer  |        | DC24V       |              | 0.44kg |                                                            |
|                                                       | 3      | DC12V       | CE<br>UL     | 0.43kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTGA60ML<br>Steady                                    |        | DC24V       |              | 0.43kg |                                                            |
| QTGA60ML-BZ<br>Steady w/built-in buzzer               |        | AC110V-220V |              | 0.53kg |                                                            |
| QTGA60MLF<br>Steady/Flashing                          | 4      | DC12V       |              | 0.51kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA60MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        | DC24V       |              | 0.51kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.61kg |                                                            |
|                                                       | 5      | DC12V       |              | 0.59kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                                                       |        | DC24V       |              | 0.59kg |                                                            |
|                                                       |        | AC110V-220V |              | 0.69kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

### Ordering Specifications

| QTG60ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTG60ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTG60ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTG60MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTG60MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTGA60ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTGA60ML-BZ    |   |            |   |                     |   |           |
| QTGA60MLF      |   |            |   |                     |   |           |
| QTGA60MLF-BZ   |   |            |   |                     |   |           |





## QTG60L Ø60mm Pole mount, LED Steady/Flashing

| Model number                       | Layers | Voltage     | Certificates | Weight | Color                                                      |
|------------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| QTG60L Steady                      | 1      | DC12V       | CE<br>UL     | 0.26kg | ● R-Red                                                    |
| QTG60L-BZ                          |        | DC24V       |              | 0.26kg |                                                            |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.36kg |                                                            |
| QTG60LF Steady/Flashing            | 2      | DC12V       |              | 0.34kg | ● R-Red<br>● G-Green                                       |
| QTG60LF-BZ                         |        | DC24V       |              | 0.34kg |                                                            |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.44kg |                                                            |
| QTGA60L Steady                     | 3      | DC12V       |              | 0.43kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTGA60L-BZ                         |        | DC24V       |              | 0.43kg |                                                            |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.53kg |                                                            |
| QTGA60LF Steady/Flashing           | 4      | DC12V       |              | 0.51kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA60LF-BZ                        |        | DC24V       |              | 0.51kg |                                                            |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.61kg |                                                            |
| QTGA60LF-BZ                        | 5      | DC12V       |              | 0.59kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTGA60LF-BZ                        |        | DC24V       |              | 0.59kg |                                                            |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.69kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

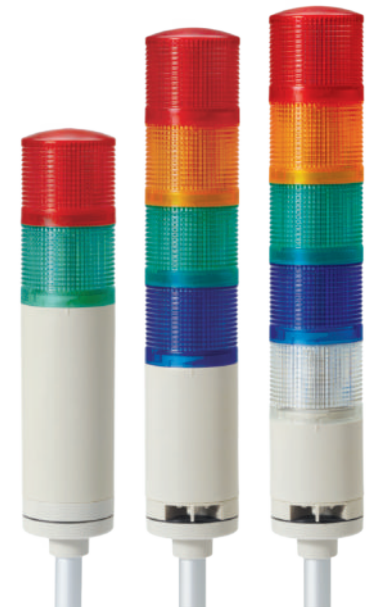
※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| QTG60L         | - | 3          | - | 110/220             | - | RAG       | - | LW18            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTG60L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTG60L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTG60LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | · LB18 -LW18    |
| QTG60LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | · QZ18 -SZ18    |
| QTGA60L        |   | 5-5 Layers |   |                     |   | ○ W-White |   | · QL18 -SL18    |
| QTGA60L-BZ     |   |            |   |                     |   |           |   |                 |
| QTGA60LF       |   |            |   |                     |   |           |   |                 |
| QTGA60LF-BZ    |   |            |   |                     |   |           |   |                 |



QTG60L Series

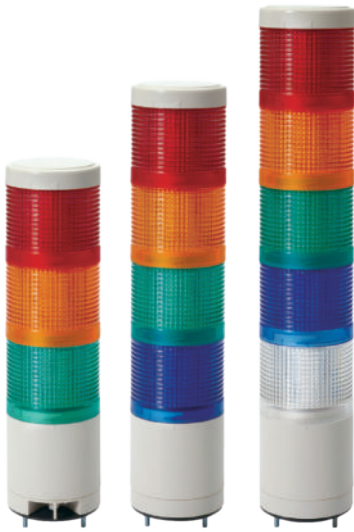


QTGA60L Series

### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

# QTG70ML / QTG70L



QTG70ML Series



QTGA70ML Series



High-volume buzzer module



## QTG70ML Ø70mm Direct mount, LED Steady/Flashing

| Model number                                       | Layers | Voltage     | Certificates | Weight | Color                                                      |
|----------------------------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| QTG70ML<br>Steady                                  | 1      | DC12V       |              | 0.42kg | ● R-Red                                                    |
| QTG70ML-BZ<br>Steady w/built-in buzzer             |        | DC24V       |              | 0.42kg |                                                            |
|                                                    |        | AC110V-220V |              | 0.52kg |                                                            |
| QTG70MLF<br>Steady/Flashing                        | 2      | DC12V       |              | 0.56kg | ● R-Red<br>● G-Green                                       |
| QTG70MLF-BZ<br>Steady/Flashing w/ built-in buzzer  |        | DC24V       |              | 0.56kg |                                                            |
|                                                    |        | AC110V-220V |              | 0.66kg |                                                            |
| QTGA70ML<br>Steady                                 | 3      | DC12V       | CE<br>UL     | 0.77kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTGA70ML-BZ<br>Steady w/built-in buzzer            |        | DC24V       |              | 0.77kg |                                                            |
| QTGA70MLF<br>Steady/Flashing                       |        | AC110V-220V |              | 0.87kg |                                                            |
| QTGA70ML-BZ<br>Steady w/built-in buzzer            | 4      | DC12V       |              | 0.92kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA70MLF<br>Steady/Flashing                       |        | DC24V       |              | 0.92kg |                                                            |
| QTGA70MLF-BZ<br>Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 1.02kg |                                                            |
|                                                    | 5      | DC12V       |              | 1.07kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                                                    |        | DC24V       |              | 1.07kg |                                                            |
|                                                    |        | AC110V-220V |              | 1.17kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

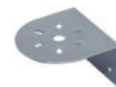
| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Ordering Specifications

| QTG70ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTG70ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTG70ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTG70MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTG70MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTGA70ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTGA70ML-BZ    |   |            |   |                     |   |           |
| QTGA70MLF      |   |            |   |                     |   |           |
| QTGA70MLF-BZ   |   |            |   |                     |   |           |

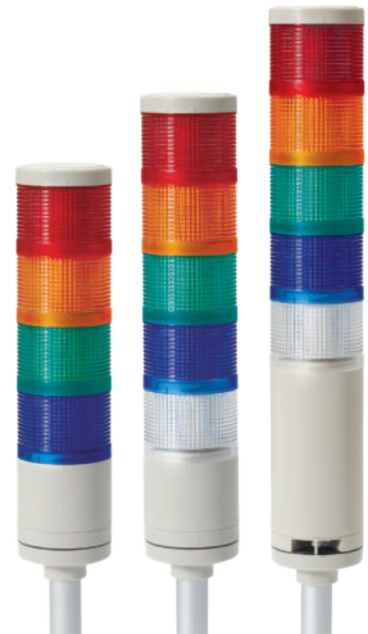


## QTG70L Ø70mm Pole mount, LED Steady/Flashing

| Model number                          | Layers | Voltage     | Certificates | Weight | Color   |
|---------------------------------------|--------|-------------|--------------|--------|---------|
| QTG70L<br>Steady                      | 1      | DC12V       | CE<br>UL     | 0.42kg | R-Red   |
| QTG70L-BZ                             |        | DC24V       |              | 0.42kg |         |
| Steady w/built-in buzzer              |        | AC110V-220V |              | 0.52kg |         |
| QTG70LF                               | 2      | DC12V       |              | 0.56kg | R-Red   |
| Steady/Flashing                       |        | DC24V       |              | 0.56kg | G-Green |
| QTG70LF-BZ                            |        | AC110V-220V |              | 0.66kg |         |
| Steady/Flashing<br>w/ built-in buzzer | 3      | DC12V       |              | 0.77kg | R-Red   |
|                                       |        | DC24V       |              | 0.77kg | A-Amber |
|                                       |        | AC110V-220V |              | 0.87kg | G-Green |
| QTGA70L<br>Steady                     | 4      | DC12V       |              | 0.92kg | R-Red   |
| QTGA70L-BZ                            |        | DC24V       |              | 0.92kg | A-Amber |
| Steady w/built-in buzzer              |        | AC110V-220V |              | 1.02kg | G-Green |
| QTGA70LF                              | 5      | DC12V       |              | 1.07kg | R-Red   |
| Steady/Flashing                       |        | DC24V       |              | 1.07kg | A-Amber |
| QTGA70LF-BZ                           |        | AC110V-220V |              | 1.17kg | G-Green |
| Steady/Flashing<br>w/ built-in buzzer |        |             |              |        | B-Blue  |
|                                       |        |             |              |        | W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTG70L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



QTGA70L Series

### Ordering Specifications

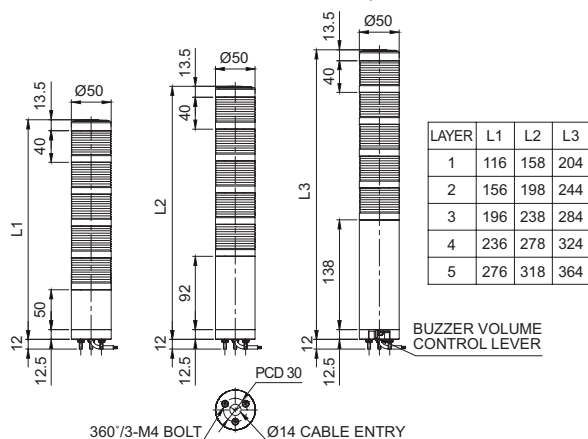
| QTG70L         | - | 3          | - | 110/220             | - | RAG     | - | LW24          |
|----------------|---|------------|---|---------------------|---|---------|---|---------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color] |   | [Bracket]     |
| QTG70L         |   | 1-1 Layer  |   | 12-DC12V            |   | R-Red   |   | None-Standard |
| QTG70L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | A-Amber |   | Bracket       |
| QTG70LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | G-Green |   | -LB24 -LW24   |
| QTG70LF-BZ     |   | 4-4 Layers |   |                     |   | B-Blue  |   | -QZ24 -SZ24   |
| QTGA70L        |   | 5-5 Layers |   |                     |   | W-White |   | -QL24 -SL24   |
| QTGA70L-BZ     |   |            |   |                     |   |         |   |               |
| QTGA70LF       |   |            |   |                     |   |         |   |               |
| QTGA70LF-BZ    |   |            |   |                     |   |         |   |               |

### Customization

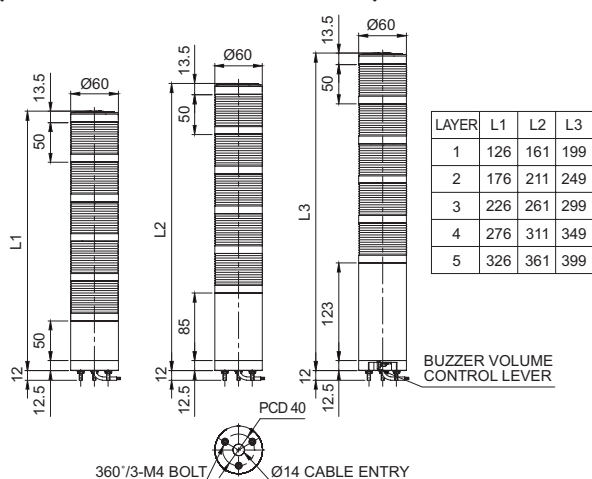
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

## Units : mm

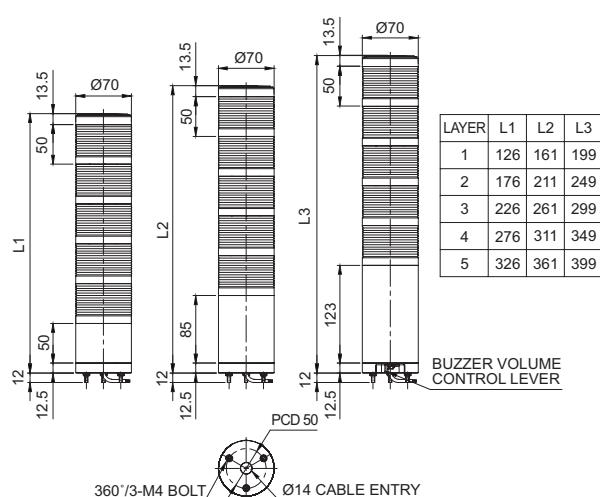
- QTG50MLF-AC
- QTG50ML-BZ-AC
- QTG50MLF-BZ-AC



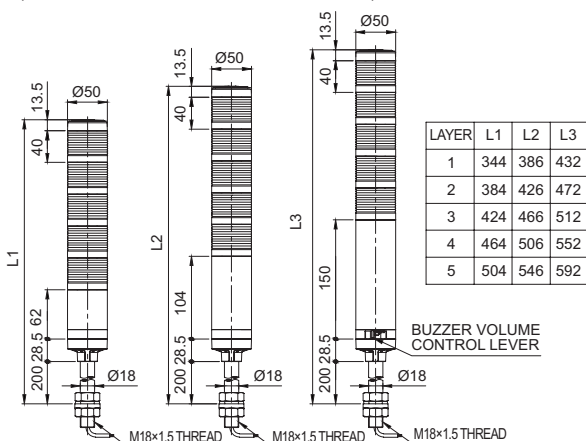
- QTG60MLF-AC
- QTG60ML-BZ-AC
- QTG60MLF-BZ-AC



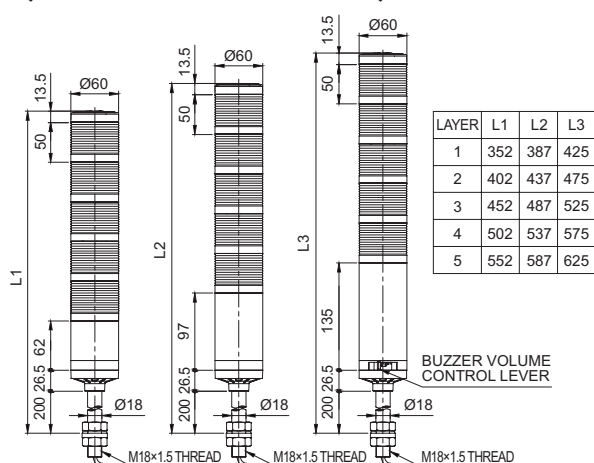
·QTG70MLF-BZ-AC



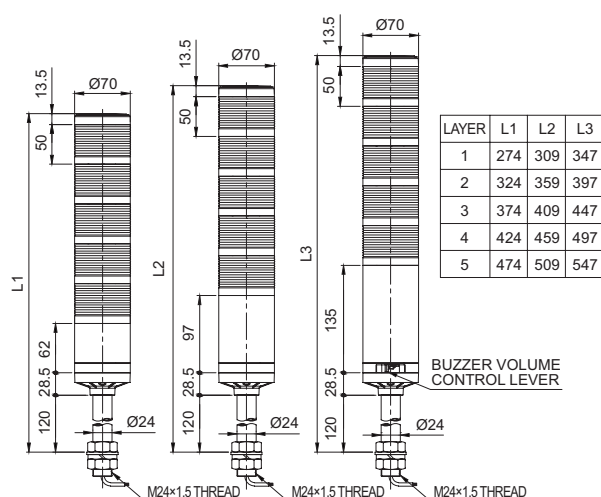
- QTG50LF-AC
- QTG50L-BZ-AC
- QTG50LF-BZ-AC



- QTG60LF-AC
- QTG60L-BZ-AC
- QTG60LF-BZ-AC



•QTG70LF-BZ-AC





Separate Color Filter Lens Inside the Outer Lens Helps to Provide a Clear Signal

### PRODUCT SPECIFICATION

QTC Series

**Materials** Lens-PC, Filter lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Modular LED steady/flashing signal tower lights
- Added a separate color filter lens inside the outer lens to help provide a clear signal
- Can select from size selections of Ø50mm, Ø60mm and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTCA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- When it is turned off the milky color filter provides comfortable viewing at close proximity for the operator
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- Available in customized 2 sound buzzer type and high volume(100dB) buzzer type
- Wired type and M12 connector type allow for a customized model that M12 connector can be attached at the end of wires.
- Transistors can be connected and can be operated on PLC directly



### Each modular color lens can be added without additional tools



QTC model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.

#### 1 High volume buzzer(100dB) option can be fitted to the top of the product. (Customization)

High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted)

#### 2 Integrated cover and lens model(QTCA50 / QTCA60 / QTCA70)

The sleek body cover and lens model is made of one piece for a simple unified look.

#### 3 QTC Series Special Lens

QTC Series added a separate color filter lens inside the outer lens to help provide a clear signal.

#### 4 Buzzer volume is adjusted via the volume control lever

QTC type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

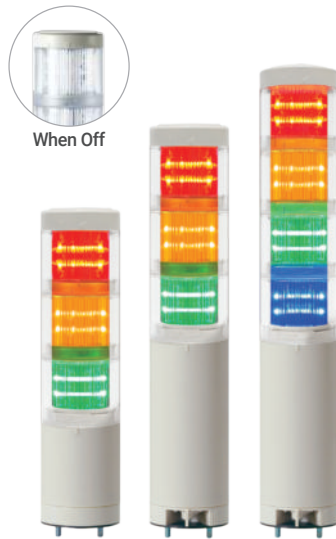
#### 5 M12 connector attached type

M12 connector is standard(Female M12 connector is not provided).

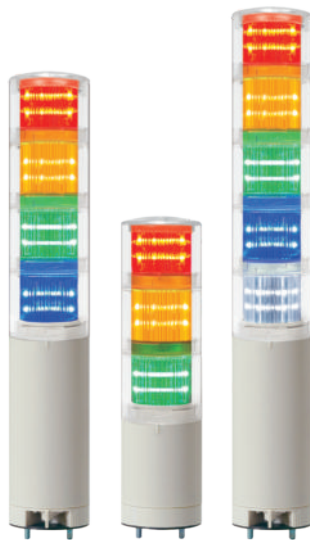
#### 6 Can select from a variety of Mounting brackets option to fit your application needs and build environment

There are a variety of Mounting bracket options available depending on cost and installation requirements.

# QTC50ML / QTC50L



QTC50ML Series



QTC50ML Series



High-volume buzzer module



## QTC50ML Ø50mm Direct mount, LED Steady/Flashing

| Model number                                         | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTC50ML<br>Steady                                    | 1      | DC12V<br>DC24V<br>AC110V-220V |              | 0.20kg<br>0.20kg<br>0.30kg | ● R-Red                                                    |
| QTC50ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTC50MLF<br>Steady/Flashing                          | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.28kg<br>0.28kg<br>0.38kg | ● R-Red<br>● G-Green                                       |
| QTC50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |
| QTC50ML<br>Steady                                    | 3      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.37kg<br>0.37kg<br>0.47kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTC50ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTC50MLF<br>Steady/Flashing                          | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.45kg<br>0.45kg<br>0.55kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTC50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |
| QTC50ML<br>Steady                                    | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.54kg<br>0.54kg<br>0.64kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

### Ordering Specifications

| QTC50ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTC50ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTC50ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTC50MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTC50MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTC50ML        |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTC50ML-BZ     |   |            |   |                     |   |           |
| QTC50MLF       |   |            |   |                     |   |           |
| QTC50MLF-BZ    |   |            |   |                     |   |           |



## QTC50L Ø50mm Pole mount, LED Steady/Flashing

| Model number                               | Layers | Voltage     | Certificates | Weight | Color     |
|--------------------------------------------|--------|-------------|--------------|--------|-----------|
| QTC50L Steady                              | 1      | DC12V       | CE<br>UL     | 0.35kg | ● R-Red   |
| QTC50L Steady w/ built-in buzzer           |        | DC24V       |              | 0.35kg |           |
| QTC50L-BZ                                  |        | AC110V-220V |              | 0.45kg |           |
| QTC50LF Steady/Flashing                    | 2      | DC12V       |              | 0.44kg | ● R-Red   |
| QTC50LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.44kg | ● G-Green |
| QTC50LF-BZ                                 |        | AC110V-220V |              | 0.54kg |           |
| QTC50L Steady                              | 3      | DC12V       |              | 0.52kg | ● R-Red   |
| QTC50L Steady w/ built-in buzzer           |        | DC24V       |              | 0.52kg | ● A-Amber |
| QTC50L-BZ                                  |        | AC110V-220V |              | 0.62kg | ● G-Green |
| QTC50L Steady                              | 4      | DC12V       |              | 0.61kg | ● R-Red   |
| QTC50L Steady w/ built-in buzzer           |        | DC24V       |              | 0.61kg | ● A-Amber |
| QTC50L-BZ                                  |        | AC110V-220V |              | 0.71kg | ● G-Green |
| QTC50LF Steady/Flashing                    | 5      | DC12V       |              | 0.69kg | ● R-Red   |
| QTC50LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.69kg | ● G-Green |
| QTC50LF-BZ                                 |        | AC110V-220V |              | 0.79kg | ● B-Blue  |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

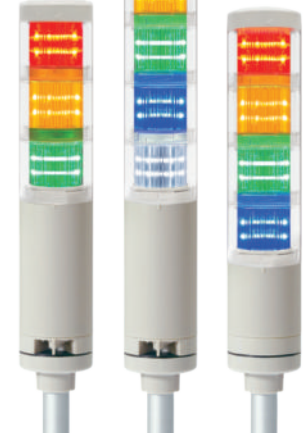
※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| QTC50L         | - | 3          | - | 110/220             | - | RAG       | - | LW18            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTC50L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTC50L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTC50LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | · LB18 -LW18    |
| QTC50LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | · QZ18 -SZ18    |
| QTC50L         |   | 5-5 Layers |   |                     |   | ○ W-White |   | · QL18 -SL18    |
| QTC50L-BZ      |   |            |   |                     |   |           |   |                 |
| QTC50LF        |   |            |   |                     |   |           |   |                 |
| QTC50LF-BZ     |   |            |   |                     |   |           |   |                 |



When Off



QTC50L Series



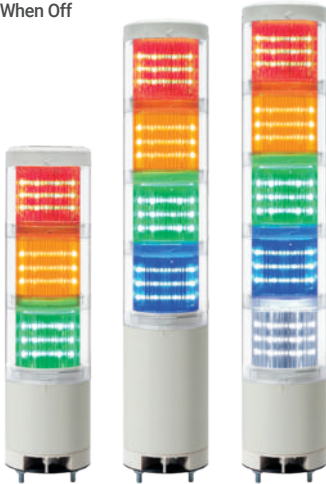
QTC50L Series

### Customization

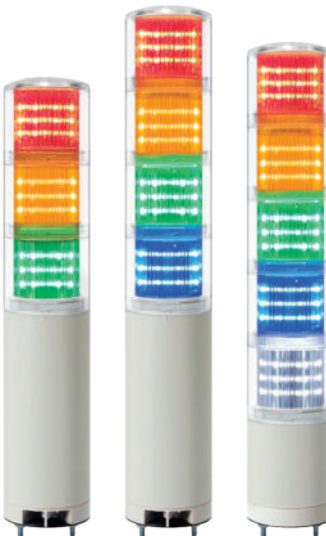
- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



# QTC60ML / QTC60L



QTC60ML Series



QTC60ML Series



High-volume buzzer module



## QTC60ML Ø60mm Direct mount, LED Steady/Flashing

| Model number                                         | Layers | Voltage     | Certificates | Weight | Color                                                      |
|------------------------------------------------------|--------|-------------|--------------|--------|------------------------------------------------------------|
| QTC60ML<br>Steady                                    | 1      | DC12V       |              | 0.28kg | ● R-Red                                                    |
| QTC60ML-BZ<br>Steady w/built-in buzzer               |        | DC24V       |              | 0.28kg |                                                            |
|                                                      |        | AC110V-220V |              | 0.38kg |                                                            |
| QTC60MLF<br>Steady/Flashing                          | 2      | DC12V       |              | 0.36kg | ● R-Red<br>● G-Green                                       |
| QTC60MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        | DC24V       |              | 0.36kg |                                                            |
|                                                      |        | AC110V-220V |              | 0.46kg |                                                            |
| QTC60ML<br>Steady                                    | 3      | DC12V       | CE<br>UL     | 0.45kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTC60ML-BZ<br>Steady w/built-in buzzer               |        | DC24V       |              | 0.45kg |                                                            |
|                                                      |        | AC110V-220V |              | 0.55kg |                                                            |
| QTC60MLF<br>Steady/Flashing                          | 4      | DC12V       |              | 0.53kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTC60MLF-BZ<br>Steady w/built-in buzzer              |        | DC24V       |              | 0.53kg |                                                            |
|                                                      |        | AC110V-220V |              | 0.63kg |                                                            |
| QTC60MLF<br>Steady/Flashing                          | 5      | DC12V       |              | 0.61kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTC60MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        | DC24V       |              | 0.61kg |                                                            |
|                                                      |        | AC110V-220V |              | 0.71kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

### Ordering Specifications

| QTC60ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTC60ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTC60ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTC60MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTC60MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTC60ML        |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTC60ML-BZ     |   |            |   |                     |   |           |
| QTC60MLF       |   |            |   |                     |   |           |
| QTC60MLF-BZ    |   |            |   |                     |   |           |

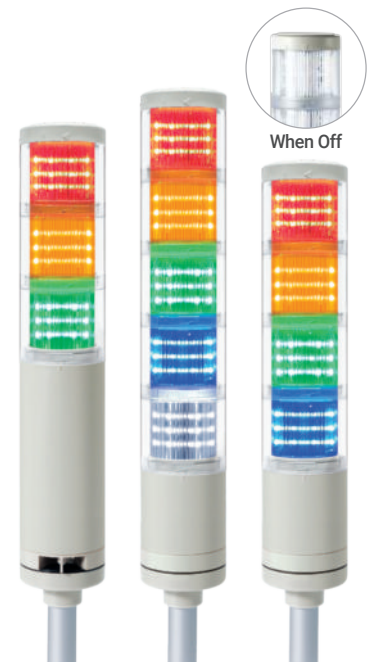


## QTC60L Ø60mm Pole mount, LED Steady/Flashing

| Model number                               | Layers | Voltage     | Certificates | Weight | Color     |
|--------------------------------------------|--------|-------------|--------------|--------|-----------|
| QTC60L Steady                              | 1      | DC12V       | CE<br>UL     | 0.43kg | ● R-Red   |
| QTC60L Steady w/ built-in buzzer           |        | DC24V       |              | 0.43kg |           |
| QTC60L-BZ                                  |        | AC110V-220V |              | 0.53kg |           |
| QTC60LF Steady/Flashing                    | 2      | DC12V       |              | 0.52kg | ● R-Red   |
| QTC60LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.52kg | ● G-Green |
| QTC60LF-BZ                                 |        | AC110V-220V |              | 0.62kg |           |
| QTC60L Steady                              | 3      | DC12V       |              | 0.60kg | ● R-Red   |
| QTC60L Steady w/ built-in buzzer           |        | DC24V       |              | 0.60kg | ● A-Amber |
| QTC60L-BZ                                  |        | AC110V-220V |              | 0.70kg | ● G-Green |
| QTC60LF Steady/Flashing                    | 4      | DC12V       |              | 0.69kg | ● R-Red   |
| QTC60LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.69kg | ● A-Amber |
| QTC60LF-BZ                                 |        | AC110V-220V |              | 0.79kg | ● G-Green |
| QTC60LF Steady/Flashing                    | 5      | DC12V       |              | 0.77kg | ● R-Red   |
| QTC60LF Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.77kg | ● G-Green |
| QTC60LF-BZ                                 |        | AC110V-220V |              | 0.87kg | ● B-Blue  |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTC60L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| QTC60L         | - | 3          | - | 110/220             | - | RAG       | - | LW18            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTC60L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTC60L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTC60LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18     |
| QTC60LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18     |
| QTC60L         |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18     |
| QTC60L-BZ      |   |            |   |                     |   |           |   |                 |
| QTC60LF        |   |            |   |                     |   |           |   |                 |
| QTC60LF-BZ     |   |            |   |                     |   |           |   |                 |

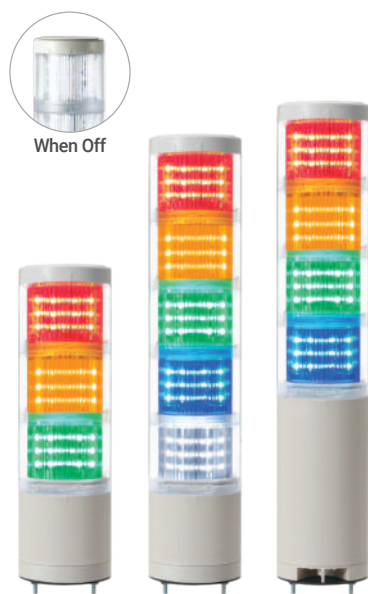


QTC60L Series

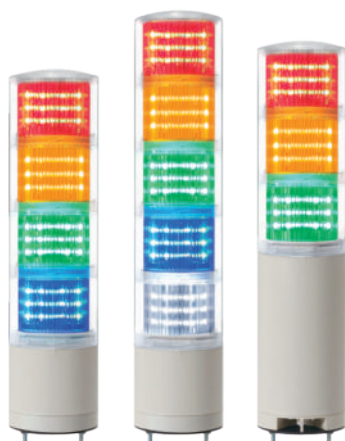
### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

# QTC70ML / QTC70L



QTC70ML Series



QTC70ML Series



High-volume buzzer module

## QTC70ML Ø70mm Direct mount, LED Steady/Flashing

| Model number                                         | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTC70ML<br>Steady                                    | 1      | DC12V<br>DC24V<br>AC110V-220V |              | 0.44kg<br>0.44kg<br>0.54kg | ● R-Red                                                    |
| QTC70ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTC70MLF<br>Steady/Flashing                          | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.58kg<br>0.58kg<br>0.68kg | ● R-Red<br>● G-Green                                       |
| QTC70MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |
| QTC70ML<br>Steady                                    | 3      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.79kg<br>0.79kg<br>0.89kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTC70ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTC70MLF<br>Steady/Flashing                          | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.94kg<br>0.94kg<br>1.04kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTC70MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |
| QTC70MLF<br>Steady/Flashing                          | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 1.09kg<br>1.09kg<br>1.19kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Ordering Specifications

| QTC70ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTC70ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTC70ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTC70MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTC70MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTC70ML        |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTC70ML-BZ     |   |            |   |                     |   |           |
| QTC70MLF       |   |            |   |                     |   |           |
| QTC70MLF-BZ    |   |            |   |                     |   |           |

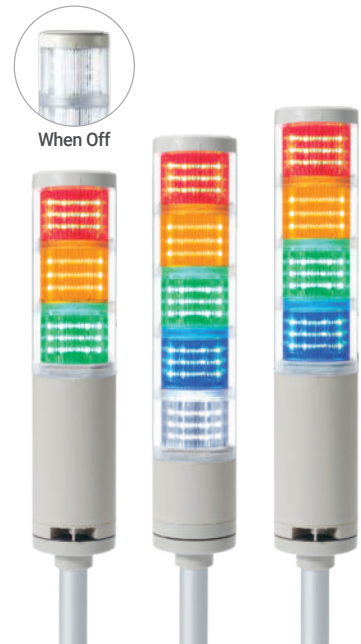


## QTC70L Ø70mm Pole mount, LED Steady/Flashing

| Model number                                     | Layers | Voltage     | Certificates | Weight | Color   |
|--------------------------------------------------|--------|-------------|--------------|--------|---------|
| QTC70L<br>Steady                                 | 1      | DC12V       | CE<br>UL     | 0.56kg | R-Red   |
| QTC70L-BZ<br>Steady w/built-in buzzer            |        | DC24V       |              | 0.56kg |         |
|                                                  |        | AC110V-220V |              | 0.66kg |         |
| QTC70LF<br>Steady/Flashing                       | 2      | DC12V       |              | 0.68kg | R-Red   |
| QTC70LF-BZ<br>Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.68kg | G-Green |
|                                                  |        | AC110V-220V |              | 0.78kg |         |
| QTC70L<br>Steady                                 | 3      | DC12V       |              | 0.83kg | R-Red   |
| QTC70L-BZ<br>Steady w/built-in buzzer            |        | DC24V       |              | 0.83kg | A-Amber |
|                                                  |        | AC110V-220V |              | 0.92kg | G-Green |
| QTC70L<br>Steady                                 | 4      | DC12V       |              | 0.98kg | R-Red   |
| QTC70L-BZ<br>Steady w/built-in buzzer            |        | DC24V       |              | 0.98kg | A-Amber |
|                                                  |        | AC110V-220V |              | 1.08kg | G-Green |
| QTC70LF<br>Steady/Flashing                       | 5      | DC12V       |              | 1.22kg | B-Blue  |
| QTC70LF-BZ<br>Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 1.22kg |         |
|                                                  |        | AC110V-220V |              | 1.31kg |         |
|                                                  |        |             |              |        | W-White |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTC70L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |                     |   |         |   |             |
|----------------|---|------------|---|---------------------|---|---------|---|-------------|
| QTC70L         | - | 3          | - | 110/220             | - | RAG     | - | LW24        |
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color] |   | [Bracket]   |
| QTC70L         |   | 1-1 Layer  |   | 12-DC12V            |   | R-Red   |   | · None-     |
| QTC70L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | A-Amber |   | Standard    |
| QTC70LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | G-Green |   | · Bracket   |
| QTC70LF-BZ     |   | 4-4 Layers |   |                     |   | B-Blue  |   | -LB24 -LW24 |
| QTC70L         |   | 5-5 Layers |   |                     |   | W-White |   | -QZ24 -SZ24 |
| QTC70L-BZ      |   |            |   |                     |   |         |   | -QL24 -SL24 |
| QTC70LF        |   |            |   |                     |   |         |   |             |
| QTC70LF-BZ     |   |            |   |                     |   |         |   |             |



QTCA70L Series

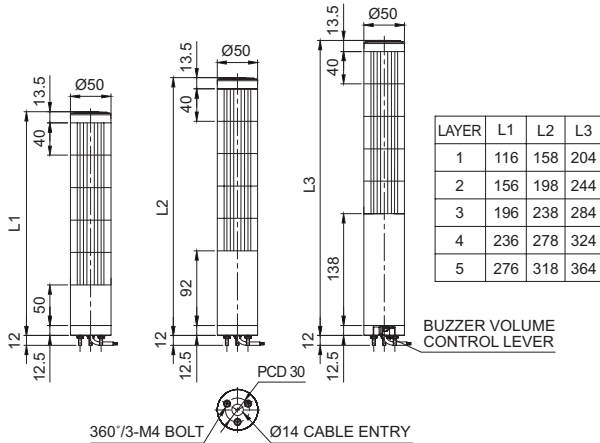
### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

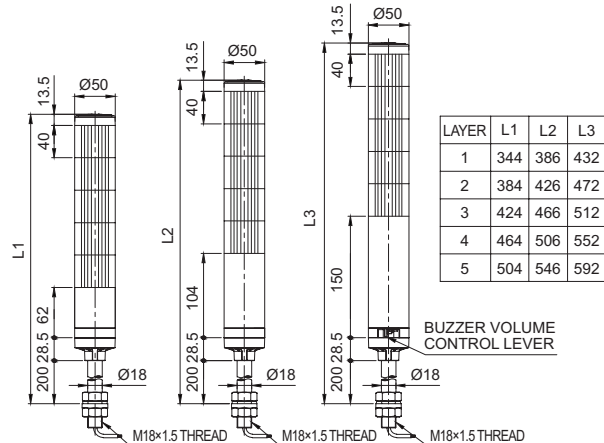
## Technical Diagram

Units : mm

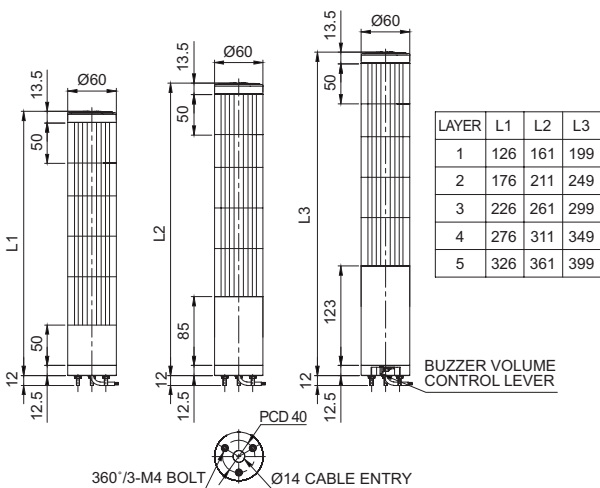
- QTC50ML-DC
- QTC50MLF-DC
- QTC50ML-BZ-DC
- QTC50ML-AC
- QTC50MLF-BZ-DC
- QTC50MLF-AC
- QTC50ML-BZ-AC
- QTC50MLF-BZ-AC



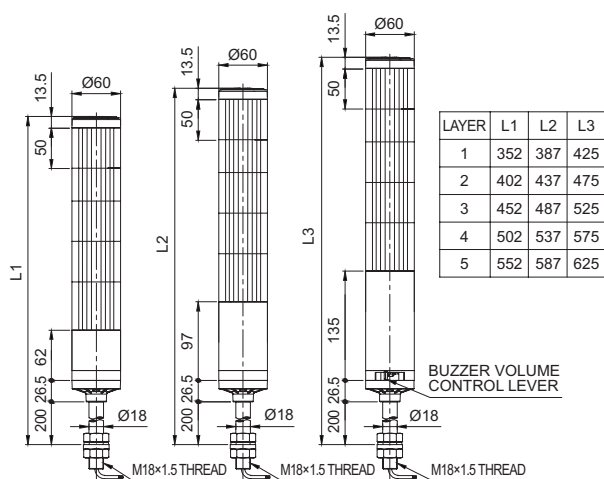
- QTC50L-DC
- QTC50LF-DC
- QTC50L-BZ-DC
- QTC50L-AC
- QTC50LF-BZ-DC
- QTC50LF-AC
- QTC50L-BZ-AC
- QTC50LF-BZ-AC



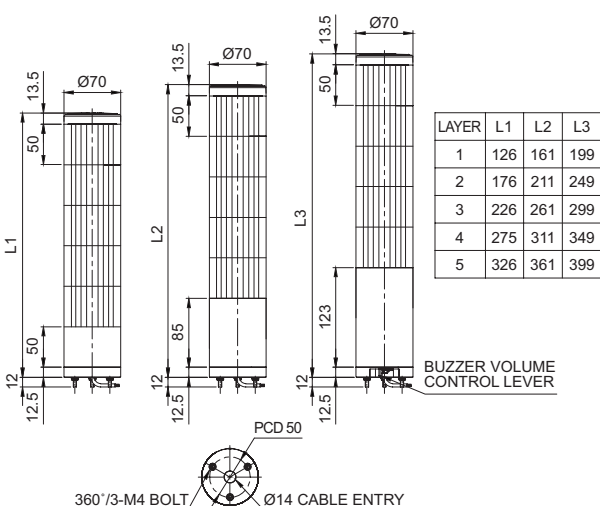
- QTC60ML-DC
- QTC60MLF-DC
- QTC60ML-BZ-DC
- QTC60ML-AC
- QTC60MLF-BZ-DC
- QTC60MLF-AC
- QTC60ML-BZ-AC
- QTC60MLF-BZ-AC



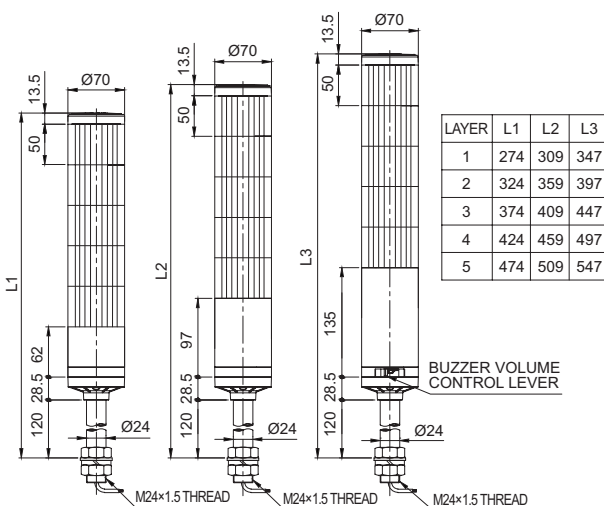
- QTC60L-DC
- QTC60LF-DC
- QTC60L-BZ-DC
- QTC60L-AC
- QTC60LF-BZ-DC
- QTC60LF-AC
- QTC60L-BZ-AC
- QTC60LF-BZ-AC



- QTC70ML-DC
- QTC70MLF-DC
- QTC70ML-BZ-DC
- QTC70ML-AC
- QTC70MLF-AC
- QTC70ML-BZ-AC
- QTC70MLF-BZ-AC
- QTC70MLF-BZ-DC



- QTC70L-DC
- QTC70LF-DC
- QTC70L-BZ-DC
- QTC70L-AC
- QTC70LF-AC
- QTC70L-BZ-AC
- QTC70LF-BZ-AC
- QTC70LF-BZ-DC





#### PRODUCT SPECIFICATION

QTR Series

**Materials** Lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Modular LED steady/flashing signal tower lights
- Soft and comfortable signal light emitted through the translucent milky lens
- When the product is turned off the milky color filter provides comfortable viewing at close proximity for the operator
- Can select from size selections of Ø50mm, Ø60mm, and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTRA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of Mounting brackets selections for the pole mount type to fit your location and mounting needs
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- Available in customized 2 sound buzzer type and high volume(100dB) buzzer type
- Wired type and M12 connector type allow for a customized model that M12 connector can be attached at the end of wires.
- Transistors can be connected and can be operated on PLC directly



#### Each modular color lens can be added without additional tools



QTR model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.



#### 1 High volume buzzer (100dB) option can be fitted to the top of the product. (Customization)

High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted)

#### 2 Integrated cover and lens model(QTRA50 / QTRA60 / QTRA70)

QTRA50 / QTRA60 / QTRA70 The sleek lens cover model is made of one piece for a simple unified look.

#### 3 QTR Series special lens

QTR Series provides soft and comfortable signal light emitted through the translucent milky lens.

#### 4 Buzzer volume is adjusted via the volume control lever

QTR type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

#### 5 M12 connector attached type

M12 connector is standard(Female M12 connector is not provided).

#### 6 Can select from a variety of Mounting brackets option to fit your application needs and build environment

There are a variety of Mounting bracket options available depending on cost and installation requirements.

# QTR50ML / QTR50L



QTR50ML Series



QTRA50ML Series



High-volume buzzer module



## QTR50ML Ø50mm Direct mount, LED Steady/Flashing

| Model number                                          | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|-------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTR50ML<br>Steady                                     | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.19kg<br>0.19kg<br>0.29kg | ● R-Red                                                    |
| QTR50ML-BZ<br>Steady w/built-in buzzer                |        |                               |              |                            |                                                            |
| QTR50MLF<br>Steady/Flashing                           | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.27kg<br>0.27kg<br>0.37kg | ● R-Red<br>● G-Green                                       |
| QTR50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer  | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.36kg<br>0.36kg<br>0.46kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTRA50ML<br>Steady                                    | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.44kg<br>0.44kg<br>0.54kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTRA50ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTRA50MLF<br>Steady/Flashing                          | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.53kg<br>0.53kg<br>0.63kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTRA50MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

### Ordering Specifications

| QTC70ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTC70ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTC70ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTC70MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTC70MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTCA70ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTCA70ML-BZ    |   |            |   |                     |   |           |
| QTCA70MLF      |   |            |   |                     |   |           |
| QTCA70MLF-BZ   |   |            |   |                     |   |           |





## QTR50L Ø50mm Pole mount, LED Steady/Flashing

| Model number                       | Layers | Voltage     | Certificates | Weight | Color     |
|------------------------------------|--------|-------------|--------------|--------|-----------|
| QTR50L Steady                      | 1      | DC12V       | CE<br>UL     | 0.34kg | ● R-Red   |
| QTR50L-BZ                          |        | DC24V       |              | 0.34kg |           |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.44kg |           |
| QTR50LF Steady/Flashing            | 2      | DC12V       |              | 0.43kg | ● R-Red   |
| QTR50LF-BZ                         |        | DC24V       |              | 0.43kg | ● G-Green |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.53kg |           |
| QTRA50L Steady                     | 3      | DC12V       |              | 0.51kg | ● R-Red   |
| QTRA50L-BZ                         |        | DC24V       |              | 0.51kg | ● A-Amber |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.61kg | ● G-Green |
| QTRA50LF Steady/Flashing           | 4      | DC12V       |              | 0.60kg | ● R-Red   |
| QTRA50LF-BZ                        |        | DC24V       |              | 0.60kg | ● A-Amber |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.70kg | ● G-Green |
| QTRA50LF Steady/Flashing           | 5      | DC12V       |              | 0.68kg | ● R-Red   |
| QTRA50LF-BZ                        |        | DC24V       |              | 0.68kg | ● A-Amber |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.78kg | ● G-Green |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



When Off



QTR50L Series



QTRA50L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 90mA  | 70mA  | Max.55mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| QTR50L         | - | 3          | - | 110/220             | - | RAG       | - | LW18        |
|----------------|---|------------|---|---------------------|---|-----------|---|-------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]   |
| QTR50L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-     |
| QTR50L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Standard    |
| QTR50LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | · Bracket   |
| QTR50LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -LB18 -LW18 |
| QTRA50L        |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QZ18 -SZ18 |
| QTRA50L-BZ     |   |            |   |                     |   |           |   | -QL18 -SL18 |
| QTRA50LF       |   |            |   |                     |   |           |   |             |
| QTRA50LF-BZ    |   |            |   |                     |   |           |   |             |

### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

# QTR60ML / QTR60L



QTR60ML Series



QTRA60ML Series



High-volume buzzer module



## QTR60ML Ø60mm Direct mount, LED Steady/Flashing

| Model number                                    | Layers | Voltage              | Certificates | Weight           | Color                                                      |
|-------------------------------------------------|--------|----------------------|--------------|------------------|------------------------------------------------------------|
| QTR60ML Steady                                  | 1      | DC12V                |              | 0.26kg           | ● R-Red                                                    |
| QTR60ML-BZ Steady w/built-in buzzer             |        | DC24V<br>AC110V-220V |              | 0.26kg<br>0.36kg |                                                            |
| QTR60MLF Steady/Flashing                        | 2      | DC12V                |              | 0.34kg           | ● R-Red<br>● G-Green                                       |
| QTR60MLF-BZ Steady/Flashing w/ built-in buzzer  |        | DC24V<br>AC110V-220V |              | 0.34kg<br>0.44kg |                                                            |
| QTRA60ML Steady                                 | 3      | DC12V                | CE<br>UL     | 0.43kg           | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTRA60ML-BZ Steady w/built-in buzzer            |        | DC24V<br>AC110V-220V |              | 0.43kg<br>0.53kg |                                                            |
| QTRA60MLF Steady/Flashing                       | 4      | DC12V                |              | 0.51kg           | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTRA60MLF-BZ Steady/Flashing w/ built-in buzzer |        | DC24V<br>AC110V-220V |              | 0.51kg<br>0.61kg |                                                            |
| QTRA60MLF Steady/Flashing                       | 5      | DC12V                |              | 0.59kg           | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTRA60MLF-BZ Steady/Flashing w/ built-in buzzer |        | DC24V<br>AC110V-220V |              | 0.59kg<br>0.69kg |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



### Ordering Specifications

| QTR60ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTR60ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTR60ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTR60MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTR60MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTRA60ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTRA60ML-BZ    |   |            |   |                     |   |           |
| QTRA60MLF      |   |            |   |                     |   |           |
| QTRA60MLF-BZ   |   |            |   |                     |   |           |



## QTR60L Ø60mm Pole mount, LED Steady/Flashing

| Model number                       | Layers | Voltage     | Certificates | Weight | Color     |
|------------------------------------|--------|-------------|--------------|--------|-----------|
| QTR60L Steady                      | 1      | DC12V       | CE<br>UL     | 0.41kg | ● R-Red   |
| QTR60L-BZ                          |        | DC24V       |              | 0.41kg |           |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.51kg |           |
| QTR60LF Steady/Flashing            | 2      | DC12V       |              | 0.50kg | ● R-Red   |
| QTR60LF-BZ                         |        | DC24V       |              | 0.50kg | ● G-Green |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.60kg |           |
| QTRA60L Steady                     | 3      | DC12V       |              | 0.58kg | ● R-Red   |
| QTRA60L-BZ                         |        | DC24V       |              | 0.58kg | ● A-Amber |
| Steady w/built-in buzzer           |        | AC110V-220V |              | 0.68kg | ● G-Green |
| QTRA60LF Steady/Flashing           | 4      | DC12V       |              | 0.67kg | ● R-Red   |
| QTRA60LF-BZ                        |        | DC24V       |              | 0.67kg | ● A-Amber |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.77kg | ● G-Green |
| QTRA60LF Steady/Flashing           | 5      | DC12V       |              | 0.75kg | ● B-Blue  |
| QTRA60LF-BZ                        |        | DC24V       |              | 0.75kg | ● W-White |
| Steady/Flashing w/ built-in buzzer |        | AC110V-220V |              | 0.85kg |           |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTR60L Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| QTR60L         | - | 3          | - | 110/220             | - | RAG       | - | LW18            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTR60L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTR60L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTR60LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18     |
| QTR60LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18     |
| QTRA60L        |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18     |
| QTRA60L-BZ     |   |            |   |                     |   |           |   |                 |
| QTRA60LF       |   |            |   |                     |   |           |   |                 |
| QTRA60LF-BZ    |   |            |   |                     |   |           |   |                 |



QTRA60L Series

### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

# QTR70ML / QTR70L



QTR70ML Series



QTRA70ML Series



High-volume buzzer module

## QTR70ML Ø70mm Direct mount, LED Steady/Flashing

| Model number                                          | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|-------------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTR70ML<br>Steady                                     | 1      | DC12V<br>DC24V<br>AC110V-220V | CE<br>UL     | 0.42kg<br>0.42kg<br>0.52kg | ● R-Red                                                    |
| QTR70ML-BZ<br>Steady w/built-in buzzer                |        |                               |              |                            |                                                            |
| QTR70MLF<br>Steady/Flashing                           | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.56kg<br>0.56kg<br>0.66kg | ● R-Red<br>● G-Green                                       |
| QTR70MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer  | 3      | DC12V<br>DC24V<br>AC110V-220V |              | 0.77kg<br>0.77kg<br>0.87kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTRA70ML<br>Steady                                    | 4      | DC12V<br>DC24V<br>AC110V-220V |              | 0.92kg<br>0.92kg<br>1.02kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTRA70ML-BZ<br>Steady w/built-in buzzer               |        |                               |              |                            |                                                            |
| QTRA70MLF<br>Steady/Flashing                          | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 1.07kg<br>1.07kg<br>1.17kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTRA70MLF-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |              |                            |                                                            |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

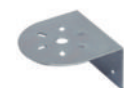
| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Ordering Specifications

| QTR70ML        | - | 3          | - | 110/220             | - | RAG       |
|----------------|---|------------|---|---------------------|---|-----------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTR70ML        |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTR70ML-BZ     |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTR70MLF       |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTR70MLF-BZ    |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTRA70ML       |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTRA70ML-BZ    |   |            |   |                     |   |           |
| QTRA70MLF      |   |            |   |                     |   |           |
| QTRA70MLF-BZ   |   |            |   |                     |   |           |



## QTR70L Ø70mm Pole mount, LED Steady/Flashing

| Model number                                   | Layers | Voltage     | Certificates | Weight | Color     |
|------------------------------------------------|--------|-------------|--------------|--------|-----------|
| QTR70L Steady                                  | 1      | DC12V       | CE<br>UL     | 0.54kg | ● R-Red   |
| QTR70L-BZ Steady w/built-in buzzer             |        | DC24V       |              | 0.54kg |           |
|                                                |        | AC110V-220V |              | 0.64kg |           |
| QTR70LF Steady/Flashing                        | 2      | DC12V       |              | 0.66kg | ● R-Red   |
| QTR70LF-BZ Steady/Flashing w/ built-in buzzer  |        | DC24V       |              | 0.66kg | ● G-Green |
|                                                |        | AC110V-220V |              | 0.76kg |           |
| QTRA70L Steady                                 | 3      | DC12V       |              | 0.81kg | ● R-Red   |
| QTRA70L-BZ Steady w/built-in buzzer            |        | DC24V       |              | 0.81kg | ● A-Amber |
|                                                |        | AC110V-220V |              | 0.90kg | ● G-Green |
| QTRA70LF Steady/Flashing                       | 4      | DC12V       |              | 0.96kg | ● R-Red   |
| QTRA70LF-BZ Steady/Flashing w/ built-in buzzer |        | DC24V       |              | 0.96kg | ● A-Amber |
|                                                |        | AC110V-220V |              | 1.06kg | ● G-Green |
|                                                | 5      | DC12V       |              | 1.20kg | ● B-Blue  |
|                                                |        | DC24V       |              | 1.20kg | ● W-White |
|                                                |        | AC110V-220V |              | 1.29kg |           |

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 105mA | 70mA  | Max.60mA    |
| Buzzer current                | 40mA  | 75mA  | Max.55mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



### Ordering Specifications

| QTR70L         | - | 3          | - | 110/220             | - | RAG       | - | LW24            |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]       |
| QTR70L         |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | · None-Standard |
| QTR70L-BZ      |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | · Bracket       |
| QTR70LF        |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB24-LW24      |
| QTR70LF-BZ     |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ24-SZ24      |
| QTRA70L        |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL24-SL24      |
| QTRA70L-BZ     |   |            |   |                     |   |           |   |                 |
| QTRA70LF       |   |            |   |                     |   |           |   |                 |
| QTRA70LF-BZ    |   |            |   |                     |   |           |   |                 |

### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

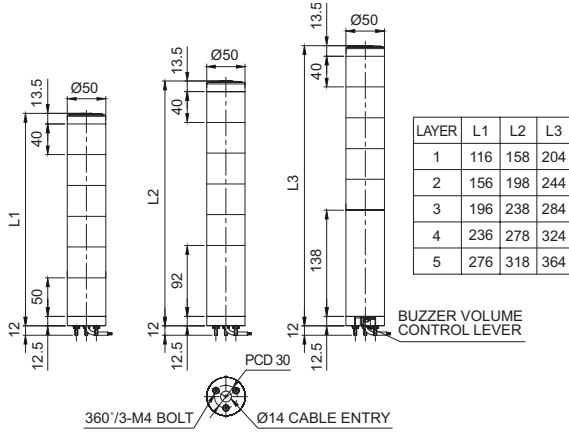
## Technical Diagram

Units : mm

·QTR50ML-DC  
·QTR50MLF-DC  
·QTR50ML-BZ-DC

·QTR50ML-AC  
·QTR50MLF-BZ-DC

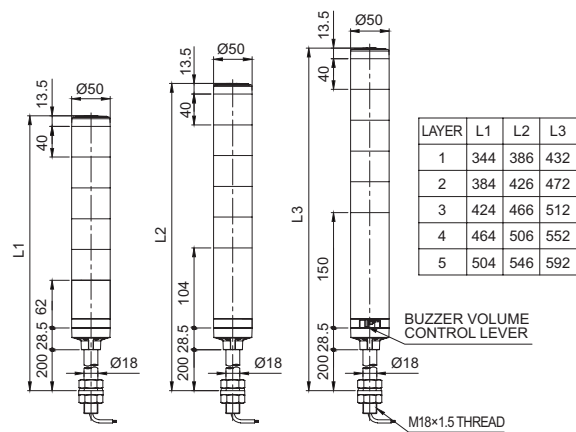
·QTR50MLF-AC  
·QTR50ML-BZ-AC  
·QTR50MLF-BZ-AC



·QTR50L-DC  
·QTR50LF-DC  
·QTR50L-BZ-DC

·QTR50L-AC  
·QTR50LF-BZ-DC

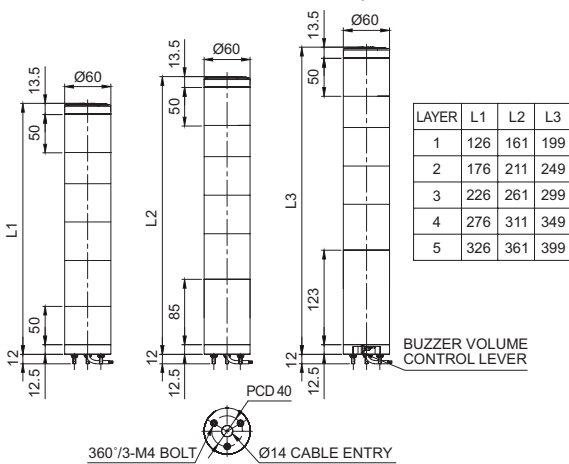
·QTR50LF-AC  
·QTR50L-BZ-AC  
·QTR50LF-BZ-AC



·QTR60ML-DC  
·QTR60MLF-DC  
·QTR60ML-BZ-DC

·QTR60ML-AC  
·QTR60MLF-BZ-DC

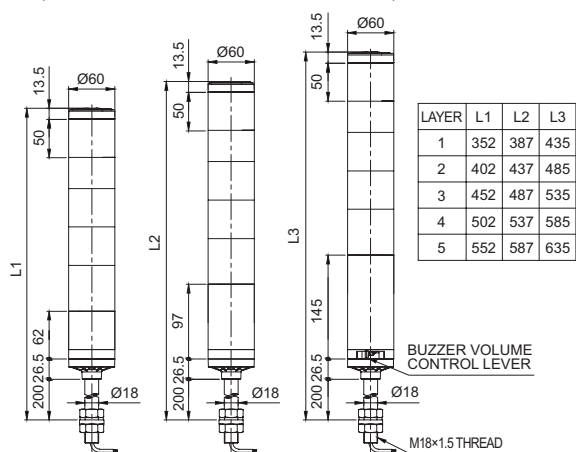
·QTR60MLF-AC  
·QTR60ML-BZ-AC  
·QTR60MLF-BZ-AC



·QTR60L-DC  
·QTR60LF-DC  
·QTR60L-BZ-DC

·QTR60L-AC  
·QTR60LF-BZ-DC

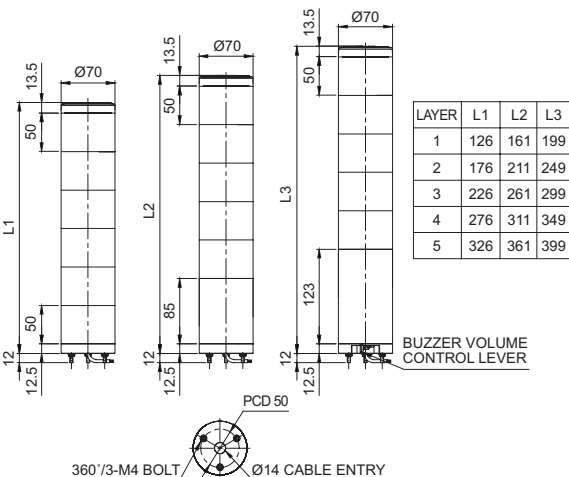
·QTR60LF-AC  
·QTR60L-BZ-AC  
·QTR60LF-BZ-AC



·QTR70ML-DC  
·QTR70MLF-DC  
·QTR70ML-BZ-DC

·QTR70ML-AC  
·QTR70MLF-AC  
·QTR70ML-BZ-AC  
·QTR70MLF-BZ-DC

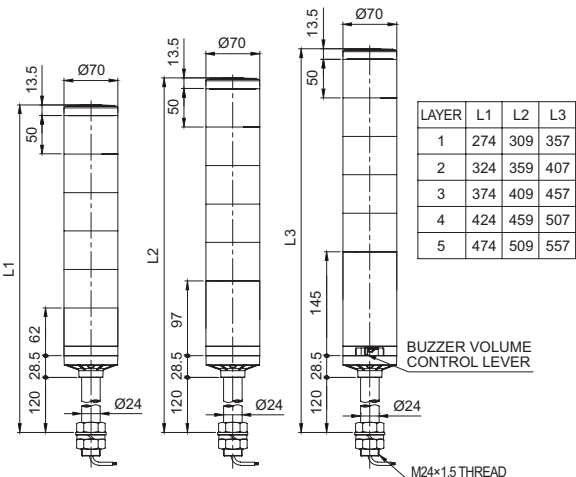
·QTR70MLF-BZ-AC



·QTR70L-DC  
·QTR70LF-DC  
·QTR70L-BZ-DC

·QTR70L-AC  
·QTR70LF-AC  
·QTR70L-BZ-AC  
·QTR70LF-BZ-DC

·QTR70LF-BZ-AC



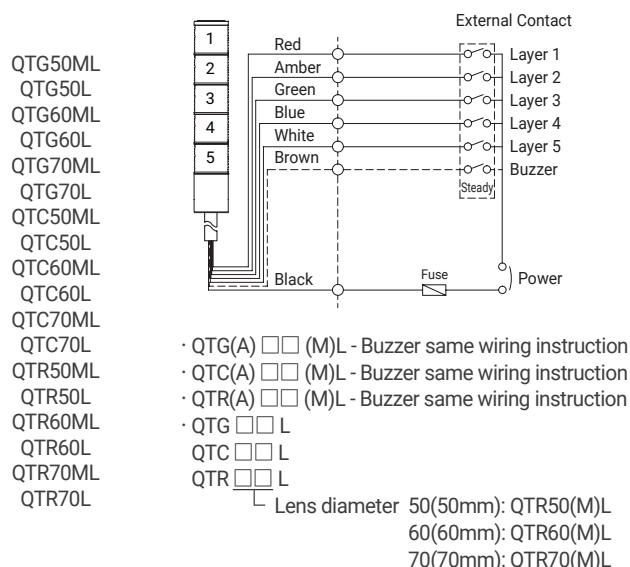


## Wiring Instructions(using External Contact)

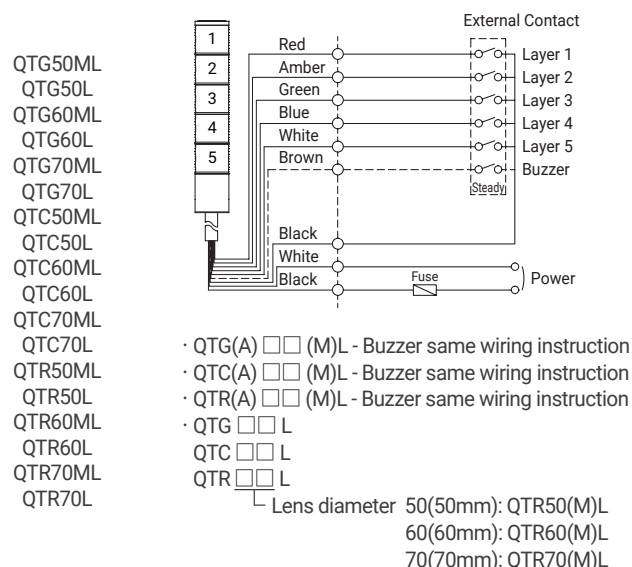
· In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

### Wiring Instructions

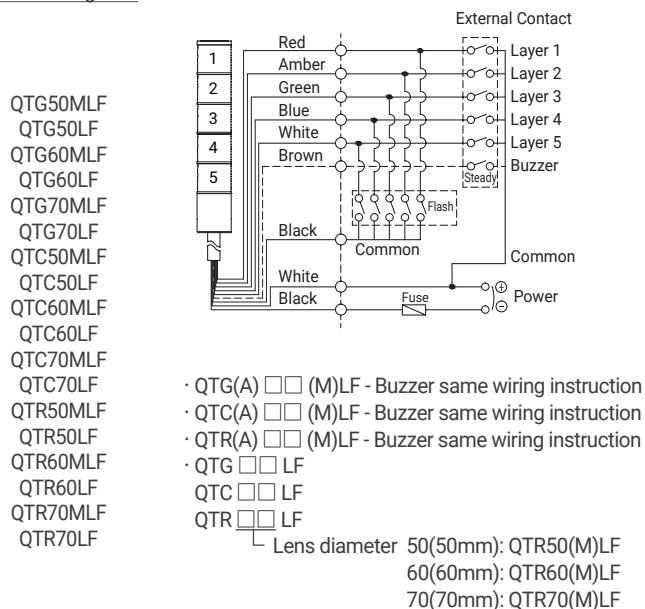
#### DC Steady



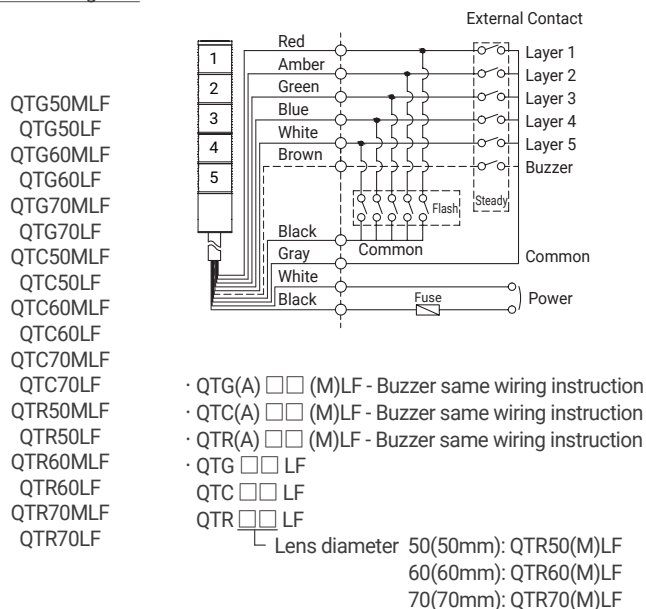
#### AC Steady



#### DC Steady/ Flashing



#### AC Steady/ Flashing



- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
 External signal line - UL1007 AWG22(0.3sq) 400mm

## Wiring Instructions(using transistor)

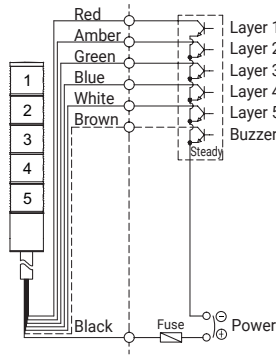
· In case of wiring with transistors, please select the proper transistor type : either NPN or PNP based on the source voltage setting.

### Wiring Instructions

#### DC Steady

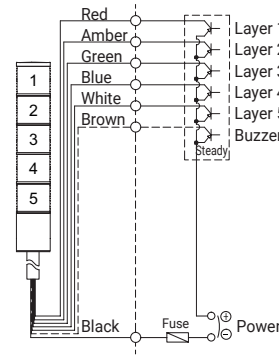
QTG50ML  
QTG50L  
QTG60ML  
QTG60L  
QTG70ML  
QTG70L  
QTC50ML  
QTC50L  
QTC60ML  
QTC60L  
QTC70ML  
QTC70L  
QTR50ML  
QTR50L  
QTR60ML  
QTR60L  
QTR70ML  
QTR70L

External Transistor



- QTG(A) □□ (M)L - Buzzer same wiring instruction
- QTC(A) □□ (M)L - Buzzer same wiring instruction
- QTR(A) □□ (M)L - Buzzer same wiring instruction
- QTG □□ L
- QTC □□ L
- QTR □□ L
- └ Lens diameter 50(50mm): QTR50(M)L  
60(60mm): QTR60(M)L  
70(70mm): QTR70(M)L

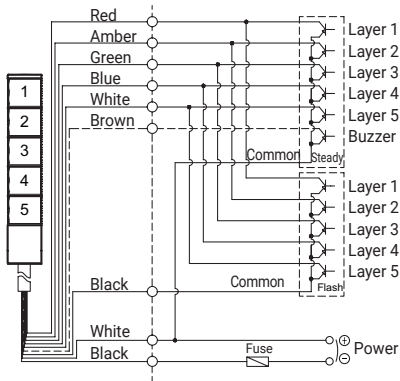
External Transistor



#### DC Steady/ Flashing

QTG50MLF  
QTG50LF  
QTG60MLF  
QTG60LF  
QTG70MLF  
QTG70LF  
QTC50MLF  
QTC50LF  
QTC60MLF  
QTC60LF  
QTC70MLF  
QTC70LF  
QTR50MLF  
QTR50LF  
QTR60MLF  
QTR60LF  
QTR70MLF  
QTR70LF

External Transistor

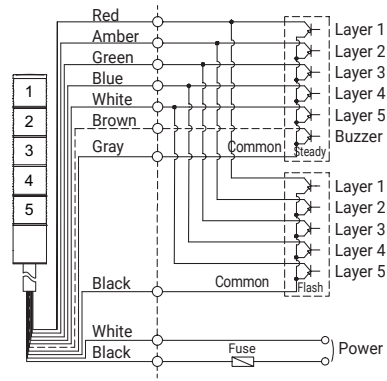


- QTG(A) □□ (M)LF - Buzzer same wiring instruction
- QTC(A) □□ (M)LF - Buzzer same wiring instruction
- QTR(A) □□ (M)LF - Buzzer same wiring instruction
- QTG □□ LF
- QTC □□ LF
- QTR □□ LF
- └ Lens diameter 50(50mm): QTR50(M)LF  
60(60mm): QTR60(M)LF  
70(70mm): QTR70(M)LF

#### AC Steady/ Flashing

QTG50MLF  
QTG50LF  
QTG60MLF  
QTG60LF  
QTG70MLF  
QTG70LF  
QTC50MLF  
QTC50LF  
QTC60MLF  
QTC60LF  
QTC70MLF  
QTC70LF  
QTR50MLF  
QTR50LF  
QTR60MLF  
QTR60LF  
QTR70MLF  
QTR70LF

External Transistor



- QTG(A) □□ (M)LF - Buzzer same wiring instruction
- QTC(A) □□ (M)LF - Buzzer same wiring instruction
- QTR(A) □□ (M)LF - Buzzer same wiring instruction
- QTG □□ LF
- QTC □□ LF
- QTR □□ LF
- └ Lens diameter 50(50mm): QTR50(M)LF  
60(60mm): QTR60(M)LF  
70(70mm): QTR70(M)LF

· DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm

· AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm

## MTG / MTC / MTR Series

### PRODUCT SPECIFICATION

MTG / MTC / MTR Series

**Materials** Lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

**Sound volume** Standard buzzer Max.90dB at 1m  
High-volume buzzer Max.100dB at 1m  
Waterproof buzzer Max.85dB at 1m

**Protection rating**

Signal Beacon Terminal type,  
Waterproof buzzer module type-IP65  
High-volume buzzer module type-Non-Waterproof

**Certificates** CE, UL

※ UL listed silver housing model is optionally provided

**Flashing rate** 60-80 flashes/min

**Compliant with RoHS directive**

- Modular LED steady/flashing type signal tower lights
- 3 unique visual effects are possible as different
  - MTG: Excellent visibility from a distance with the use of a special color diffusing lens
  - MTC: Added a separate color filter lens inside the outer lens to help provide a clear signal
  - MTR: Soft and comfortable signal light emitted through the translucent milky lens
- Can select from size selections of Ø50mm, Ø60mm, and Ø70mm to fit your sophisticated application needs
- Steady/Flashing mode can be selected by using dip switch inside of the LED module
- Push buttons on the terminal help you to realize easy wiring
- Modularized high buzzer module emits intensive buzzer sound
- Sealed design with waterproof buzzer
- MTGA / MTCA / MTRA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product



### Each modular color lens can be added without additional tools



MTG / MTC / MTR model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.



- 1 Terminal type base module**  
Terminal type base module can wire power lines and signaling lines separately depending on the installation environment.
- 2 Buzzer module**  
High-volume buzzer module: The high-volume buzzer module with a high-output buzzer can deliver a stronger signal than a standard buzzer module(Buzzer volume: Max. 100dB at 1m).  
Waterproof buzzer module: The waterproof buzzer module with a fully enclosed structure can emit a stable buzzer sound (IP Rating: IP65, buzzer volume: Max. 85dB at 1m).
- 3 Integrated cover and lens model**  
MTGA / MTCA / MTRA Series the sleek lens cover model is made of one piece for a simple unified look.
- 4 Black and silver applied products (customized type)**  
Black or silver products for the body, cover, and buzzer module are customized product.
- 5 M12 connector attached type (customization)**  
Built-in M12 connector realizes easy installations and disconnections.
- 6 Can select from a variety of Mounting brackets option to fit your application needs and build environment**  
There are a variety of Mounting brackets options available depending on cost and installation requirements.

## Modular LED signal tower light with built-in terminal

# MTG / MTC / MTR Series

A new concept model that allows users to change and combine individual lens colors without a tool

### Cover integrated LED module



It is possible to assemble a product with a different atmosphere from existing products by using a cover lens integrated module in which the cover and the LED module are integrated.

- MGA LED module : Excellent visibility even from a distance by adopting a colored diffuser lens that is integrated with the cover
- MCA LED module : Clear and beautiful signal light by embedding a filter lens in a transparent groove that is integrated with the cover
- MRA LED module : Soft and cozy signal light is emitted by using a milky translucent lens that is integrated with the cover.

| Module name               | Layout | Product feature                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED module                |        | <ul style="list-style-type: none"> <li>• The LED module adopts a special colored diffused light for excellent visibility.</li> <li>• Customer can select LED function by using the built-in steady/flashing mode switch.</li> <li>• Customer can disassemble and assemble according to the purpose.</li> </ul> <p>※ MTC/MTR module is photographed in a LED steady mode to help customer's understanding.</p> |
| Standard buzzer module    |        | <ul style="list-style-type: none"> <li>• The buzzer volume level is up to 90dB.</li> <li>• Customer can freely disassemble and assemble according to customer's demand.</li> </ul>                                                                                                                                                                                                                            |
| High-volume buzzer module |        | <ul style="list-style-type: none"> <li>• The buzzer volume level is up to 100dB.</li> <li>• Intensive buzzer sound is possible by adopting a high-volume buzzer.</li> <li>• Customer can freely disassemble and assemble according to customer's demand.</li> </ul>                                                                                                                                           |
| Waterproof buzzer module  |        | <ul style="list-style-type: none"> <li>• By adopting a completely sealed structure, MTG realizes stable buzzer sound.</li> <li>• Better protection rating which is IP65 in comparison with a built-in buzzer unit.</li> <li>• Customer can freely disassemble and assemble according to customer's demand.</li> </ul>                                                                                         |

### Features when MC / MR module modes are steady/off conditions

- MC/MR module does not display the color of the light source on the module surface when it is turned off (see photo below).



When MC module is off



When MR module is off



When MC module is off



When MR module is off

### Can select from a variety of Mounting bracket options to fit your application needs

- You can chose from 9 different kinds of Mounting bracket options.
- The bracket materials vary from steel, aluminum, and polycarbonate
- Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



## Modular LED signal tower light with built-in terminal

# MTG / MTC / MTR Series

A model with excellent versatility through the application of various mounting options

### Terminal type base module



- Constructing a terminal block to release locking on the terminal block type base module enables wiring without using a special tool.
- User directly selects the standard power cable length, color, specifications, and so on and customized wiring is possible.
- Easy wiring by releasing locking with a button.

| Module name                    | Layout                                                                              | Product feature                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self stand base module         |    | <ul style="list-style-type: none"> <li>· It is used when fixing the product directly to the mounting location without using any other type of Mounting bracket.</li> </ul>                                                                                                                                                                                                        |
| Pole type base module          |   | <ul style="list-style-type: none"> <li>· After assembling the pole on the bottom plate of the product, use a separate Mounting bracket to fix the product.</li> <li>· The height of the product can be freely adjusted by changing the pole height.</li> <li>· 9 types of various Mounting brackets can be selected and used according to the installation environment</li> </ul> |
| M12 connector type base module |  | <ul style="list-style-type: none"> <li>· It is used when fixing the product directly to the mounting location without using any other type of Mounting bracket.</li> <li>· Connect and drive the product using the M12 connector on the bottom plate.</li> </ul>                                                                                                                  |

### How to assemble modules

- Consumers can purchase the necessary modules and assemble them themselves.
- Detailed specifications and features of the module are introduced in the catalog.
- Module assembly information is included in the assembly guide page.



### Pre-assemble unit

- Assemble the functions requested by the consumer and supply it as a finished product.
- The assembly specifications of various types are introduced in the catalog.

### How to assemble modules



- ① Assemble so that the I-shaped projections of the module to be assembled coincide with each other.



- ② Lock the upper module by rotating the upper module clockwise so that the triangular protrusion aligns with the I-shaped protrusion of the lower module.

### How to dismantle modules



- ① Make sure that the I-shaped projection of the upper module is aligned with the I-shaped projection of the lower module. Rotate the upper module counterclockwise.



- ② Separate the upper module to the upper side.



# Modular LED signal tower light with built-in terminal

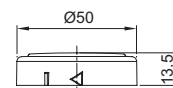
## MTG50 / MTC50 / MTR50 Series

### Top module

#### · Cover

(Units : mm)

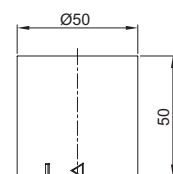
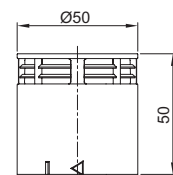
| Layout                                                                            | Parts Name  | Model No   | Color  | Weight | Common Specifications                                                                                                                                 |
|-----------------------------------------------------------------------------------|-------------|------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | MTG50 Cover | MG50-CV    | Ivory  | 0.01kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 14</li> </ul> |
|  | MTG50 Cover | MG50-CV-SV | Silver | 0.01kg |                                                                                                                                                       |
|  | MTG50 Cover | MG50-CV-BK | Black  | 0.01kg |                                                                                                                                                       |



#### · Buzzer module

(Units : mm)

| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification |         | Volume(dB) | Weight | Common Specifications                                                                                                                                            |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|---------------|---------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage       | Current |            |        |                                                                                                                                                                  |
|  | MTG50-Standard buzzer module    | MG50-BZ-24     | Ivory  | DC24V         | 90mA    | Max.90dB   | 0.05kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble : Non-Waterproof</li> <li>· Product size: Ø50 X 50</li> </ul> |
|                                                                                     | MTG50-High-volume buzzer module | MG50-HBZ-24    | Ivory  | DC24V         | 90mA    | Max.100dB  | 0.05kg |                                                                                                                                                                  |
|  | MTG50-Standard buzzer module    | MG50-BZ-24-SV  | Silver | DC24V         | 90mA    | Max.90dB   | 0.05kg |                                                                                                                                                                  |
|                                                                                     | MTG50-High-volume buzzer module | MG50-HBZ-24-SV | Silver | DC24V         | 90mA    | Max.100dB  | 0.05kg |                                                                                                                                                                  |
|  | MTG50-Standard buzzer module    | MG50-BZ-24-BK  | Black  | DC24V         | 90mA    | Max.90dB   | 0.05kg |                                                                                                                                                                  |
|                                                                                     | MTG50-High-volume buzzer module | MG50-HBZ-24-BK | Black  | DC24V         | 90mA    | Max.100dB  | 0.05kg |                                                                                                                                                                  |
|  | MTG50-Waterproof buzzer module  | MG50-WBZ-24    | Ivory  | DC24V         | 90mA    | Max.85dB   | 0.05kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 50</li> </ul>            |
|  | MTG50-Waterproof buzzer module  | MG50-WBZ-24-SV | Silver | DC24V         | 90mA    | Max.85dB   | 0.05kg |                                                                                                                                                                  |
|  | MTG50-Waterproof buzzer module  | MG50-WBZ-24-BK | Black  | DC24V         | 90mA    | Max.85dB   | 0.05kg |                                                                                                                                                                  |

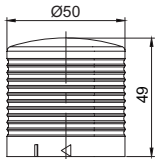
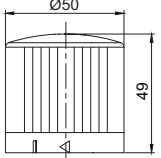
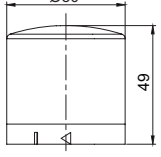






## · Cover integrated LED Steady/Flashing module

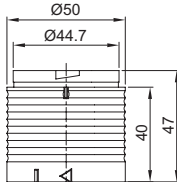
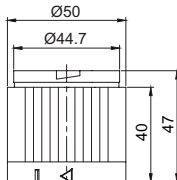
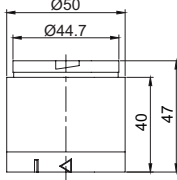
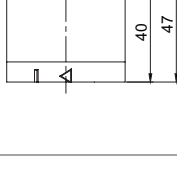
(Units : mm)

| Layout                                                                            |                                                                                   |                                                                                   | Model No                               | Color | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|-------|---------------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                | MC                                                                                | MR                                                                                |                                        |       | Voltage       | Current |        |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|  |  |  | MGA50-R-24<br>MCA50-R-24<br>MRA50-R-24 | Red   | DC24V         | 70mA    | 0.05kg | <ul style="list-style-type: none"> <li>· Material: PC</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 49</li> </ul>    |

## LED module

### · LED Steady/Flashing module

(Units : mm)

| Layout                                                                              |                                                                                     |                                                                                     | Model No                            | Color | Specification |         | Weight | Common Specifications                                                                                                                                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|-------|---------------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                  | MC                                                                                  | MR                                                                                  |                                     |       | Voltage       | Current |        |                                                                                                                                                      |
|  |  |  | MG50-R-24<br>MC50-R-24<br>MR50-R-24 | Red   | DC24V         | 70mA    | 0.05kg | <ul style="list-style-type: none"> <li>· Material: PC</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 47</li> </ul> |
|  |  |  | MG50-A-24<br>MC50-A-24<br>MR50-A-24 | Amber | DC24V         | 70mA    | 0.05kg |                                                                 |
|  |  |  | MG50-G-24<br>MC50-G-24<br>MR50-G-24 | Green | DC24V         | 70mA    | 0.05kg |                                                                 |
|  |  |  | MG50-B-24<br>MC50-B-24<br>MR50-B-24 | Blue  | DC24V         | 70mA    | 0.05kg |                                                                 |
|  |  |  | MG50-W-24<br>MC50-W-24<br>MR50-W-24 | White | DC24V         | 70mA    | 0.05kg |                                                                 |

# Modular LED signal tower light with built-in terminal

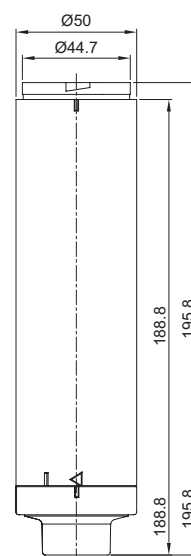
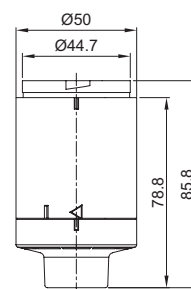
## MTG50 / MTC50 / MTR50 Series

### Base module

#### · Pole mount type

(Units : mm)

| Layout                                                                              | Parts Name                     | Model No      | Color  | Specification |            | Weight | Common Specifications                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------|---------------|--------|---------------|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                |               |        | Voltage       | Current    |        |                                                                                                                                                        |
|    | MTG50-Pole type base module-DC | MG50-BS-DC    | Ivory  | DC24V         | 400mA      | 0.07kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 86</li> </ul>  |
|    | MTG50-Pole type base module-DC | MG50-BS-DC-SV | Silver | DC24V         | 400mA      | 0.07kg |                                                                                                                                                        |
|   | MTG50-Pole type base module-DC | MG50-BS-DC-BK | Black  | DC24V         | 400mA      | 0.07kg |                                                                                                                                                        |
|  | MTG50-Pole type base module-AC | MG50-BS-AC    | Ivory  | AC110V -220V  | Max. 250mA | 0.22kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 196</li> </ul> |
|  | MTG50-Pole type base module-AC | MG50-BS-AC-SV | Silver | AC110V -220V  | Max. 250mA | 0.22kg |                                                                                                                                                        |
|  | MTG50-Pole type base module-AC | MG50-BS-AC-BK | Black  | AC110V -220V  | Max. 250mA | 0.22kg |                                                                                                                                                        |

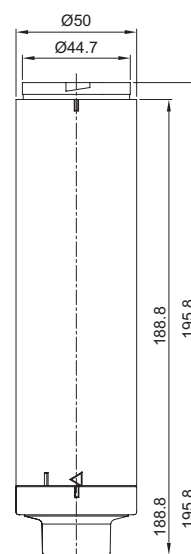
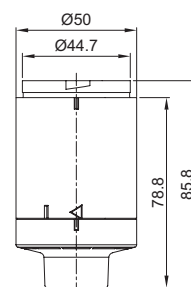




## · Self stand type

(Units : mm)

| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification |            | Weight | Common Specifications                                                                                                                                  |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|---------------|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage       | Current    |        |                                                                                                                                                        |
|    | MTG50-Self stand base module-DC | MG50-MBS-DC    | Ivory  | DC24V         | 400mA      | 0.07kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 78</li> </ul>  |
|    | MTG50-Self stand base module-DC | MG50-MBS-DC-SV | Silver | DC24V         | 400mA      | 0.07kg |                                                                                                                                                        |
|   | MTG50-Self stand base module-DC | MG50-MBS-DC-BK | Black  | DC24V         | 400mA      | 0.07kg |                                                                                                                                                        |
|  | MTG50-Self stand base module-AC | MG50-MBS-AC    | Ivory  | AC110V -220V  | Max. 250mA | 0.23kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø50 X 188</li> </ul> |
|  | MTG50-Self stand base module-AC | MG50-MBS-AC-SV | Silver | AC110V -220V  | Max. 250mA | 0.23kg |                                                                                                                                                        |
|  | MTG50-Self stand base module-AC | MG50-MBS-AC-BK | Black  | AC110V -220V  | Max. 250mA | 0.23kg |                                                                                                                                                        |

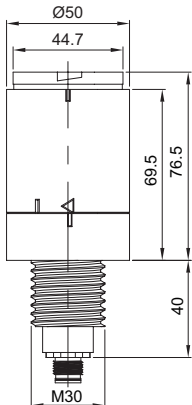


## Modular LED signal tower light with built-in terminal

# MTG50 / MTC50 / MTR50 Series

### · Base module(M12 connector type)

(Units : mm)

| Layout                                                                             | Parts Name                                    | Model No              | Color  | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------|--------|---------------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |                                               |                       |        | Voltage       | Current |        |                                                                                                                                                                                                                                                |
|   | MTG50-M12<br>connector type<br>base module-DC | MG50-BS-DC<br>-M12    | Ivory  | DC24V         | 400mA   | 0.08kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with<br/>assemble: IP65</li> <li>· Product size: Ø50 X 71</li> </ul>  |
|   | MTG50-M12<br>connector type<br>base module-DC | MG50-BS-DC<br>-M12-SV | Silver | DC24V         | 400mA   | 0.08kg |                                                                                                                                                                                                                                                |
|  | MTG50-M12<br>connector type<br>base module-DC | MG50-BS-DC<br>-M12-BK | Black  | DC24V         | 400mA   | 0.08kg |                                                                                                                                                                                                                                                |

### Pole

(Units : mm)

| Layout                                                                              | Model No                                                              | Thread<br>Specifications | Length                                              | Common Specifications |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------|-----------------------|
|  | PE18-100<br>PE18-250<br>PE18-400<br>PE18-600<br>PE18-800<br>PE18-1000 | M18                      | 100mm<br>250mm<br>400mm<br>600mm<br>800mm<br>1000mm | · Pole Outdia: Ø18    |



## Mount bracket

### · Self stand type

(Units : mm)

| Layout                                                                              | Parts Name                        | Model No     | Material | Color  | Common Specifications |
|-------------------------------------------------------------------------------------|-----------------------------------|--------------|----------|--------|-----------------------|
|    | 18mm<br>SCREW & NUT<br>(standard) | SN18-bracket | Steel    | -      |                       |
|    | LB18                              | LB18-bracket | Steel    | -      |                       |
|    | LW18                              | LW18-bracket | ABS      | Ivory  |                       |
|    | QZ18                              | QZ18-bracket | ABS      | Black  |                       |
|   | SZ18                              | SZ18-bracket | Al       | Silver |                       |
|  | QL18                              | QL18-bracket | ABS      | Black  |                       |
|  | SL18                              | SL18-bracket | Al       | Silver |                       |

### · Self stand type

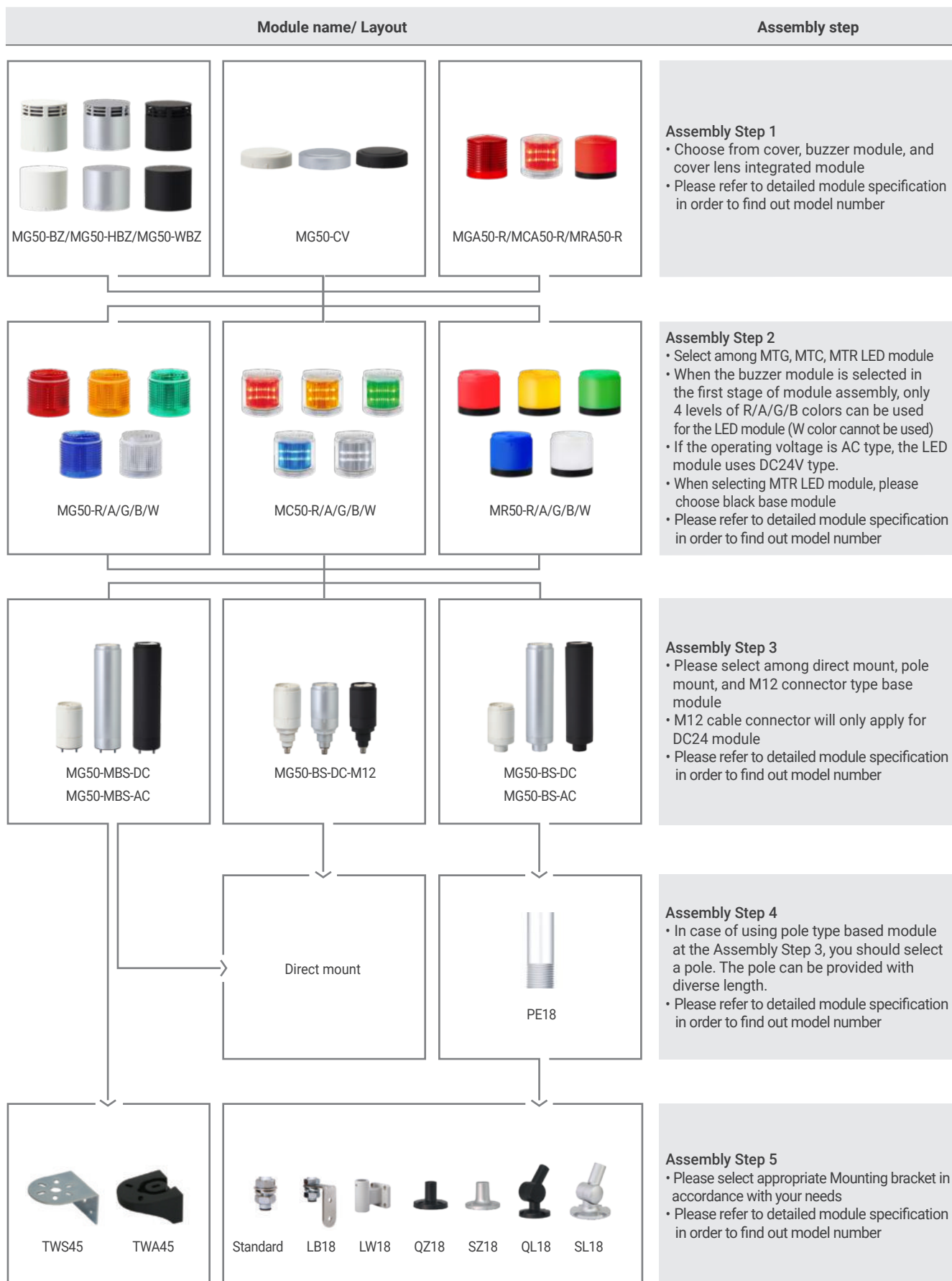
(Units : mm)

| Layout                                                                              | Parts Name | Model No      | Material | Color | Common Specifications |
|-------------------------------------------------------------------------------------|------------|---------------|----------|-------|-----------------------|
|  | TWS45      | TWS45-bracket | Steel    | -     |                       |
|  | TWA45      | TWA45-bracket | PC       | Black |                       |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

# MTG50 / MTC50 / MTR50 Series

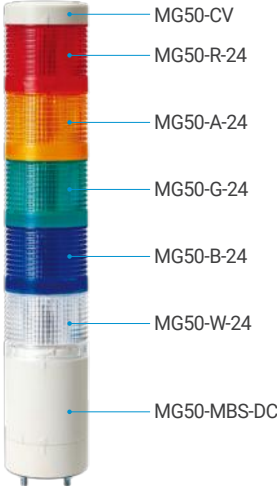
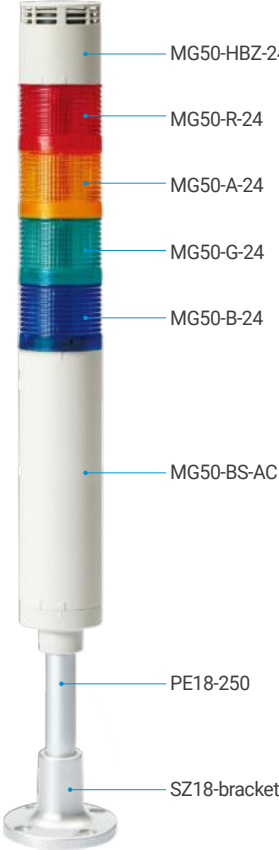
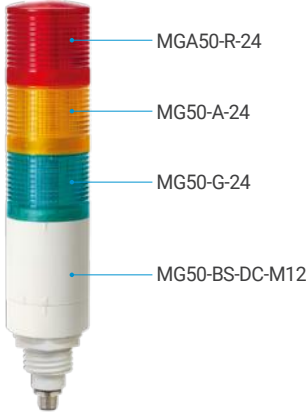
## How to configure module





## Example of MTG50 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).

| MTG50ML-5-24-RAGBW                                                                 |         | MTG50L-HBZ-4-110/220-RAGB-SZ18                                                     |         | MTGA50L-3-24-RAG-M12                                                                |         |
|------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|---------|
| Layout                                                                             | Modules | Layout                                                                             | Modules | Layout                                                                              | Modules |
|  |         |  |         |  |         |

|                                                                            |                                                                                                         |                                                                                             |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Cover module<br>+<br>LED module<br>+<br>MBS module(Self stand type module) | Buzzer module<br>+<br>LED module<br>+<br>BS module(Pole type module)<br>+<br>Pole<br>+<br>Mount bracket | Cover integrated LED module<br>+<br>LED module<br>+<br>BS module(M12 connector type module) |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|

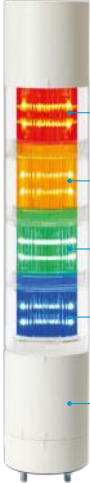
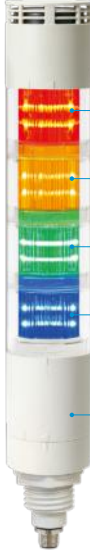
## Ordering Specifications

| [Upper module]                                               | [LED module]                                                                                               | [Base module]                                            | [Pole]                                                | [Bracket]                                                                        |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|
| MG50-HBZ-24                                                  | MG50-R/A/G/B-24                                                                                            | MG50-BS-AC                                               | PE18-250                                              | SZ18                                                                             |
| Cover module<br>Buzzer module<br>Cover integrated LED module | <div> <div>R-Red</div> <div>A-Amber</div> <div>G-Green</div> <div>B-Blue</div> <div>○ W-White</div> </div> | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |

MTG50 / MTC50 / MTR50 Series

Example of MTC50 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).

| MTC50ML-WBZ-4-24-RAGB                                                              |                                                                                | MTCA50L-4-24-RAGB-SZ18                                                             |                                                                                             | MTC50L-HBZ-4-24-RAGB-M12                                                             |                                                                                   |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Layout                                                                             | Modules                                                                        | Layout                                                                             | Modules                                                                                     | Layout                                                                               | Modules                                                                           |
|  | MG50-WBZ-24<br>MC50-R-24<br>MC50-A-24<br>MC50-G-24<br>MC50-B-24<br>MG50-MBS-DC |  | MCA50-R-24<br>MC50-A-24<br>MC50-G-24<br>MC50-B-24<br>MG50-BS-DC<br>PE18-500<br>SZ18-bracket |  | MG50-HBZ-24<br>MC50-R-24<br>MC50-A-24<br>MC50-G-24<br>MC50-B-24<br>MG50-BS-DC-M12 |

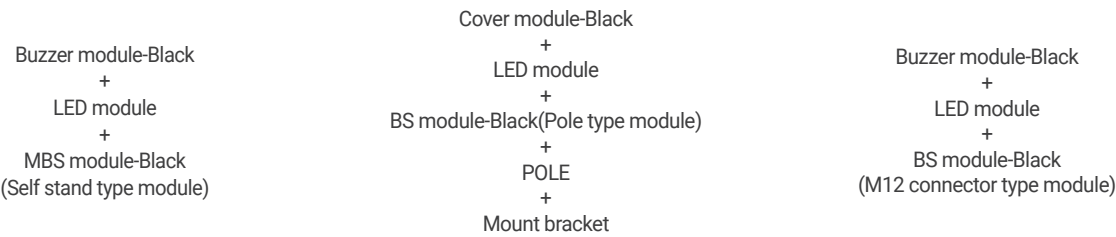
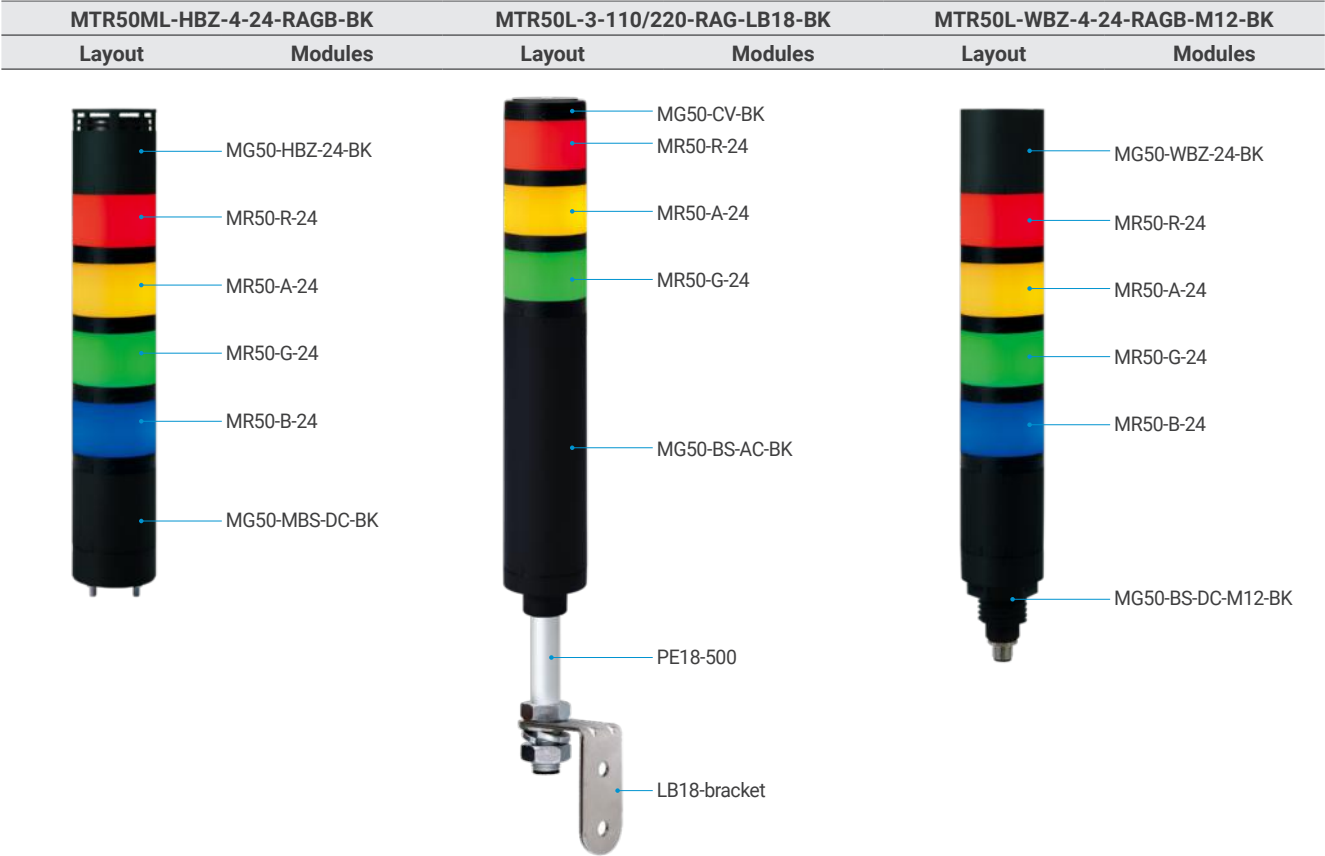
|                                                                             |                                                                                                                       |                                                                               |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Buzzer module<br>+<br>LED module<br>+<br>MBS module(Self stand type module) | Cover integrated LED module<br>+<br>LED module<br>+<br>BS module(Pole type module)<br>+<br>POLE<br>+<br>Mount bracket | Buzzer module<br>+<br>LED module<br>+<br>BS module(M12 connector type module) |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|

Ordering Specifications

| [Upper module]                                               | [LED module]                                       | [Base module]                                            | [Pole]                                                | [Bracket]                                                                        |
|--------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|
| MG50-WBZ-24                                                  | MC50-R/A/G/B-24                                    | MG50-MBS-DC                                              | None                                                  | None                                                                             |
| Cover module<br>Buzzer module<br>Cover integrated LED module | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>○ W-White | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |

## Example of MTR50 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).



## Ordering Specifications

| [Upper module]                                               | [LED module]                                     | [Base module]                                            | [Pole]                                                | [Bracket]                                                                        |
|--------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|
| MG50-CV-BK                                                   | MR50-R/A/G/B-24                                  | MG50-BS-AC-BK                                            | PE18-500                                              | LB18                                                                             |
| Cover module<br>Buzzer module<br>Cover integrated LED module | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |

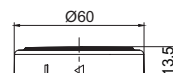
# MTG60 / MTC60 / MTR60 Series

## Top module

### • Cover

(Units : mm)

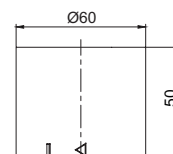
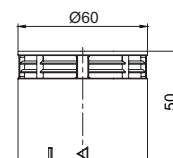
| Layout                                                                            | Parts Name  | Model No   | Color  | Weight | Common Specifications                                                                                                                           |
|-----------------------------------------------------------------------------------|-------------|------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  | MTG60 Cover | MG60-CV    | Ivory  | 0.01kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø60 X 14</li> </ul> |
|  | MTG60 Cover | MG60-CV-SV | Silver | 0.01kg |                                                                                                                                                 |
|  | MTG60 Cover | MG60-CV-BK | Black  | 0.01kg |                                                                                                                                                 |



### • Buzzer module

(Units : mm)

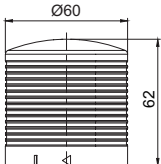
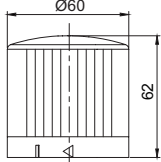
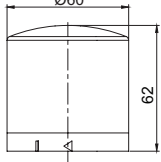
| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification |         | Volume(dB) | Weight | Common Specifications                                                                                                                                      |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|---------------|---------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage       | Current |            |        |                                                                                                                                                            |
|  | MTG60-Standard buzzer module    | MG60-BZ-24     | Ivory  | DC24V         | 90mA    | Max.90dB   | 0.06kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble : Non-Waterproof</li> <li>Product size: Ø60 X 50</li> </ul> |
|                                                                                     | MTG60-High-volume buzzer module | MG60-HBZ-24    | Ivory  | DC24V         | 90mA    | Max.100dB  | 0.06kg |                                                                                                                                                            |
|  | MTG60-Standard buzzer module    | MG60-BZ-24-SV  | Silver | DC24V         | 90mA    | Max.90dB   | 0.06kg |                                                                                                                                                            |
|                                                                                     | MTG60-High-volume buzzer module | MG60-HBZ-24-SV | Silver | DC24V         | 90mA    | Max.100dB  | 0.06kg |                                                                                                                                                            |
|  | MTG60-Standard buzzer module    | MG60-BZ-24-BK  | Black  | DC24V         | 90mA    | Max.90dB   | 0.06kg |                                                                                                                                                            |
|                                                                                     | MTG60-High-volume buzzer module | MG60-HBZ-24-BK | Black  | DC24V         | 90mA    | Max.100dB  | 0.06kg |                                                                                                                                                            |
|  | MTG60-Waterproof buzzer module  | MG60-WBZ-24    | Ivory  | DC24V         | 90mA    | Max.85dB   | 0.06kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø60 X 50</li> </ul>            |
|  | MTG60-Waterproof buzzer module  | MG60-WBZ-24-SV | Silver | DC24V         | 90mA    | Max.85dB   | 0.06kg |                                                                                                                                                            |
|  | MTG60-Waterproof buzzer module  | MG60-WBZ-24-BK | Black  | DC24V         | 90mA    | Max.85dB   | 0.06kg |                                                                                                                                                            |





· Cover integrated LED Steady/Flashing module

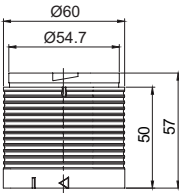
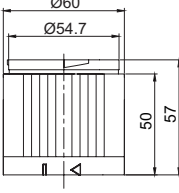
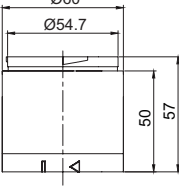
(Units : mm)

| Layout                                                                            |                                                                                   |                                                                                   | Model No                               | Color | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|-------|---------------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                | MC                                                                                | MR                                                                                |                                        |       | Voltage       | Current |        |                                                                                                                                                                                                                                                                                                                                                                                                             |
|  |  |  | MGA60-R-24<br>MCA60-R-24<br>MRA60-R-24 | Red   | DC24V         | 70mA    | 0.06kg | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø60 X 62</li> </ul>    |

LED module

· LED Steady/Flashing module

(Units : mm)

| Layout                                                                              |                                                                                     |                                                                                     | Model No                            | Color | Specification |         | Weight | Common Specifications                                                                                                                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|-------|---------------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                  | MC                                                                                  | MR                                                                                  |                                     |       | Voltage       | Current |        |                                                                                                                                                |
|  |  |  | MG60-R-24<br>MC60-R-24<br>MR60-R-24 | Red   | DC24V         | 70mA    | 0.06kg | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø60 X 57</li> </ul> |
|  |  |  | MG60-A-24<br>MC60-A-24<br>MR60-A-24 | Amber | DC24V         | 70mA    | 0.06kg |                                                           |
|  |  |  | MG60-G-24<br>MC60-G-24<br>MR60-G-24 | Green | DC24V         | 70mA    | 0.06kg |                                                           |
|  |  |  | MG60-B-24<br>MC60-B-24<br>MR60-B-24 | Blue  | DC24V         | 70mA    | 0.06kg |                                                           |
|  |  |  | MG60-W-24<br>MC60-W-24<br>MR60-W-24 | White | DC24V         | 70mA    | 0.06kg |                                                                                                                                                |

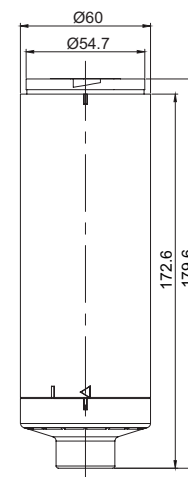
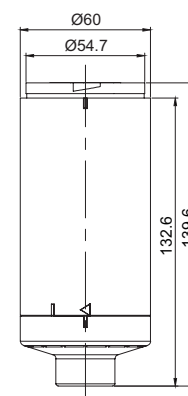
# MTG60 / MTC60 / MTR60 Series

## Base module

### · Pole mount type

(Units : mm)

| Layout                                                                              | Parts Name                     | Model No      | Color  | Specification   |               | Weight | Common Specifications                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------|---------------|--------|-----------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                |               |        | Voltage         | Current       |        |                                                                                                                                                        |
|    | MTG60-Pole type base module-DC | MG60-BS-DC    | Ivory  | DC24V           | 400mA         | 0.14kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø60 X 140</li> </ul> |
|    | MTG60-Pole type base module-DC | MG60-BS-DC-SV | Silver | DC24V           | 400mA         | 0.14kg |                                                                                                                                                        |
|  | MTG60-Pole type base module-DC | MG60-BS-DC-BK | Black  | DC24V           | 400mA         | 0.14kg |                                                                                                                                                        |
|  | MTG60-Pole type base module-AC | MG60-BS-AC    | Ivory  | AC110V<br>-220V | Max.<br>250mA | 0.24kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø60 X 180</li> </ul> |
|  | MTG60-Pole type base module-AC | MG60-BS-AC-SV | Silver | AC110V<br>-220V | Max.<br>250mA | 0.24kg |                                                                                                                                                        |
|  | MTG60-Pole type base module-AC | MG60-BS-AC-BK | Black  | AC110V<br>-220V | Max.<br>250mA | 0.24kg |                                                                                                                                                        |

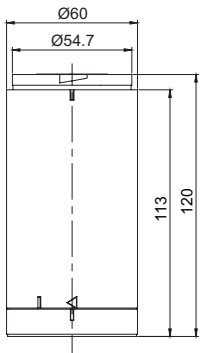
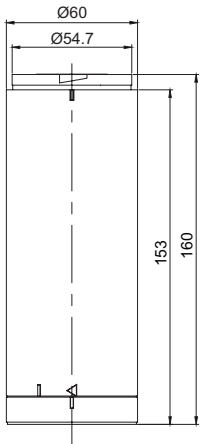






## · Self stand type

(Units : mm)

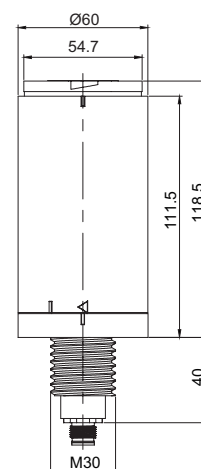
| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification |            | Weight | Common Specifications                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|---------------|------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage       | Current    |        |                                                                                                                                                                                                                                              |
|    | MTG60-Self stand base module-DC | MG60-MBS-DC    | Ivory  | DC24V         | 400mA      | 0.14kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø60 X 120</li> </ul>   |
|    | MTG60-Self stand base module-DC | MG60-MBS-DC-SV | Silver | DC24V         | 400mA      | 0.14kg |                                                                                                                                                                                                                                              |
|  | MTG60-Self stand base module-DC | MG60-MBS-DC-BK | Black  | DC24V         | 400mA      | 0.14kg |                                                                                                                                                                                                                                              |
|  | MTG60-Self stand base module-AC | MG60-MBS-AC    | Ivory  | AC110V -220V  | Max. 250mA | 0.25kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø60 X 160</li> </ul>  |
|  | MTG60-Self stand base module-AC | MG60-MBS-AC-SV | Silver | AC110V -220V  | Max. 250mA | 0.25kg |                                                                                                                                                                                                                                              |
|  | MTG60-Self stand base module-AC | MG60-MBS-AC-BK | Black  | AC110V -220V  | Max. 250mA | 0.25kg |                                                                                                                                                                                                                                              |

# MTG60 / MTC60 / MTR60 Series

## · M12 connector type

(Units : mm)

| Layout                                                                             | Parts Name                                    | Model No              | Color  | Specification |         | Weight | Common Specifications                                                                                                                                      |
|------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------|--------|---------------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |                                               |                       |        | Voltage       | Current |        |                                                                                                                                                            |
|   | MTG60-M12<br>connector type<br>base module-DC | MG60-BS-DC<br>-M12    | Ivory  | DC24V         | 400mA   | 0.15kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with<br/>assemble: IP65</li> <li>· Product size: Ø60 X 119</li> </ul> |
|   | MTG60-M12<br>connector type<br>base module-DC | MG60-BS-DC<br>-M12-SV | Silver | DC24V         | 400mA   | 0.15kg |                                                                                                                                                            |
|  | MTG60-M12<br>connector type<br>base module-DC | MG60-BS-DC<br>-M12-BK | Black  | DC24V         | 400mA   | 0.15kg |                                                                                                                                                            |



## Pole

(Units : mm)

| Layout                                                                              | Model No                                                              | Thread<br>Specifications | Length                                              | Common Specifications |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------|-----------------------|
|  | PE18-100<br>PE18-250<br>PE18-400<br>PE18-600<br>PE18-800<br>PE18-1000 | M18                      | 100mm<br>250mm<br>400mm<br>600mm<br>800mm<br>1000mm | · Pole Outdia: Ø18    |

## Mounting bracket

### · Pole mount type

(Units : mm)

| Layout                                                                              | Parts Name                        | Model No     | Material | Color  | Common Specifications |
|-------------------------------------------------------------------------------------|-----------------------------------|--------------|----------|--------|-----------------------|
|    | 18mm<br>SCREW & NUT<br>(standard) | SN18-bracket | Steel    | -      |                       |
|    | LB18                              | LB18-bracket | Steel    | -      |                       |
|    | LW18                              | LW18-bracket | ABS      | Ivory  |                       |
|    | QZ18                              | QZ18-bracket | ABS      | Black  |                       |
|  | SZ18                              | SZ18-bracket | Al       | Silver |                       |
|  | QL18                              | QL18-bracket | ABS      | Black  |                       |
|  | SL18                              | SL18-bracket | Al       | Silver |                       |

### · Self stand type

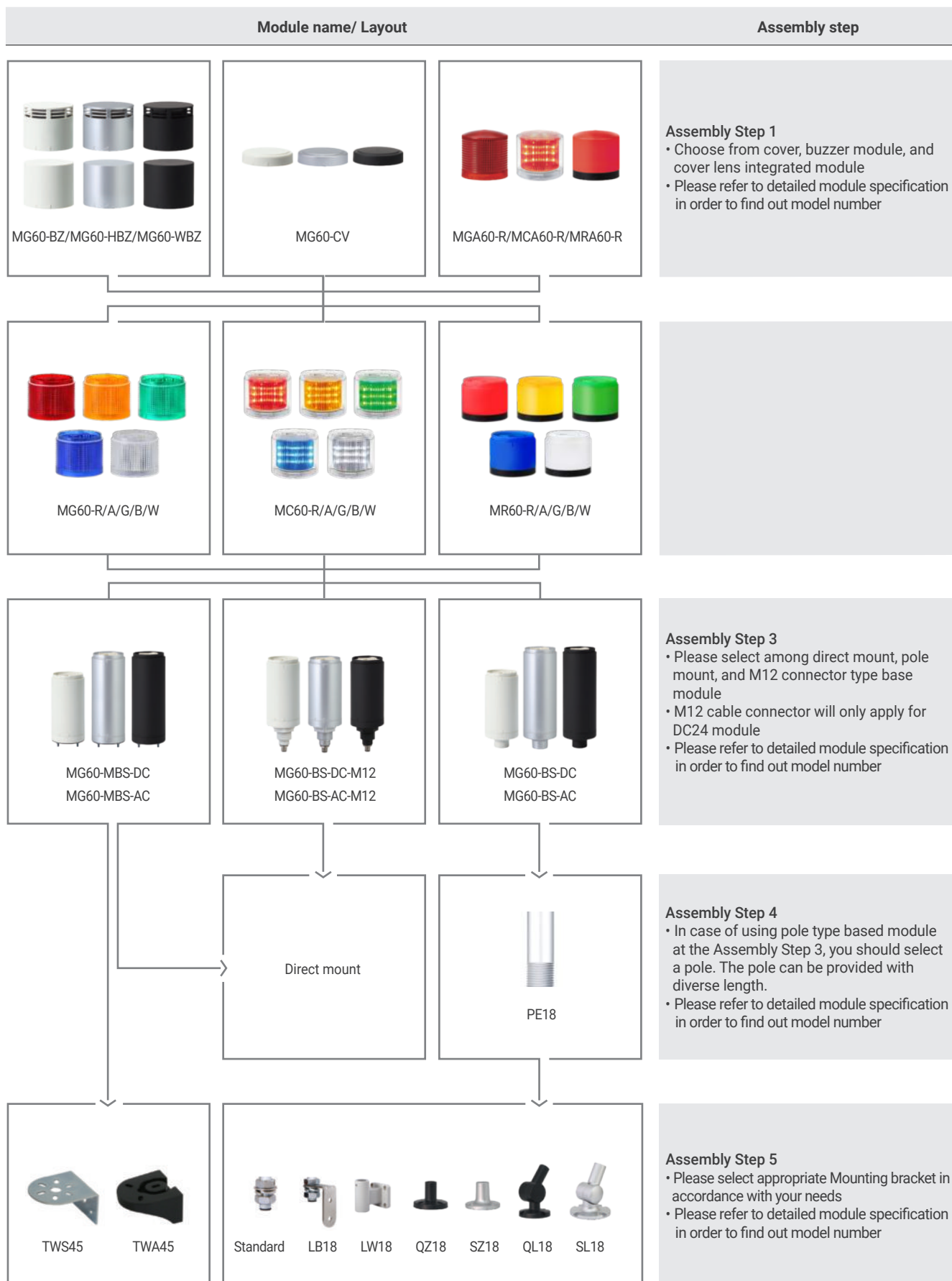
(Units : mm)

| Layout                                                                              | Parts Name | Model No      | Material | Color | Common Specifications |
|-------------------------------------------------------------------------------------|------------|---------------|----------|-------|-----------------------|
|  | TWS45      | TWS45-bracket | Steel    | -     |                       |
|  | TWA45      | TWA45-bracket | PC       | Black |                       |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

# MTG60 / MTC60 / MTR60 Series

## How to configure module



## Example of MTG60 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).

| MTG60ML-4-24-RAGB-SV                                |         | MTG60L-WBZ-3-110/220-RAG-LW18 |         | MTG60L-HBZ-4-24-RAGB-M12 |         |
|-----------------------------------------------------|---------|-------------------------------|---------|--------------------------|---------|
| Layout                                              | Modules | Layout                        | Modules | Layout                   | Modules |
| <div> <div> </div> <div> </div> <div> </div> </div> |         |                               |         |                          |         |

|                                                                                          |                                                                                                         |                                                                               |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Cover module-Silver<br>+<br>LED module<br>+<br>MBS module-Silver(Self stand type module) | Buzzer module<br>+<br>LED module<br>+<br>BS module(Pole type module)<br>+<br>POLE<br>+<br>Mount bracket | Buzzer module<br>+<br>LED module<br>+<br>BS module(M12 connector type module) |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|

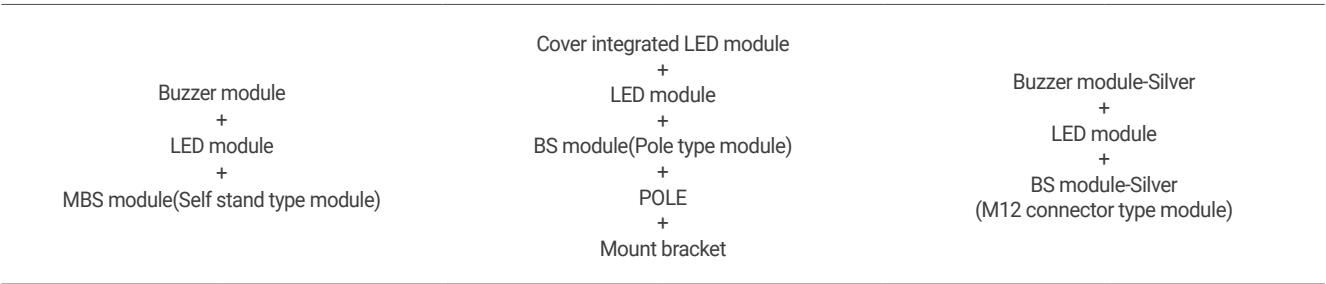
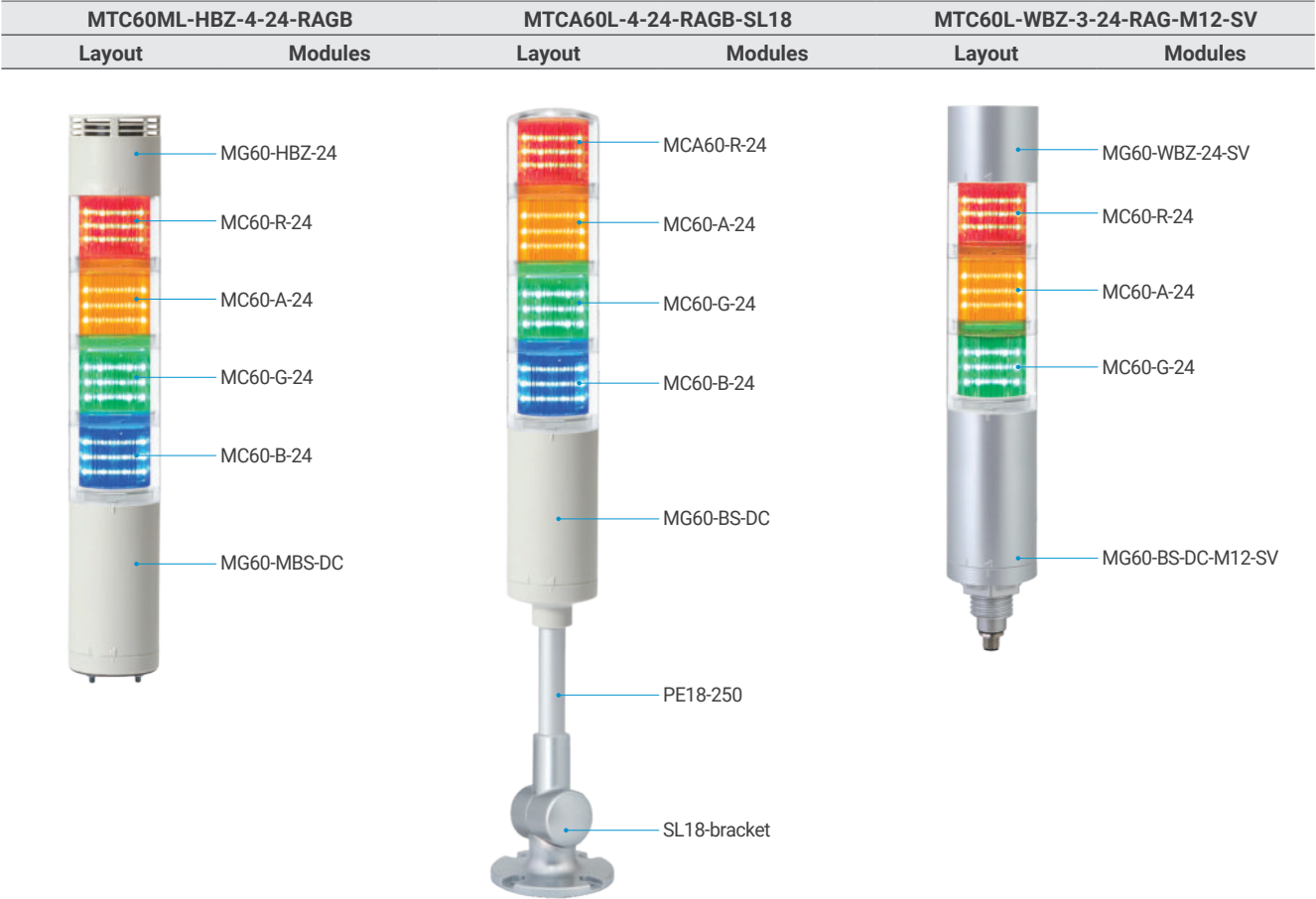
## Ordering Specifications

| [Upper module]                                               | [LED module]                                               | [Base module]                                            | [Pole]                                                | [Bracket]                                                                        |
|--------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>MG60-WBZ-24</b>                                           | <b>MG60-R/A/G/B-24</b>                                     | <b>MG60-BS-AC</b>                                        | <b>PE18-250</b>                                       | <b>LW18</b>                                                                      |
| Cover module<br>Buzzer module<br>Cover integrated LED module | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |

MTG60 / MTC60 / MTR60 Series

Example of MTC60 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).



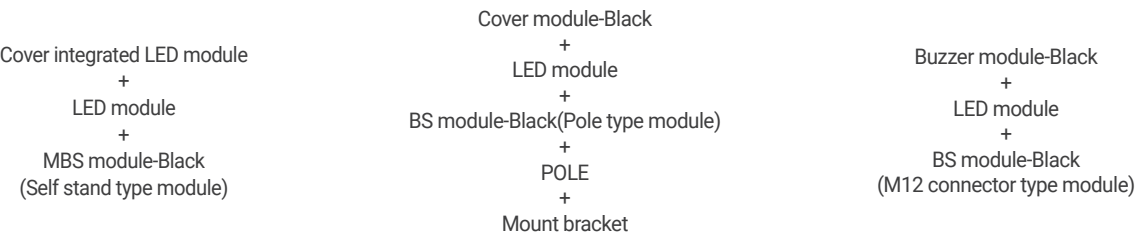
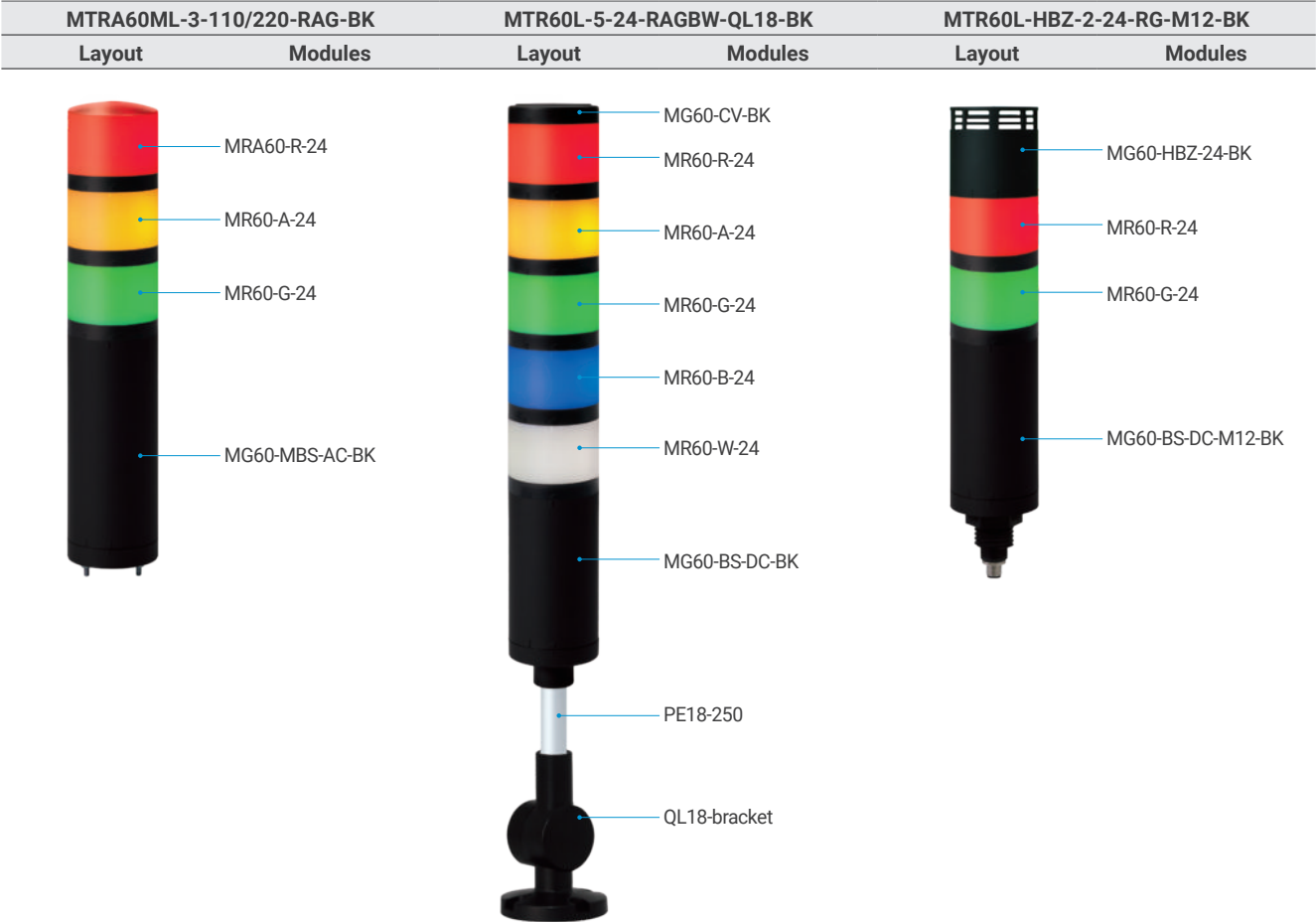
Ordering Specifications

| [Upper module]                                               | [LED module]                                     | [Base module]                                            | [Pole]                                                | [Bracket]                                                                        |
|--------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------|
| MCA60-R-24                                                   | MC60-R/A/G/B-24                                  | MG60-BS-DC                                               | PE18-250                                              | SL18                                                                             |
| Cover module<br>Buzzer module<br>Cover integrated LED module | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |



## Example of MTR60 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).



## Ordering Specifications

| [Upper module]                                                                          | [LED module]                                                                                             | [Base module]                                                                       | [Pole]                                                                   | [Bracket]                                                                                           |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| MG60-CV-BK                                                                              | MR60-R/A/G/B/W-24                                                                                        | MG60-BS-DC-BK                                                                       | PE18-250                                                                 | QL18                                                                                                |
| <div>Cover module</div> <div>Buzzer module</div> <div>Cover integrated LED module</div> | <div> <div>R-Red</div> <div>A-Amber</div> <div>G-Green</div> <div>B-Blue</div> <div>W-White</div> </div> | <div>Pole mount type</div> <div>Self stand type</div> <div>M12 connector type</div> | <div>None-Self stand type, M12 connector type</div> <div>Pole type</div> | <div>None-Self stand type, M12 connector type</div> <div>Pole type, Self stand type(Optional)</div> |

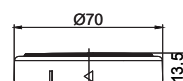
# MTG70 / MTC70 / MTR70 Series

## Top module

### · Cover

(Units : mm)

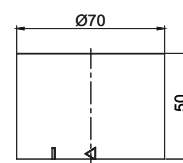
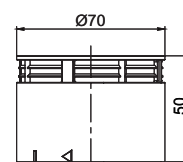
| Layout                                                                            | Parts Name  | Model No   | Color  | Weight | Common Specifications                                                                                                                           |
|-----------------------------------------------------------------------------------|-------------|------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  | MTG70 Cover | MG70-CV    | Ivory  | 0.01kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 X 14</li> </ul> |
|  | MTG70 Cover | MG70-CV-SV | Silver | 0.01kg |                                                                                                                                                 |
|  | MTG70 Cover | MG70-CV-BK | Black  | 0.01kg |                                                                                                                                                 |



### · Buzzer module

(Units : mm)

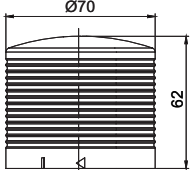
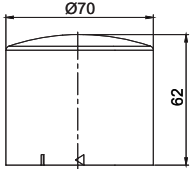
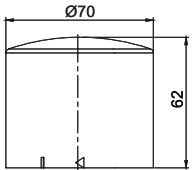
| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification |         | Volume(dB) | Weight | Common Specifications                                                                                                                                      |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|---------------|---------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage       | Current |            |        |                                                                                                                                                            |
|  | MTG70-Standard buzzer module    | MG70-BZ-24     | Ivory  | DC24V         | 90mA    | Max.90dB   | 0.07kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble : Non-Waterproof</li> <li>Product size: Ø70 X 50</li> </ul> |
|                                                                                     | MTG70-High-volume buzzer module | MG70-HBZ-24    | Ivory  | DC24V         | 90mA    | Max.100dB  | 0.07kg |                                                                                                                                                            |
|  | MTG70-Standard buzzer module    | MG70-BZ-24-SV  | Silver | DC24V         | 90mA    | Max.90dB   | 0.07kg |                                                                                                                                                            |
|                                                                                     | MTG70-High-volume buzzer module | MG70-HBZ-24-SV | Silver | DC24V         | 90mA    | Max.100dB  | 0.07kg |                                                                                                                                                            |
|  | MTG70-Standard buzzer module    | MG70-BZ-24-BK  | Black  | DC24V         | 90mA    | Max.90dB   | 0.07kg |                                                                                                                                                            |
|                                                                                     | MTG70-High-volume buzzer module | MG70-HBZ-24-BK | Black  | DC24V         | 90mA    | Max.100dB  | 0.07kg |                                                                                                                                                            |
|  | MTG70-Waterproof buzzer module  | MG70-WBZ-24    | Ivory  | DC24V         | 90mA    | Max.85dB   | 0.07kg | <ul style="list-style-type: none"> <li>Material: ABS</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 X 50</li> </ul>            |
|  | MTG70-Waterproof buzzer module  | MG70-WBZ-24-SV | Silver | DC24V         | 90mA    | Max.85dB   | 0.07kg |                                                                                                                                                            |
|  | MTG70-Waterproof buzzer module  | MG70-WBZ-12-BK | Black  | DC24V         | 90mA    | Max.85dB   | 0.07kg |                                                                                                                                                            |





· Cover integrated LED Steady/Flashing module

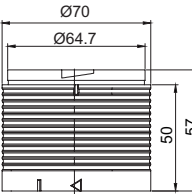
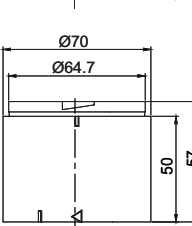
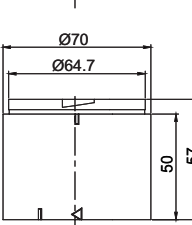
(Units : mm)

| Layout                                                                            |                                                                                   |                                                                                   | Model No                               | Color | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------|-------|---------------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                | MC                                                                                | MR                                                                                |                                        |       | Voltage       | Current |        |                                                                                                                                                                                                                                                                                                                                                              |
|  |  |  | MGA70-R-24<br>MCA70-R-24<br>MRA70-R-24 | Red   | DC24V         | 70mA    | 0.07kg | · Material: PC<br>· Protection ratings with assemble: IP65<br>· Product size: Ø70 X 62<br><br><br> |

LED module

· LED Steady/Flashing module

(Units : mm)

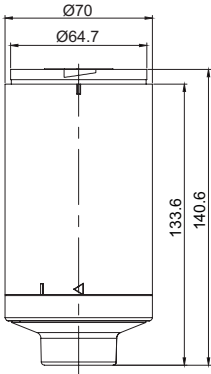
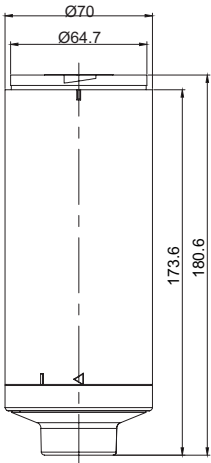
| Layout                                                                              |                                                                                     |                                                                                     | Model No                            | Color | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|-------|---------------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MG                                                                                  | MC                                                                                  | MR                                                                                  |                                     |       | Voltage       | Current |        |                                                                                                                                                                                                                                                                                                                                                                   |
|  |  |  | MG70-R-24<br>MC70-R-24<br>MR70-R-24 | Red   | DC24V         | 70mA    | 0.07kg | · Material: PC<br>· Protection ratings with assemble: IP65<br>· Product size: Ø70 X 57<br><br><br> |
|  |  |  | MG70-A-24<br>MC70-A-24<br>MR70-A-24 | Amber | DC24V         | 70mA    | 0.07kg |                                                                                                                                                                                                                                                                                                                                                                   |
|  |  |  | MG70-G-24<br>MC70-G-24<br>MR70-G-24 | Green | DC24V         | 70mA    | 0.07kg |                                                                                                                                                                                                                                                                                                                                                                   |
|  |  |  | MG70-B-24<br>MC70-B-24<br>MR70-B-24 | Blue  | DC24V         | 70mA    | 0.07kg |                                                                                                                                                                                                                                                                                                                                                                   |
|  |  |  | MG70-W-24<br>MC70-W-24<br>MR70-W-24 | White | DC24V         | 70mA    | 0.07kg |                                                                                                                                                                                                                                                                                                                                                                   |

# MTG70 / MTC70 / MTR70 Series

## Base module

### · Pole mount type

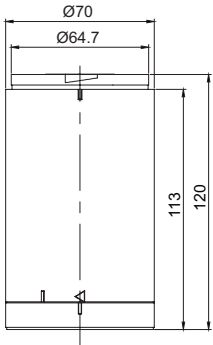
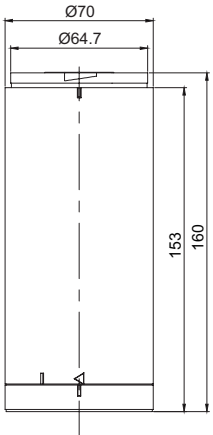
(Units : mm)

| Layout                                                                              | Parts Name                     | Model No      | Color  | Specification |            | Weight | Common Specifications                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------|---------------|--------|---------------|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                |               |        | Voltage       | Current    |        |                                                                                                                                                        |
|    | MTG70-Pole type base module-DC | MG70-BS-DC    | Ivory  | DC24V         | 400mA      | 0.17kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø70 X 141</li> </ul> |
|    | MTG70-Pole type base module-DC | MG70-BS-DC-SV | Silver | DC24V         | 400mA      | 0.17kg |                                                                    |
|   | MTG70-Pole type base module-DC | MG70-BS-DC-BK | Black  | DC24V         | 400mA      | 0.17kg |                                                                                                                                                        |
|  | MTG70-Pole type base module-AC | MG70-BS-AC    | Ivory  | AC110V -220V  | Max. 250mA | 0.27kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø70 X 181</li> </ul> |
|  | MTG70-Pole type base module-AC | MG70-BS-AC-SV | Silver | AC110V -220V  | Max. 250mA | 0.27kg |                                                                   |
|  | MTG70-Pole type base module-AC | MG70-BS-AC-BK | Black  | AC110V -220V  | Max. 250mA | 0.27kg |                                                                                                                                                        |



## · Self stand type

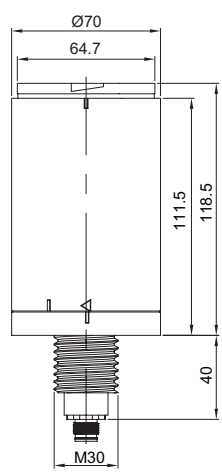
(Units : mm)

| Layout                                                                              | Parts Name                      | Model No       | Color  | Specification   |               | Weight | Common Specifications                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|---------------------------------|----------------|--------|-----------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                |        | Voltage         | Current       |        |                                                                                                                                                                                                                                              |
|    | MTG70-Self stand base module-DC | MG70-MBS-DC    | Ivory  | DC24V           | 400mA         | 0.17kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø70 X 120</li> </ul>    |
|    | MTG70-Self stand base module-DC | MG70-MBS-DC-SV | Silver | DC24V           | 400mA         | 0.17kg |                                                                                                                                                                                                                                              |
|   | MTG70-Self stand base module-DC | MG70-MBS-DC-BK | Black  | DC24V           | 400mA         | 0.17kg |                                                                                                                                                                                                                                              |
|  | MTG70-Self stand base module-AC | MG70-MBS-AC    | Ivory  | AC110V<br>-220V | Max.<br>250mA | 0.28kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with assemble: IP65</li> <li>· Product size: Ø70 X 160</li> </ul>  |
|  | MTG70-Self stand base module-AC | MG70-MBS-AC-SV | Silver | AC110V<br>-220V | Max.<br>250mA | 0.28kg |                                                                                                                                                                                                                                              |
|  | MTG70-Self stand base module-AC | MG70-MBS-AC-BK | Black  | AC110V<br>-220V | Max.<br>250mA | 0.28kg |                                                                                                                                                                                                                                              |

# MTG70 / MTC70 / MTR70 Series

## · M12 connector type

(Units : mm)

| Layout                                                                             | Parts Name                                    | Model No              | Color  | Specification |         | Weight | Common Specifications                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------|--------|---------------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |                                               |                       |        | Voltage       | Current |        |                                                                                                                                                                                                                                                 |
|   | MTG70-M12<br>connector type<br>base module-DC | MG70-BS-DC<br>-M12    | Ivory  | DC24V         | 400mA   | 0.19kg | <ul style="list-style-type: none"> <li>· Material: ABS</li> <li>· Protection ratings with<br/>assemble: IP65</li> <li>· Product size: Ø70 X 119</li> </ul>  |
|   | MTG70-M12<br>connector type<br>base module-DC | MG70-BS-DC<br>-M12-SV | Silver | DC24V         | 400mA   | 0.19kg |                                                                                                                                                                                                                                                 |
|  | MTG70-M12<br>connector type<br>base module-DC | MG70-BS-DC<br>-M12-BK | Black  | DC24V         | 400mA   | 0.19kg |                                                                                                                                                                                                                                                 |

## Pole

(Units : mm)

| Layout                                                                              | Model No                                                              | Thread<br>Specifications | Length                                              | Common Specifications |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------|-----------------------|
|  | PE24-100<br>PE24-250<br>PE24-400<br>PE24-700<br>PE24-800<br>PE24-1000 | M24                      | 100mm<br>250mm<br>400mm<br>700mm<br>800mm<br>1000mm | · Pole Outdia: Ø24    |

## Mounting bracket

### • Pole mount type

(Units : mm)

| Layout                                                                              | Parts Name                    | Model No     | Material | Color  | Common Specifications |
|-------------------------------------------------------------------------------------|-------------------------------|--------------|----------|--------|-----------------------|
|    | 24mm washers & nuts(standard) | SN24-bracket | Steel    | -      |                       |
|    | LB24                          | LB24-bracket | Steel    | -      |                       |
|    | LW24                          | LW24-bracket | ABS      | Ivory  |                       |
|    | QZ24                          | QZ24-bracket | ABS      | Black  |                       |
|  | SZ24                          | SZ24-bracket | Al       | Silver |                       |
|  | QL24                          | QL24-bracket | ABS      | Black  |                       |
|  | SL24                          | SL24-bracket | Al       | Silver |                       |

### • Self stand type

(Units : mm)

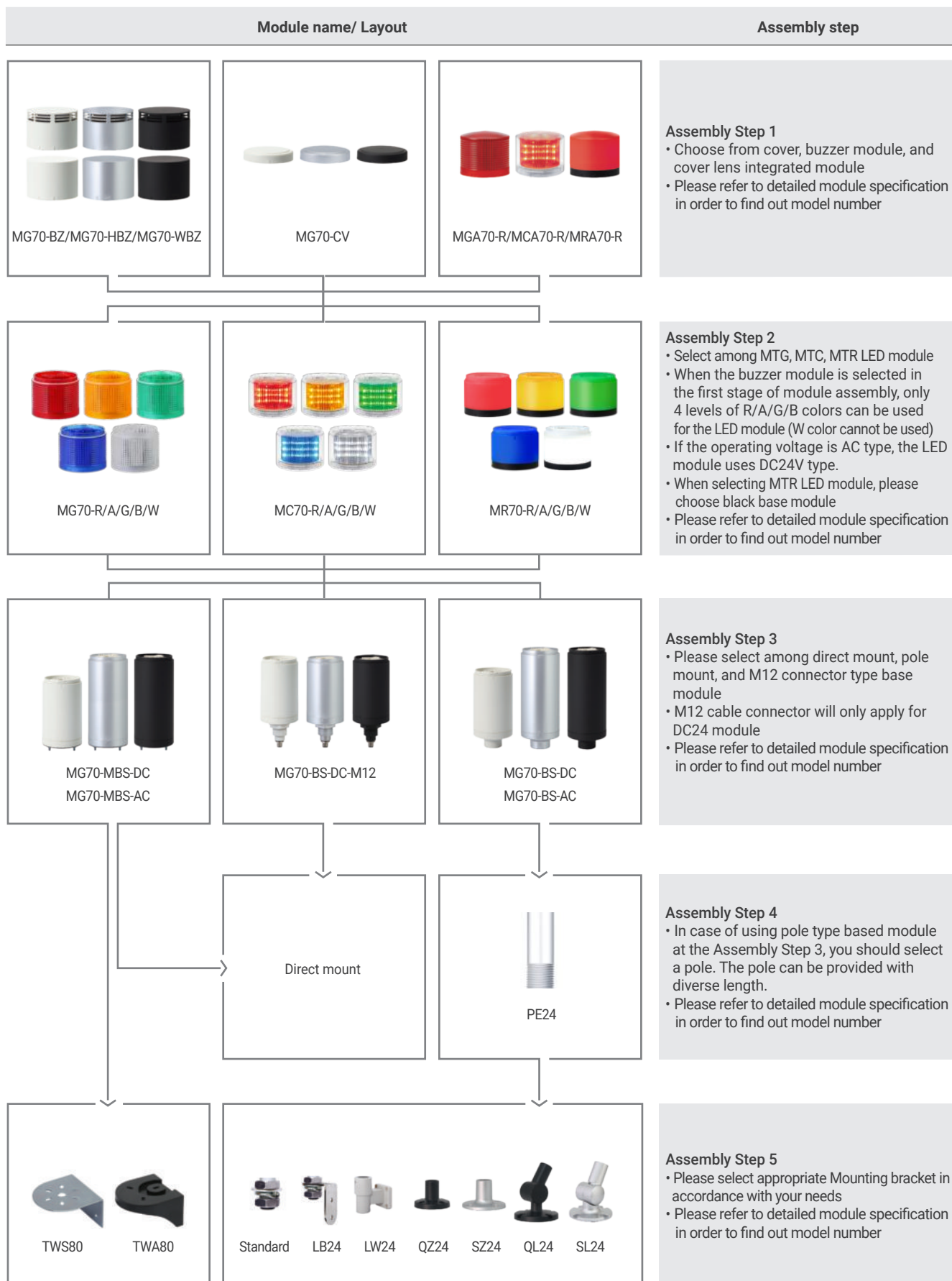
| Layout                                                                              | Parts Name | Model No      | Material | Color | Common Specifications |
|-------------------------------------------------------------------------------------|------------|---------------|----------|-------|-----------------------|
|  | TWS80      | TWS45-bracket | Steel    | -     |                       |
|  | TWA80      | TWA45-bracket | PC       | Black |                       |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



# MTG70 / MTC70 / MTR70 Series

## How to configure module



## Example of MTG70 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).

| MTG70ML-HBZ-4-24-RAGB                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         | MTG70L-WBZ-3-110/220-RAG-SZ24-SV |         | MTG70L-3-24-RAG-M12-SV |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------------|---------|------------------------|---------|
| Layout                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Modules | Layout                           | Modules | Layout                 | Modules |
| <div> <div> <div>MG70-HBZ-24</div> <div>MG70-R-24</div> <div>MG70-A-24</div> <div>MG70-G-24</div> <div>MG70-B-24</div> <div>MG70-MBS-DC</div> </div> <div> <div>MG70-WBZ-24-SV</div> <div>MG70-R-24</div> <div>MG70-A-24</div> <div>MG70-G-24</div> <div>MG70-BS-AC-SV</div> <div>PE24-250</div> <div>SZ24-bracket</div> </div> <div> <div>MG70-CV-SV</div> <div>MG70-R-24</div> <div>MG70-A-24</div> <div>MG70-G-24</div> <div>MG70-BS-DC-M12-SV</div> </div> </div> |         |                                  |         |                        |         |

|                                                                             |                                                                                                                       |                                                                                                |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Buzzer module<br>+<br>LED module<br>+<br>MBS module(Self stand type module) | Buzzer module-Silver<br>+<br>LED module<br>+<br>BS module-Silver(Pole type module)<br>+<br>POLE<br>+<br>Mount bracket | Cover module-Silver<br>+<br>LED module<br>+<br>BS module-Silver<br>(M12 connector type module) |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|

## Ordering Specifications

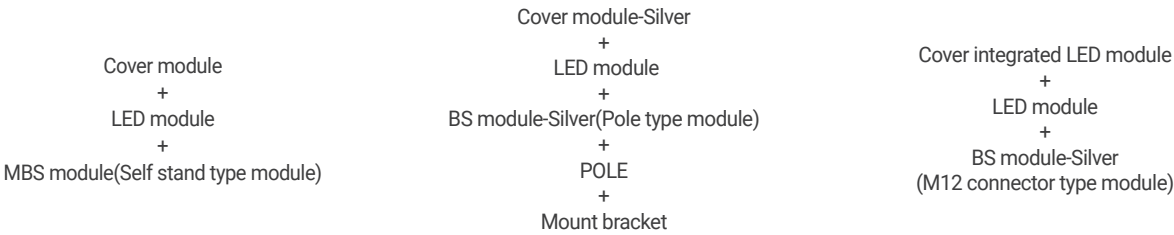
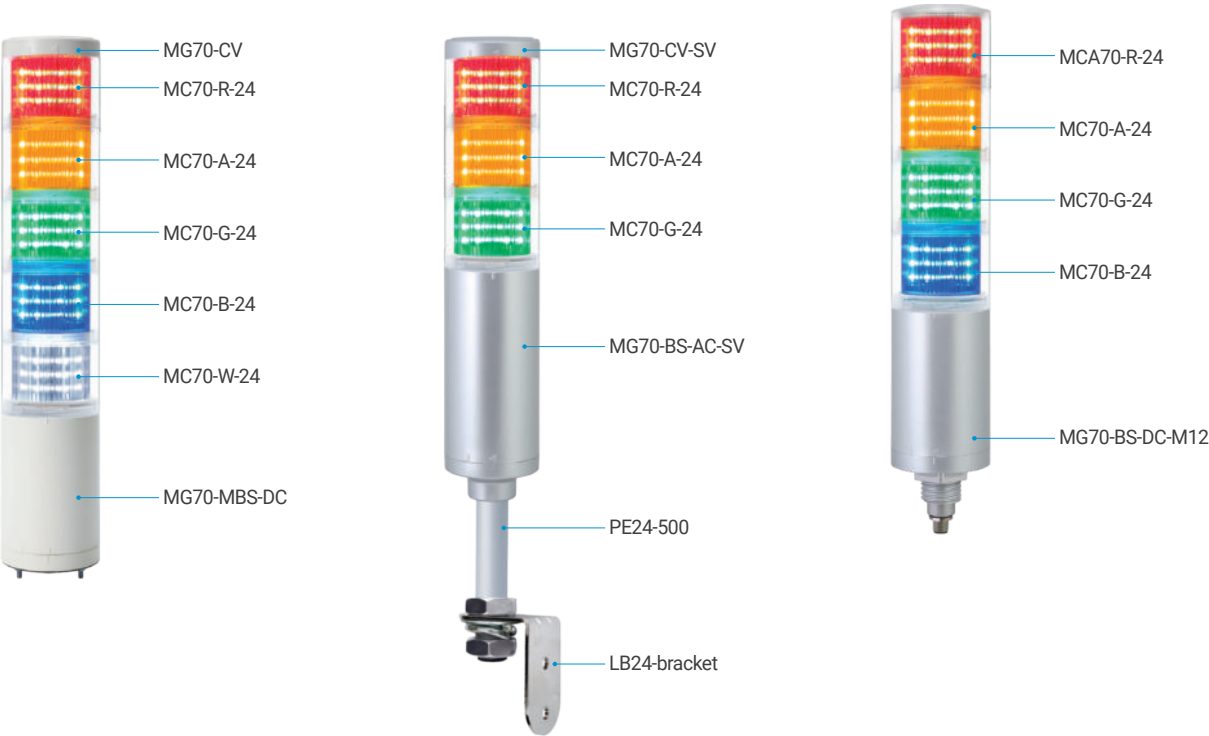
| [Upper module]                                                                          | [LED module]                                                                                               | [Base module]                                                                       | [Pole]                                                                   | [Bracket]                                                                                           |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| MG70-WBZ-24-SV                                                                          | MG70-R/A/G/B-24                                                                                            | MG70-BS-AC-SV                                                                       | PE24-250                                                                 | SZ24                                                                                                |
| <div>Cover module</div> <div>Buzzer module</div> <div>Cover integrated LED module</div> | <div> <div>R-Red</div> <div>A-Amber</div> <div>G-Green</div> <div>B-Blue</div> <div>○ W-White</div> </div> | <div>Pole mount type</div> <div>Self stand type</div> <div>M12 connector type</div> | <div>None-Self stand type, M12 connector type</div> <div>Pole type</div> | <div>None-Self stand type, M12 connector type</div> <div>Pole type, Self stand type(Optional)</div> |

MTG70 / MTC70 / MTR70 Series

Example of MTC70 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).

| MTC70ML-5-24-RAGBW |         | MTC70L-3-110/220-RAG-LB24-SV |         | MTCA70L-4-24-RAGB-M12-SV |         |
|--------------------|---------|------------------------------|---------|--------------------------|---------|
| Layout             | Modules | Layout                       | Modules | Layout                   | Modules |

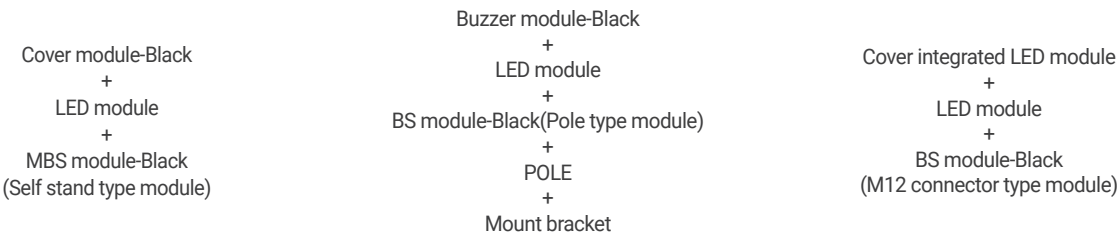
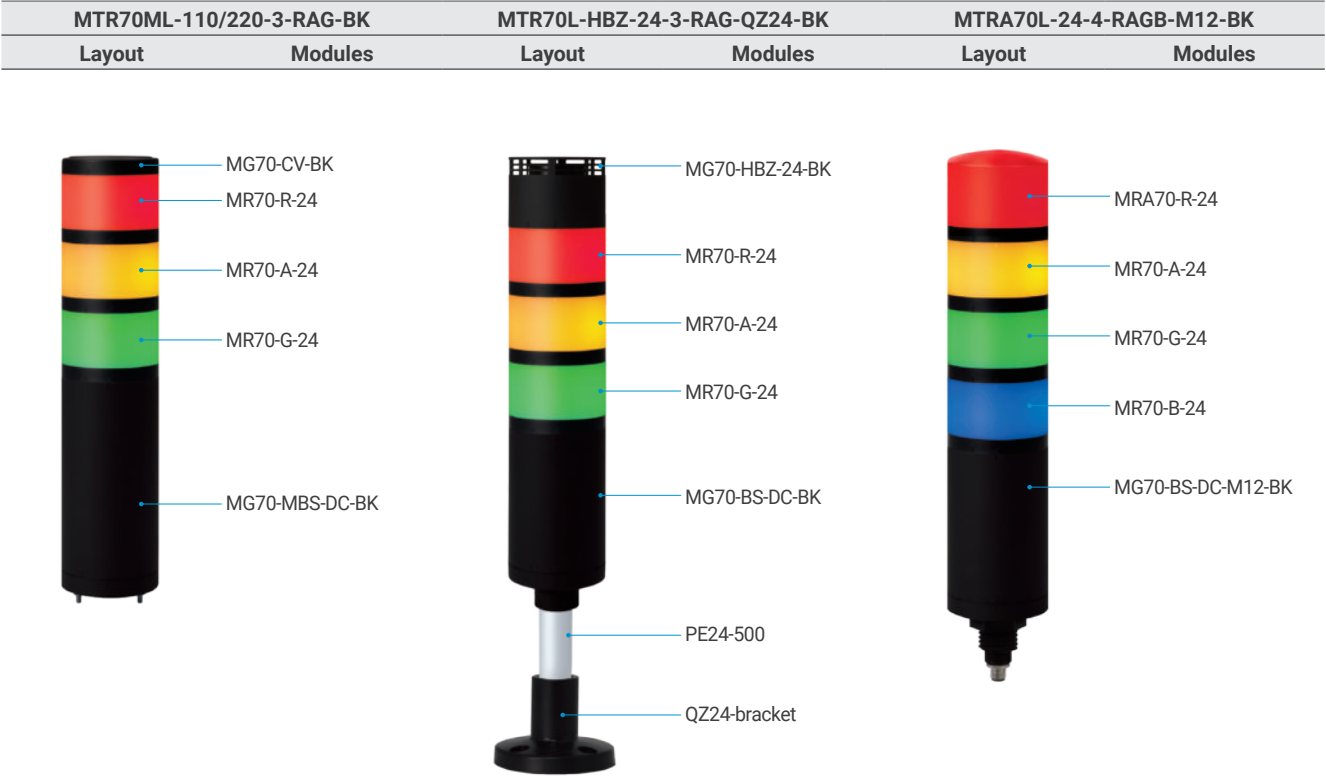


Ordering Specifications

| [Upper module]                                               | [LED module]                                     | [Base module]                                            | [Pole]                                                | [Bracket]                                                                      |
|--------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------|
| MG70-CV-SV                                                   | MC70-R/A/G/B-24                                  | MG70-BS-AC-SV                                            | PE24-500                                              | LB24                                                                           |
| Cover module<br>Buzzer module<br>Cover integrated LED module | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White | Pole mount type<br>Self stand type<br>M12 connector type | None-Self stand type, M12 connector type<br>Pole type | None-Self stand type, M12 connector type<br>Pole type, Self stand type(Option) |

## Example of MTR70 module configuration

- You can assemble the product through module combination by referring to the diagram below.
- When a buzzer module (standard buzzer module/high volume buzzer module/waterproof buzzer module) is combined, only 4 LED modules can be assembled (W color module cannot be assembled).



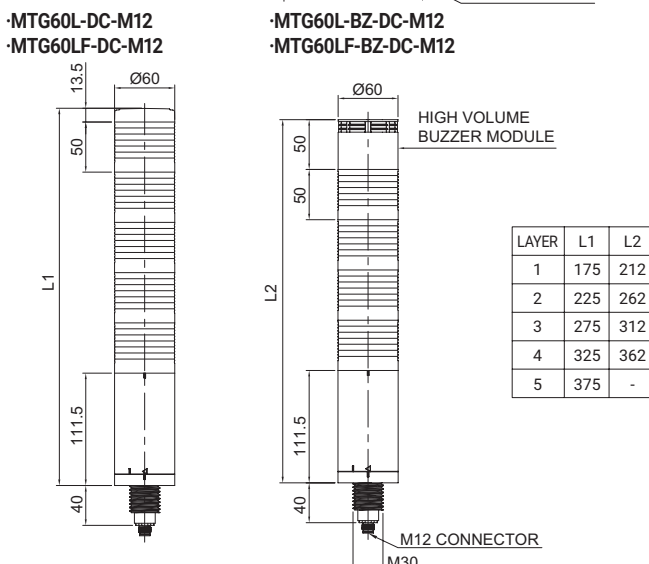
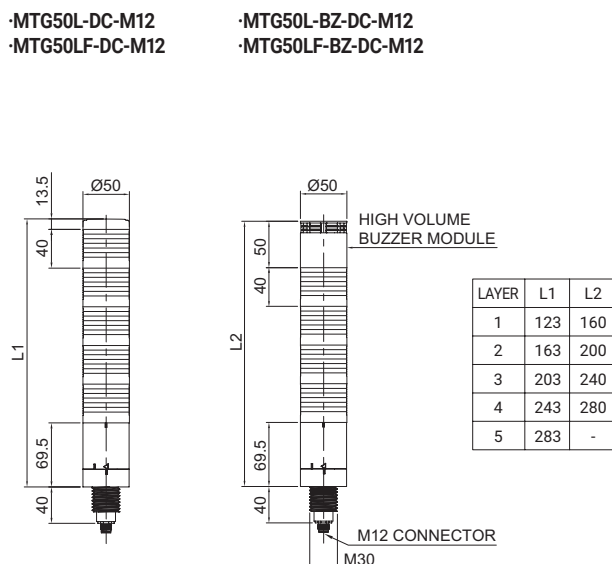
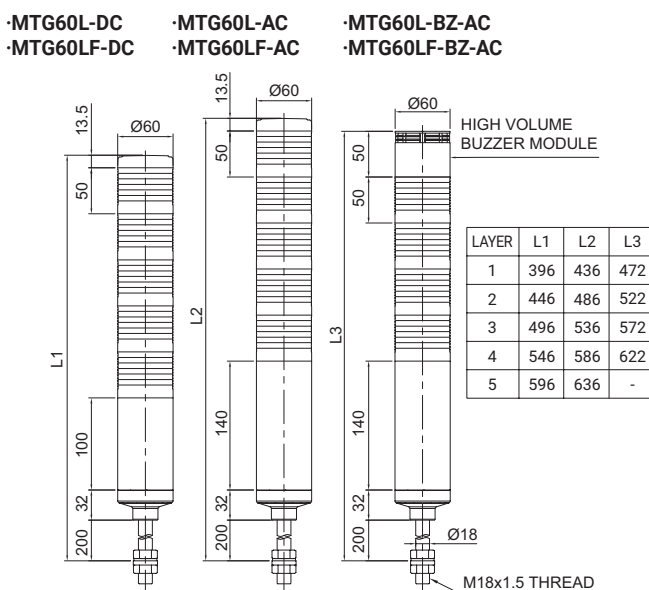
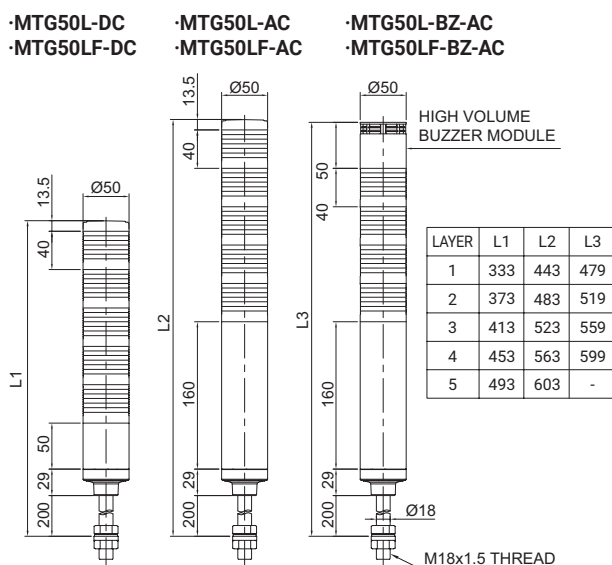
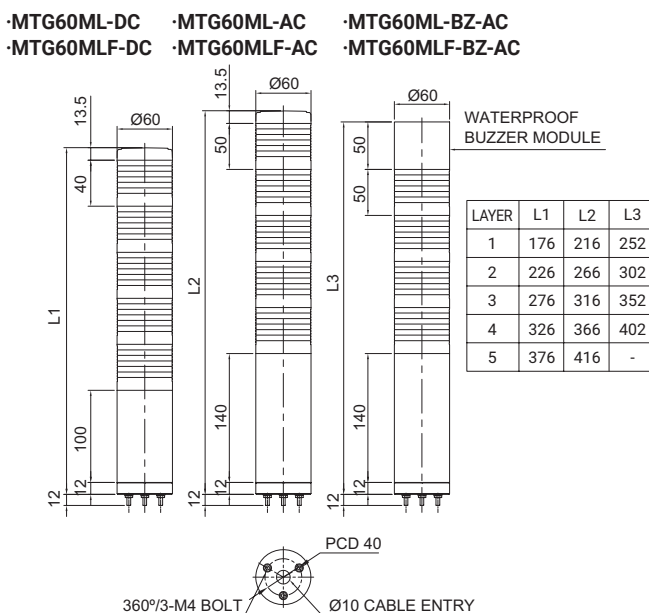
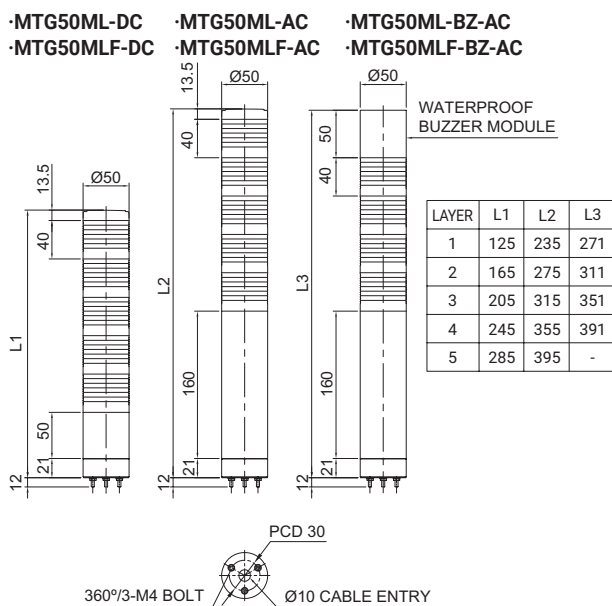
## Ordering Specifications

| [Upper module]                                                   | [LED module]                                                   | [Base module]                                                | [Pole]                                                    | [Bracket]                                                                            |
|------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>MG70-HBZ-24-BK</b>                                            | <b>MR70-R/A/G/B/W-24</b>                                       | <b>MG70-BS-DC-BK</b>                                         | <b>PE24-500</b>                                           | <b>QZ24</b>                                                                          |
| <br>Cover module<br>Buzzer module<br>Cover integrated LED module | <br>● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White | <br>Pole mount type<br>Self stand type<br>M12 connector type | <br>None-Self stand type, M12 connector type<br>Pole type | <br>None-Self stand type, M12 connector type<br>Pole type, Self stand type(Optional) |

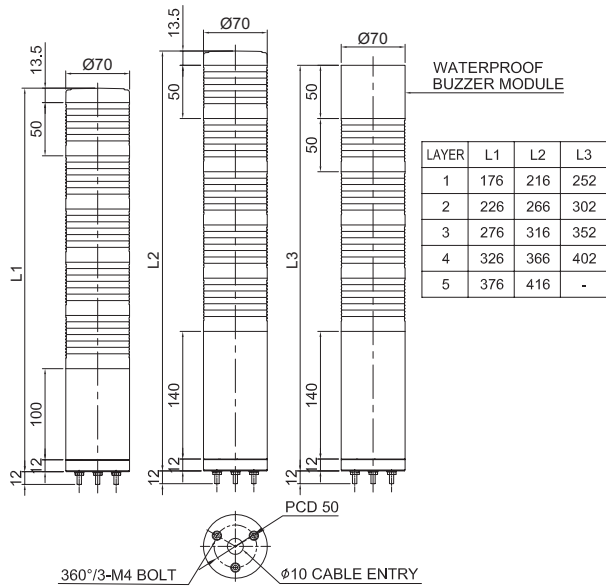
# MTG / MTC / MTR Series

## Technical Diagram

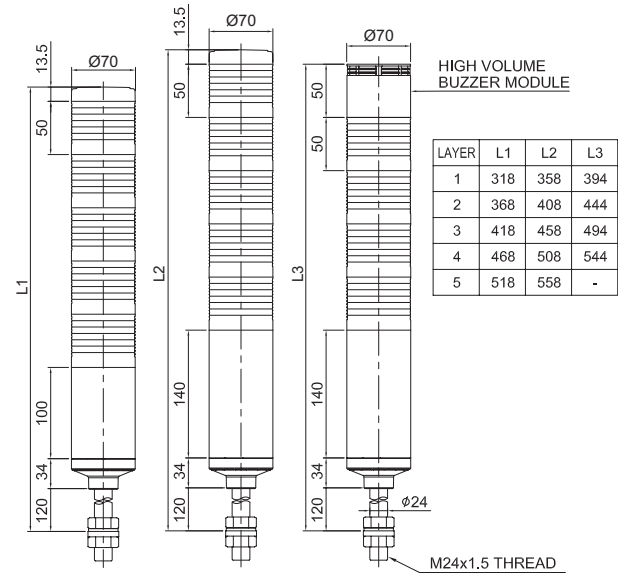
Units : mm



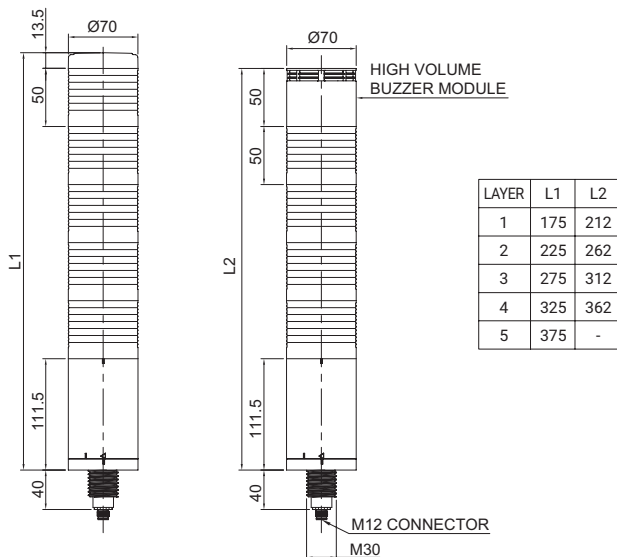
·MTG70ML-DC ·MTG70ML-AC ·MTG70ML-BZ-AC  
·MTG70MLF-DC ·MTG70MLF-AC ·MTG70MLF-BZ-AC



·MTG70L-DC ·MTG70L-AC ·MTG70L-BZ-AC  
·MTG70LF-DC ·MTG70LF-AC ·MTG70LF-BZ-AC



·MTG70L-DC-M12 ·MTG70L-BZ-DC-M12  
·MTG70LF-DC-M12 ·MTG70LF-BZ-DC-M12



\* For external dimensions of MTC / MTR products, refer to the MTG model.

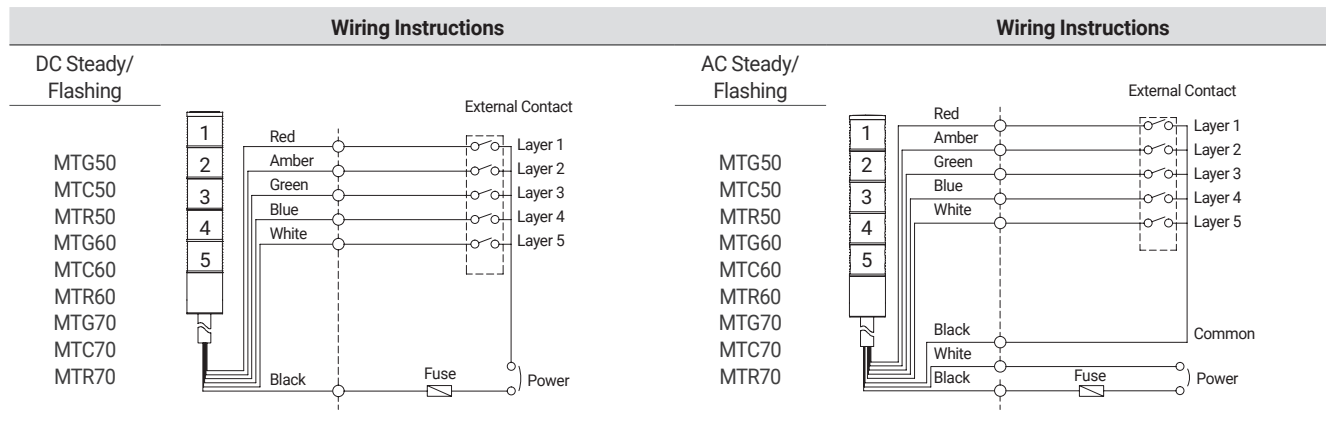
\* Buzzer module can be selected among standard buzzer module, high-volume buzzer module and waterproof buzzer module.

## MTG Series

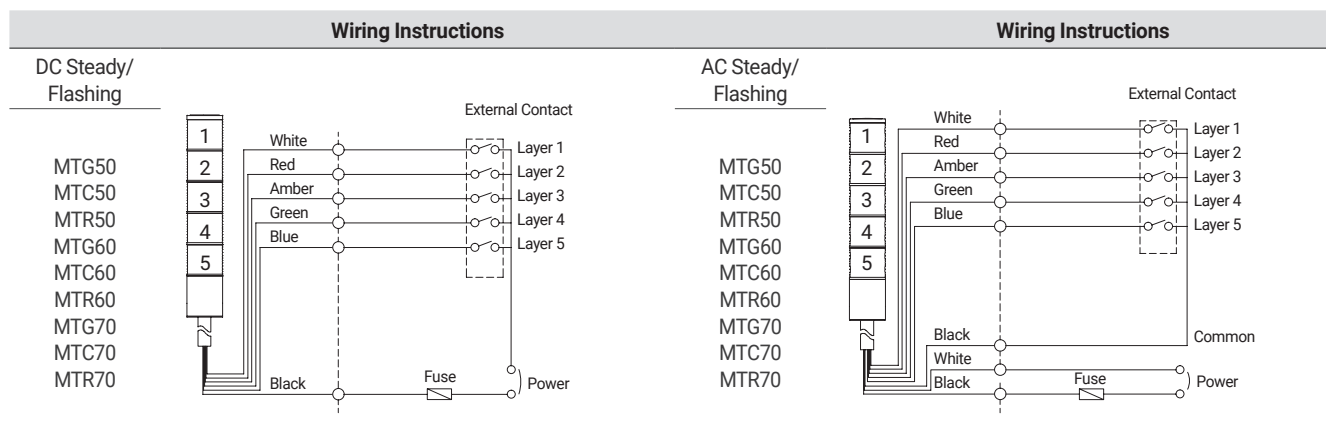
### Wiring Instructions(Wiring using External Contact)

· In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

· In case of buzzer not applied



· In case of buzzer applied



### Recommended signal line information

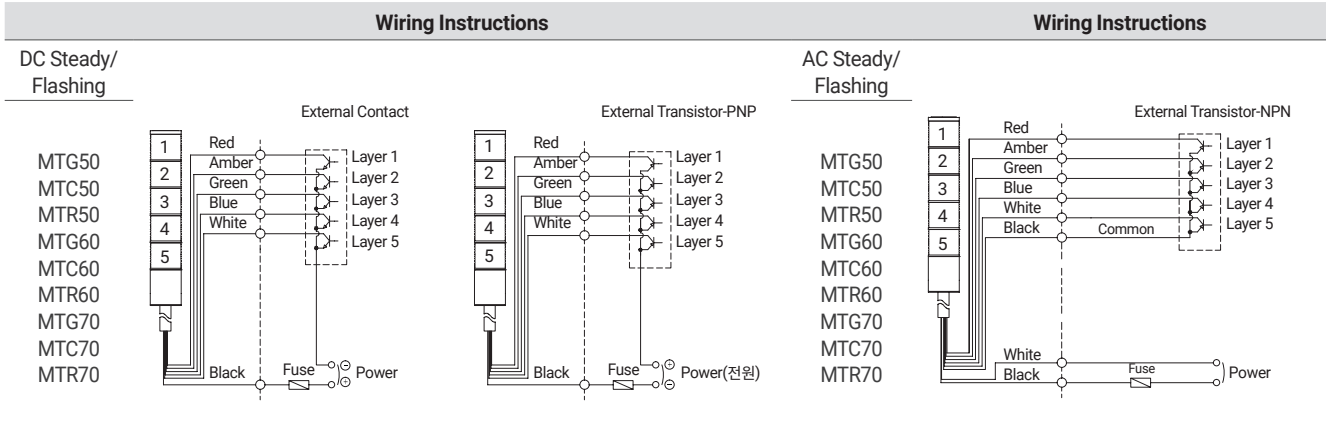
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED light source tower lamp can be connected using External Contacts and transistors.
- The wiring method for MTG / MTC / MTR products is the same.



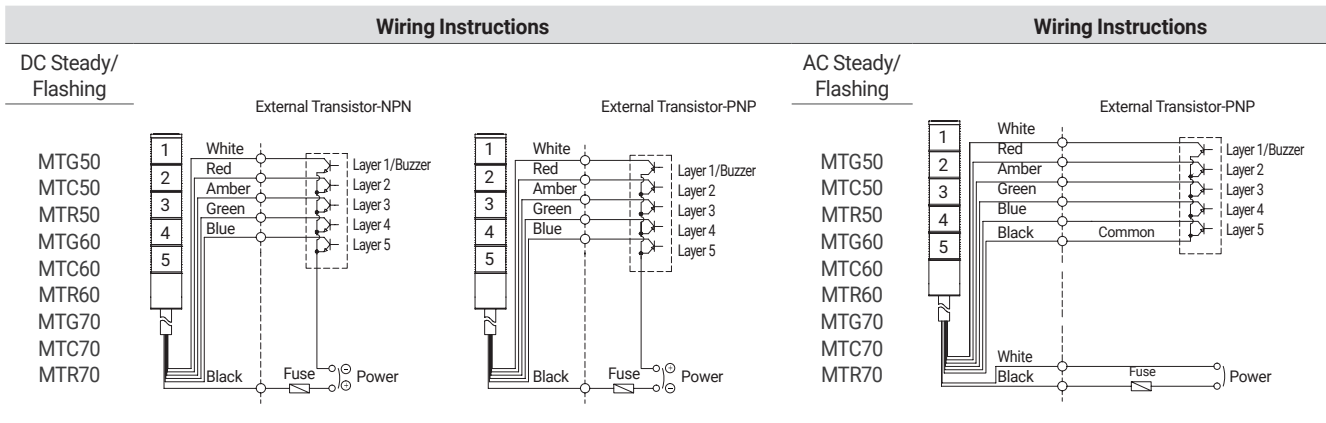
## Wiring Instructions(Wiring using transistor)

- When using a transistor, please choose between the NPN or PNP type transistor which best matches the voltage and product type, then connect them correctly according to the wiring diagrams below.

### In case of buzzer not applied



### In case of buzzer applied



## Recommended signal line information

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED light source tower lamp can be connected using External Contacts and transistors.
- The wiring method for MTG / MTC / MTR products is the same.

# MTG / MTC / MTR Series

## Wiring diagrams(In case of M12 connector type model)

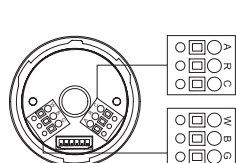
- M12 connector module can be supplied DC type only. (It same goes for External Contact/Transistor contact)
- Please wire the product by referring below PIN-MAP.

| Wiring Instructions                                                                                               |             | Wiring Instructions(PIN-MAP) |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
|-------------------------------------------------------------------------------------------------------------------|-------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------|---|--------|---|--------|---|--------|---|--------|---|--------|---|-----|---|-----|---|----------|
| DC Steady/<br>Flashing                                                                                            |             |                              | <table border="1"> <thead> <tr> <th>PIN</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Layer1</td> </tr> <tr> <td>2</td> <td>Layer2</td> </tr> <tr> <td>3</td> <td>Layer3</td> </tr> <tr> <td>4</td> <td>Layer4</td> </tr> <tr> <td>5</td> <td>Layer5</td> </tr> <tr> <td>6</td> <td>N/A</td> </tr> <tr> <td>7</td> <td>N/A</td> </tr> <tr> <td>8</td> <td>POWER(-)</td> </tr> </tbody> </table> | PIN | DESCRIPTION | 1 | Layer1 | 2 | Layer2 | 3 | Layer3 | 4 | Layer4 | 5 | Layer5 | 6 | N/A | 7 | N/A | 8 | POWER(-) |
| PIN                                                                                                               | DESCRIPTION |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 1                                                                                                                 | Layer1      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 2                                                                                                                 | Layer2      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 3                                                                                                                 | Layer3      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 4                                                                                                                 | Layer4      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 5                                                                                                                 | Layer5      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 6                                                                                                                 | N/A         |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 7                                                                                                                 | N/A         |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| 8                                                                                                                 | POWER(-)    |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |
| MTG50-M12<br>MTC50-M12<br>MTR50-M12<br>MTG60-M12<br>MTC60-M12<br>MTR60-M12<br>MTG70-M12<br>MTC70-M12<br>MTR70-M12 |             |                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |             |   |        |   |        |   |        |   |        |   |        |   |     |   |     |   |          |

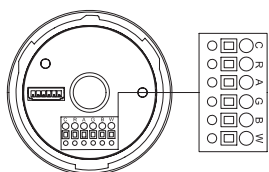
## Wiring diagrams(Terminal Wiring Information)

- Please refer to wiring diagram for further information.

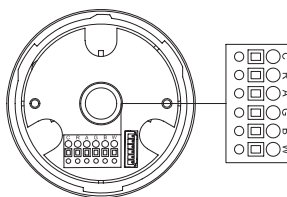
### Terminal block wiring method(DC Type)



MTG/MTC/MTR50



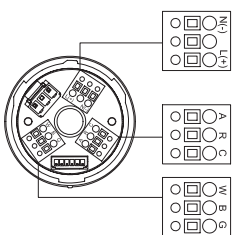
MTG/MTC/MTR60



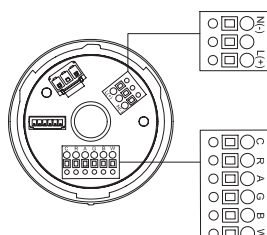
MTG/MTC/MTR70

|   |        |
|---|--------|
| C | COMMON |
| R | RED    |
| A | AMBER  |
| G | GREEN  |
| B | BLUE   |
| W | WHITE  |

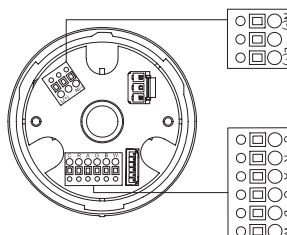
### Terminal block wiring method(AC Type)



MTG/MTC/MTR50



MTG/MTC/MTR60



MTG/MTC/MTR70

|      |          |
|------|----------|
| N(-) | AC POWER |
| -    | N/A      |
| L(+) | AC POWER |

|   |        |
|---|--------|
| C | COMMON |
| R | RED    |
| A | AMBER  |
| G | GREEN  |
| B | BLUE   |
| W | WHITE  |



QT50L / QT50ML  
QT70L / QT70ML

### New Model Concept which Allows for Significant Customization to Your Specific Needs Using Special Modular Components



- QT Series tower light is a multifunctional product that allows for significant customization to your specific needs using our special modular components such as the lens, buzzer, USB cord and Mounting brackets. Additional tools are not required for assembly
- All modular components can be arranged freely to the user desired position (upper/ lower) except for the dial tone lever



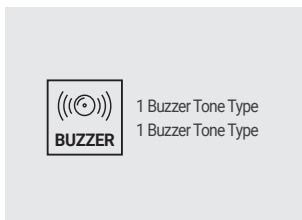
#### · Buzzer modules position can be chosen freely

The buzzer module is designed to be compatible with the light modules by using a novel architecture developed by Qlight. Therefore, users can reposition the module to the location they desire. In the photo to the left, the buzzer module is located at the top, center and bottom positions.



#### · Can select from a variety of LED light functions

The LED indicator can provide varying signals/actions by using different independent light modules; flashing, strobe, rotating. For example, green would indicate risk which can be highlighted further by selecting a strobe flashing or rotating module.



#### · Buzzer sound selection

Modules that output buzzer sounds can be arranged according to the work environment and purpose. For detailed specifications of the buzzer sound module, please refer to QT Series [Buzzer Module].



#### · Can select from a variety of pole selections to fit your application needs

You can choose from 8 different kinds of pole options for mounting. The pole materials vary from steel, aluminum, and polycarbonate. Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions



#### · Module sales

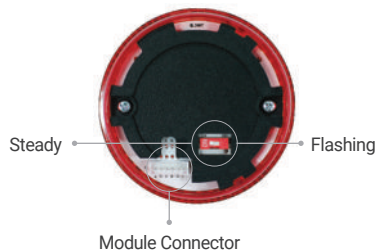
Consumers can purchase the modules they need and assemble them themselves. Detailed specifications and features of the module are introduced on the QT50 / QT70 module information page. References for module combinations are included on the Assembly Instructions page.

#### · Assembly sales

We assemble the functions requested by consumers and supply them as finished products. Assembly specifications for various model numbers are introduced on the QT50 / QT70 product detail page.

## QT Series

Multi-functional module can be assemble to user requirements



Please use the switch for Steady and Flashing which is on top of Q50L-F and Q70L-F, LED steady/flashing module.

### Module Connection



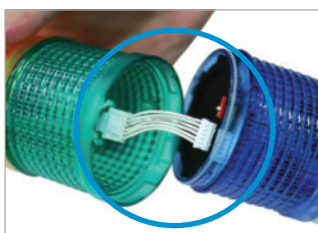
1 Connect wire between module



2 Match the edge of module



3 To assemble turn right



Uses a connector for easy assembly

### LED module

- 4 kinds of LED modules; Steady, steady/flashing, strobe, revolving flashing
- Good visibility with high brightness.
- Module position can be chosen based on signal importance.



Q70L-N



Q50L-N

#### LED Steady Module

- Output LED Steady signal
- High brightness LED
- Voltage: DC12V, DC24V, AC110V, AC220V



Q70L-F



Q50L-F

#### LED Steady/Flashing Module

- Output LED Steady/Flashing signal
- High brightness LED
- Voltage: DC12V, DC24V, AC110V, AC220V



Q70L-S



Q50L-S

#### LED Strobe Module

- LED Strobe Module
- Excellent notice compare to flashing type
- Voltage: DC12V, DC24V



Q70L-R



Q50L-R

#### LED Revolving Flashing Module

- LED light revolve and flash
- Dynamic Signal
- Voltage: DC12V, DC24V

### Buzzer module

- Buzzer module has Siren and Bip sound, Bip sound is adjustable.
- Buzzer module position can be chosen freely and has a good air tight seal.



Q70L-BZS

#### Siren Sound Buzzer Module

- Siren buzzer volume: Max.90dB
- Sound fixed
- Voltage: DC12V, DC24V, AC110V, AC220V



Q70L-BZ



Q50L-BZ

#### Bip Sound Buzzer Module

- Bip sound(Pi-Pi) volume : Max 90dB
- Sound adjustable
- Voltage: DC12V, DC24V, AC110V, AC220V



- Sound adjustable by lever on module side
- Buzzer module position can be chosen freely

### Module Connection

- Adopts a convenient connector for easy assemble.
- Simple connection structure makes assembly straightforward and effortless when compared to other manufacturer's products.

Base Module is composed of the control line and threaded to the Mounting bracket for improved product mounting efficiency.  
Please refer to below instruction and choose the mount type.

### Base Module

- 6P terminal plate equipped on basic module. Please refer to QT Series wiring diagram for wiring of power line and signal line

|              |                                                                                    |                                              |
|--------------|------------------------------------------------------------------------------------|----------------------------------------------|
| Direct mount |   | 3 Bolts on base module                       |
| Wall mount   |   | Wall mount bracket on base module            |
| Pole mount   |  | Pole module and pole assemble on base module |

### Module Color

- Housing color of the QT series modular tower lights is black
- Customizable in beige color

### Wiring Instructions

- QT series can be wired to External Contact and transistor
- In case of wiring with transistor, please select the proper transistor type either NPN or PNP based on the source voltage setting
- DC Steady type : External power/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC Steady, AC/DC steady/flashing type :  
External power line - UL1015 AWG18(0.75sq)×2C 400mm  
External signal line - UL1007 AWG22(0.3sq)400mm

### Mounting bracket

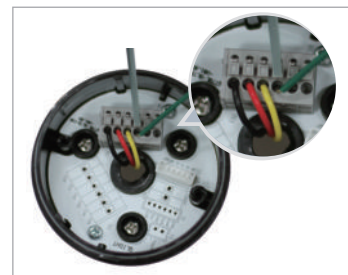
- Pole Mount Brackets

| Standard                                                                            | LB18<br>LB24                                                                        | LW18<br>LW24                                                                        | QZ18<br>QZ24                                                                        | SZ18<br>SZ24                                                                        | QL18<br>QL24                                                                        | SL18<br>SL24                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |
| Steel                                                                               | Steel                                                                               | ABS                                                                                 | ABS                                                                                 | Al                                                                                  | ABS                                                                                 | Al                                                                                  |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



### Power Line Wiring Instructions



Terminal box can be wired without a special tool by using the push and release locking mechanism.

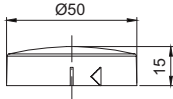


# Modular Multi-Functional LED Tower Lights

## QT50 Series

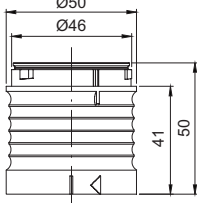
### Module Specifications QT50L / QT50ML

(Units : mm)

| Layout                                                                            | Parts Name  | Model No | Common Specifications                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | QT50L Cover | Q50L-CV  | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø50 x 15</li> </ul>  |

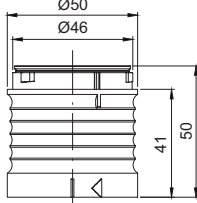
### · LED Steady Module

(Units : mm)

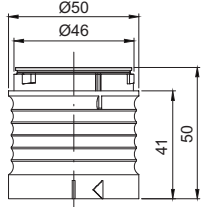
| Layout                                                                              | Parts Name                            | Model No                                               | Specification                      |                               | Common Specifications                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------|------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                       |                                                        | Voltage                            | Current                       |                                                                                                                                                                                                                                       |
|    | Q50L-NR<br>Red LED<br>Steady Module   | Q50L-NR-12<br>Q50L-NR-24<br>Q50L-NR-110<br>Q50L-NR-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble : IP65</li> <li>Product size: Ø50 x 50</li> </ul>  |
|   | Q50L-NA<br>Amber LED<br>Steady Module | Q50L-NA-12<br>Q50L-NA-24<br>Q50L-NA-110<br>Q50L-NA-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q50L-NG<br>Green LED<br>Steady Module | Q50L-NG-12<br>Q50L-NG-24<br>Q50L-NG-110<br>Q50L-NG-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q50L-NB<br>Blue LED<br>Steady Module  | Q50L-NB-12<br>Q50L-NB-24<br>Q50L-NB-110<br>Q50L-NB-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q50L-NC<br>White LED<br>Steady Module | Q50L-NC-12<br>Q50L-NC-24<br>Q50L-NC-110<br>Q50L-NC-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |

### · LED Steady/Flashing Module

(Units : mm)

| Layout                                                                              | Parts Name                                        | Model No                                               | Specification                      |                               | Common Specifications                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                                   |                                                        | Voltage                            | Current                       |                                                                                                                                                                                                                                       |
|  | Q50L-FR<br>Red LED<br>Steady/Flashing<br>Module   | Q50L-FR-12<br>Q50L-FR-24<br>Q50L-FR-110<br>Q50L-FR-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble : IP65</li> <li>Product size: Ø50 x 50</li> </ul>  |
|  | Q50L-FA<br>Amber LED<br>Steady/Flashing<br>Module | Q50L-FA-12<br>Q50L-FA-24<br>Q50L-FA-110<br>Q50L-FA-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q50L-FG<br>Green LED<br>Steady/Flashing<br>Module | Q50L-FG-12<br>Q50L-FG-24<br>Q50L-FG-110<br>Q50L-FG-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 100mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |

(Units : mm)

| Layout                                                                            | Parts Name                                        | Model No    | Specification |         | Common Specifications                                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------|-------------|---------------|---------|-----------------------------------------------------------------------------------------|
|                                                                                   |                                                   |             | Voltage       | Current |                                                                                         |
|  | Q50L-FB<br>Blue LED<br>Steady/Flashing<br>Module  | Q50L-FB-12  | DC12V         | 100mA   | · Material: PC<br>· Protection ratings with assemble : IP65<br>· Product size: Ø50 x 50 |
|                                                                                   |                                                   | Q50L-FB-24  | DC24V         | 55mA    |                                                                                         |
|                                                                                   |                                                   | Q50L-FB-110 | AC110V        | 25mA    |                                                                                         |
|                                                                                   |                                                   | Q50L-FB-220 | AC220V        | 25mA    |                                                                                         |
|  | Q50L-FC<br>White LED<br>Steady/Flashing<br>Module | Q50L-FC-12  | DC12V         | 100mA   |      |
|                                                                                   |                                                   | Q50L-FC-24  | DC24V         | 55mA    |                                                                                         |
|                                                                                   |                                                   | Q50L-FC-110 | AC110V        | 25mA    |                                                                                         |
|                                                                                   |                                                   | Q50L-FC-220 | AC220V        | 25mA    |                                                                                         |

## · LED Strobe Module

(Units : mm)

| Layout                                                                              | Parts Name                            | Model No                 | Specification  |                | Common Specifications                                                                   |
|-------------------------------------------------------------------------------------|---------------------------------------|--------------------------|----------------|----------------|-----------------------------------------------------------------------------------------|
|                                                                                     |                                       |                          | Voltage        | Current        |                                                                                         |
|   | Q50L-SR<br>Red LED<br>Strobe Module   | Q50L-SR-12<br>Q50L-SR-24 | DC12V<br>DC24V | 110mA<br>110mA | · Material: PC<br>· Protection ratings with assemble : IP65<br>· Product size: Ø50 x 50 |
|  | Q50L-SA<br>Amber LED<br>Strobe Module | Q50L-SA-12<br>Q50L-SA-24 | DC12V<br>DC24V | 110mA<br>110mA |                                                                                         |
|  | Q50L-SG<br>Green LED<br>Strobe Module | Q50L-SG-12<br>Q50L-SG-24 | DC12V<br>DC24V | 110mA<br>110mA |                                                                                         |
|  | Q50L-SB<br>Blue LED<br>Strobe Module  | Q50L-SB-12<br>Q50L-SB-24 | DC12V<br>DC24V | 110mA<br>110mA |                                                                                         |
|  | Q50L-SC<br>White LED<br>Strobe Module | Q50L-SC-12<br>Q50L-SC-24 | DC12V<br>DC24V | 110mA<br>110mA |                                                                                         |

## · LED Revolving Flashing Module

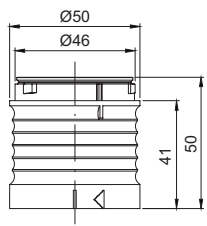
(Units : mm)

| Layout                                                                              | Parts Name                                           | Model No                 | Specification  |              | Common Specifications                                                                   |
|-------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|----------------|--------------|-----------------------------------------------------------------------------------------|
|                                                                                     |                                                      |                          | Voltage        | Current      |                                                                                         |
|  | Q50L-RR<br>Red LED<br>Revolving Flashing<br>Module   | Q50L-RR-12<br>Q50L-RR-24 | DC12V<br>DC24V | 80mA<br>80mA | · Material: PC<br>· Protection ratings with assemble : IP65<br>· Product size: Ø50 x 50 |
|  | Q50L-RA<br>Amber LED<br>Revolving Flashing<br>Module | Q50L-RA-12<br>Q50L-RA-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                         |



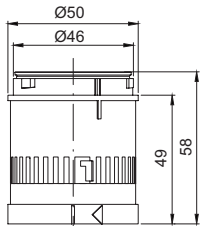
# QT50 Series

(Units : mm)

| Layout                                                                            | Parts Name                                           | Model No                 | Specification  |              | Common Specifications                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|----------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                                                      |                          | Voltage        | Current      |                                                                                                                                                                                                                                     |
|  | Q50L-RG<br>Green LED<br>Revolving Flashing<br>Module | Q50L-RG-12<br>Q50L-RG-24 | DC12V<br>DC24V | 80mA<br>80mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble : IP65</li> <li>Product size: Ø50 x 50</li> </ul>  |
|  | Q50L-RB<br>Blue LED<br>Revolving Flashing<br>Module  | Q50L-RB-12<br>Q50L-RB-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                                                                                                                                                                     |
|  | Q50L-RC<br>White LED<br>Revolving Flashing<br>Module | Q50L-RC-12<br>Q50L-RC-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                                                                                                                                                                     |

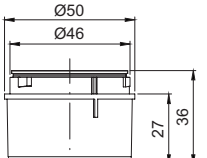
## • Buzzer module

(Units : mm)

| Layout                                                                              | Parts Name               | Model No                                               | Specification                      |                                | Common Specifications                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------|------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                          |                                                        | Voltage                            | Current                        |                                                                                                                                                                                                                                                                |
|  | Q50L-BZ<br>Buzzer module | Q50L-BZ-12<br>Q50L-BZ-24<br>Q50L-BZ-110<br>Q50L-BZ-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 30mA<br>55mA<br>110mA<br>130mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP54</li> <li>Product size: Ø50 x 58</li> <li>Volume: Max.90dB</li> </ul>  |

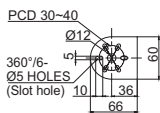
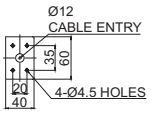
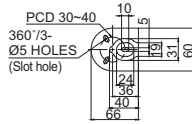
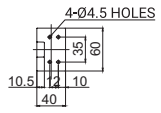
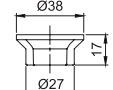
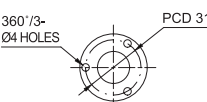
## • Base Module

(Units : mm)

| Layout                                                                              | Parts Name                                               | Model No | Common Specifications                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Pole Mount Base<br>Module<br>Direct Mount Base<br>Module | Q50L-BS  | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø50 x 36</li> </ul>  |

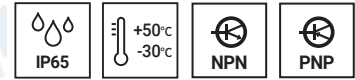
## • Mount Bracket Module

(Units : mm)

| Layout                                                                              | Parts Name         | Model No | Material | Technical Diagram                                                                                                                                                           |
|-------------------------------------------------------------------------------------|--------------------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Wall mount Bracket | TWS45    | Steel    |    |
|  | Wall mount Bracket | TWA45    | PC       |    |
|  | Pole Module        | Q50L-PB  | PC       |   |

# Ø50mm Modular LED Tower Lights

## QT50ML



Product consist of cover, LED modules, base module

### QT50ML Ø50mm Modular LED Tower Lights, Direct Mount

| Model number      | Layers | Voltage | Certificates | Weight | Color     |
|-------------------|--------|---------|--------------|--------|-----------|
| QT50ML<br>QT50MLF | 1      | DC12V   | CE           | 0.10kg | ● R-Red   |
|                   |        | DC24V   |              | 0.10kg |           |
|                   |        | AC110V  |              | 0.11kg |           |
|                   |        | AC220V  |              | 0.11kg |           |
|                   | 2      | DC12V   |              | 0.14kg | ● R-Red   |
|                   |        | DC24V   |              | 0.14kg |           |
|                   |        | AC110V  |              | 0.15kg | ● G-Green |
|                   |        | AC220V  |              | 0.15kg |           |
|                   | 3      | DC12V   |              | 0.19kg | ● R-Red   |
|                   |        | DC24V   |              | 0.19kg |           |
|                   |        | AC110V  |              | 0.20kg | ● A-Amber |
|                   |        | AC220V  |              | 0.20kg |           |
|                   | 4      | DC12V   |              | 0.23kg | ● R-Red   |
|                   |        | DC24V   |              | 0.23kg |           |
|                   |        | AC110V  |              | 0.24kg | ● G-Green |
|                   |        | AC220V  |              | 0.24kg |           |
|                   | 5      | DC12V   |              | 0.27kg | ● R-Red   |
|                   |        | DC24V   |              | 0.27kg |           |
|                   |        | AC110V  |              | 0.28kg | ● G-Green |
|                   |        | AC220V  |              | 0.28kg |           |

※ CE compliant: DC12V, DC24V, AC220V



QT50ML

Beige color

Beige color is available



### module configuration

|                   |                                         |   |                 |
|-------------------|-----------------------------------------|---|-----------------|
| QT50ML<br>QT50MLF | Steady Module<br>Steady/Flashing Module | + | Base Module(BS) |
|-------------------|-----------------------------------------|---|-----------------|

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 100mA | 55mA  | 25mA   | 25mA   |

### Wiring Instructions

- LED tower light can be wired by using transistor and External Contact

### Customization

- Beige color
- LED Strobe(Model number: QT50MLS)
- LED simulated revolving(Model number: QT50MLR)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



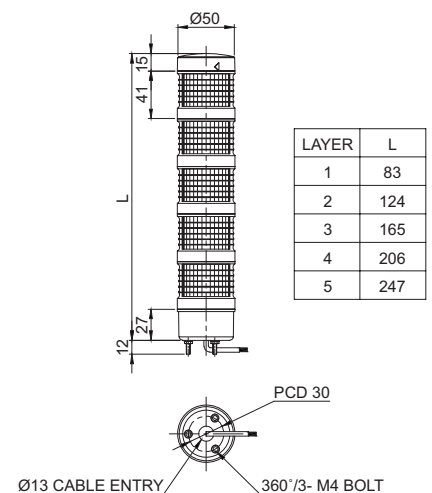
### Ordering Specifications

|                |   |            |   |            |   |           |
|----------------|---|------------|---|------------|---|-----------|
| QT50ML         | - | 3          | - | 220        | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| QT50ML         |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| QT50MLF        |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
|                |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
|                |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |
|                |   | 5-5 Layers |   |            |   | ○ W-White |

### Technical Diagram

Units : mm

#### QT50ML



# Ø50mm Built-in Buzzer Modular LED Tower Lights

## QT50ML-BZ



Product consist of cover, LED modules, buzzer module, base module



### QT50ML-BZ Ø50mm Built-in Buzzer Modular LED Tower Lights, Direct Mount

| Model number                           | Layers | Voltage | Certificates | Weight | Color                                         |
|----------------------------------------|--------|---------|--------------|--------|-----------------------------------------------|
| QT50ML-BZ<br>QT50MLF-BZ<br>(Max. 90dB) | 1      | DC12V   | CE           | 0.17kg | ● R-Red                                       |
|                                        |        | DC24V   |              | 0.17kg |                                               |
|                                        |        | AC110V  |              | 0.18kg |                                               |
|                                        |        | AC220V  |              | 0.18kg |                                               |
|                                        | 2      | DC12V   |              | 0.21kg | ● R-Red<br>● G-Green                          |
|                                        |        | DC24V   |              | 0.21kg |                                               |
|                                        |        | AC110V  |              | 0.22kg |                                               |
|                                        |        | AC220V  |              | 0.22kg |                                               |
|                                        | 3      | DC12V   |              | 0.25kg | ● R-Red<br>● A-Amber<br>● G-Green             |
|                                        |        | DC24V   |              | 0.25kg |                                               |
|                                        |        | AC110V  |              | 0.26kg |                                               |
|                                        |        | AC220V  |              | 0.26kg |                                               |
|                                        | 4      | DC12V   |              | 0.30kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |
|                                        |        | DC24V   |              | 0.30kg |                                               |
|                                        |        | AC110V  |              | 0.31kg |                                               |
|                                        |        | AC220V  |              | 0.31kg |                                               |

※ CE compliant: DC12V, DC24V, AC220V

### module configuration

|                   |                                            |   |                 |   |                   |
|-------------------|--------------------------------------------|---|-----------------|---|-------------------|
| QT50ML<br>QT50MLF | Steady Module<br>Steady/Flashing<br>Module | + | Base Module(BS) | + | Buzzer module(BZ) |
|-------------------|--------------------------------------------|---|-----------------|---|-------------------|

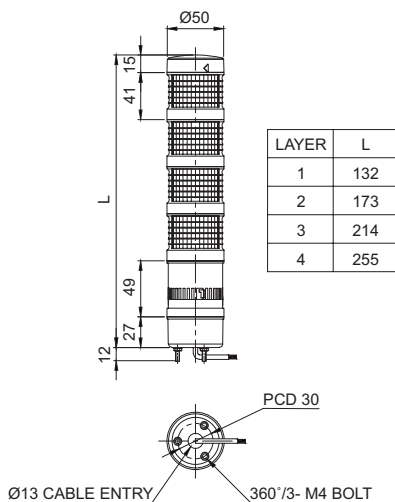
### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 100mA | 55mA  | 25mA   | 25mA   |
| Buzzer current                | 30mA  | 55mA  | 110mA  | 130mA  |

### Technical Diagram

Units : mm

#### QT50ML-BZ



### Wiring Instructions

- LED tower light can be wired by using transistor and External Contact

### Customization

- Beige color
- LED Strobe(Model number: QT50MLS-BZ)
- LED simulated revolving(Model number: QT50MLR-BZ)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

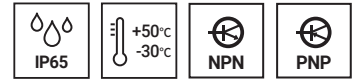


### Ordering Specifications

|                |   |            |   |            |   |           |
|----------------|---|------------|---|------------|---|-----------|
| QT50ML-BZ      | - | 3          | - | 220        | - | RAG       |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |
| QT50ML-BZ      |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |
| QT50MLF-BZ     |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |
|                |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |
|                |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |

# Ø50mm Modular Multi-Functional LED Tower Lights

## QT50L



Product consist of cover, LED modules, base module, and pole module

### QT50L Ø50mm Modular LED Tower Lights, Pole Mount

| Model number    | Layers | Voltage | Certificates | Weight | Color     |
|-----------------|--------|---------|--------------|--------|-----------|
| QT50L<br>QT50LF | 1      | DC12V   | CE           | 0.25kg | ● R-Red   |
|                 |        | DC24V   |              | 0.25kg |           |
|                 |        | AC110V  |              | 0.26kg |           |
|                 |        | AC220V  |              | 0.26kg |           |
|                 | 2      | DC12V   |              | 0.30kg | ● R-Red   |
|                 |        | DC24V   |              | 0.30kg |           |
|                 |        | AC110V  |              | 0.31kg | ● G-Green |
|                 |        | AC220V  |              | 0.31kg |           |
|                 | 3      | DC12V   |              | 0.34kg | ● R-Red   |
|                 |        | DC24V   |              | 0.34kg |           |
|                 |        | AC110V  |              | 0.35kg | ● A-Amber |
|                 |        | AC220V  |              | 0.35kg |           |
|                 | 4      | DC12V   |              | 0.38kg | ● R-Red   |
|                 |        | DC24V   |              | 0.38kg |           |
|                 |        | AC110V  |              | 0.39kg | ● G-Green |
|                 |        | AC220V  |              | 0.39kg |           |
|                 | 5      | DC12V   |              | 0.43kg | ● R-Red   |
|                 |        | DC24V   |              | 0.43kg |           |
|                 |        | AC110V  |              | 0.44kg | ● A-Amber |
|                 |        | AC220V  |              | 0.44kg |           |
|                 |        |         |              |        | ● G-Green |
|                 |        |         |              |        |           |
|                 |        |         |              |        | ● B-Blue  |
|                 |        |         |              |        |           |
|                 |        |         |              |        | ○ W-White |

※ CE compliant: DC12V, DC24V, AC220V

### module configuration

|                 |                                         |   |                                         |
|-----------------|-----------------------------------------|---|-----------------------------------------|
| QT50L<br>QT50LF | Steady Module<br>Steady/Flashing Module | + | Base Module(BS)<br>+<br>Pole Module(PB) |
|-----------------|-----------------------------------------|---|-----------------------------------------|

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 100mA | 55mA  | 25mA   | 25mA   |

### Wiring Instructions

- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |            |   |           |   |                 |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| QT50L          | - | 3          | - | 24         | - | RAG       | - | LW18            |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| QT50L          |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| QT50LF         |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
|                |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | -LB18 -LW18     |
|                |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | -QZ18 -SZ18     |
|                |   | 5-5 Layers |   |            |   | ○ W-White |   | -QL18 -SL18     |



QT50L

Beige color

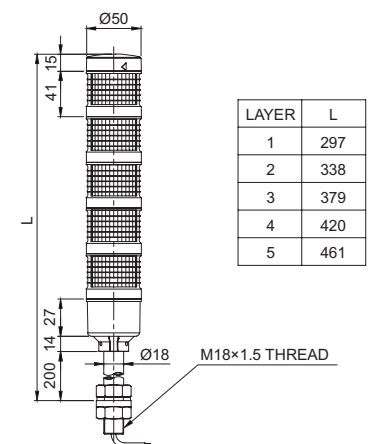
Beige color is available



### Technical Diagram

Units : mm

·QT50L



### Customization

- Customized pole length available
- Beige color
- LED Strobe(Model number: QT50LS)
- LED simulated revolving (Model number: QT50LR)

# Ø50mm Built-in Buzzer Modular Multi-Functional LED Tower Lights

## QT50L-BZ



Product consist of cover, LED modules, buzzer module, base module, and pole module



### QT50L-BZ Ø50mm Built-in Buzzer Modular LED Tower Lights, Pole Mount

| Model number          | Layers | Voltage | Certificates | Weight | Color                                         |
|-----------------------|--------|---------|--------------|--------|-----------------------------------------------|
| QT50L-BZ<br>QT50LF-BZ | 1      | DC12V   | CE           | 0.32kg | ● R-Red                                       |
|                       |        | DC24V   |              | 0.32kg |                                               |
|                       |        | AC110V  |              | 0.33kg |                                               |
|                       |        | AC220V  |              | 0.33kg |                                               |
|                       | 2      | DC12V   |              | 0.37kg | ● R-Red<br>● G-Green                          |
|                       |        | DC24V   |              | 0.37kg |                                               |
|                       |        | AC110V  |              | 0.38kg |                                               |
|                       |        | AC220V  |              | 0.38kg |                                               |
|                       | 3      | DC12V   |              | 0.41kg | ● R-Red<br>● A-Amber<br>● G-Green             |
|                       |        | DC24V   |              | 0.41kg |                                               |
|                       |        | AC110V  |              | 0.42kg |                                               |
|                       |        | AC220V  |              | 0.42kg |                                               |
|                       | 4      | DC12V   |              | 0.45kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |
|                       |        | DC24V   |              | 0.45kg |                                               |
|                       |        | AC110V  |              | 0.46kg |                                               |
|                       |        | AC220V  |              | 0.46kg |                                               |

※ CE compliant: DC12V, DC24V, AC220V

### module configuration

|                 |                                            |   |                                         |   |                   |
|-----------------|--------------------------------------------|---|-----------------------------------------|---|-------------------|
| QT50L<br>QT50LF | Steady Module<br>Steady/Flashing<br>Module | + | Base Module(BS)<br>+<br>Pole Module(PB) | + | Buzzer module(BZ) |
|-----------------|--------------------------------------------|---|-----------------------------------------|---|-------------------|

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 100mA | 55mA  | 25mA   | 25mA   |
| Buzzer current                | 30mA  | 55mA  | 110mA  | 130mA  |

### Wiring Instructions

· LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |            |   |           |   |                 |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| QT50L-BZ       | - | 3          | - | 24         | - | RAG       | - | LW18            |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| QT50L-BZ       |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| QT50LF-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
|                |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | -LB18 -LW18     |
|                |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | -QZ18 -SZ18     |
|                |   |            |   |            |   |           |   | -QL18 -SL18     |



QT50L-BZ

Beige color

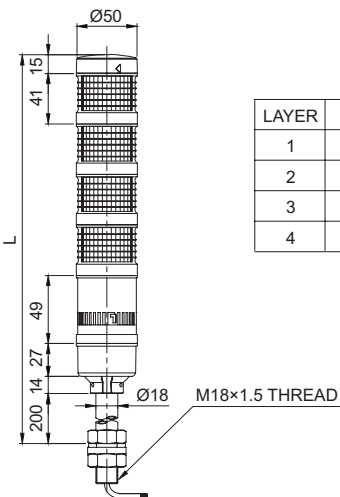
Beige color is available



### Technical Diagram

Units : mm

#### ·QT50L-BZ



| LAYER | L   |
|-------|-----|
| 1     | 346 |
| 2     | 387 |
| 3     | 428 |
| 4     | 469 |

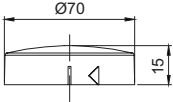
### Customization

- Customized pole length available
- Beige color
- LED Strobe(Model number: QT50LS-BZ)
- LED simulated revolving (Model number: QT50LR-BZ)

## QT70 Series

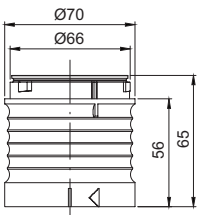
### Module Specifications QT70L / QT70ML

(Units : mm)

| Layout                                                                            | Parts Name  | Model No | Common Specifications                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | QT70L Cover | Q70L-CV  | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 x 15</li> </ul>  |

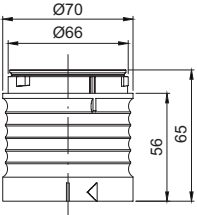
### • LED Steady Module

(Units : mm)

| Layout                                                                              | Parts Name                            | Model No                                               | Specification                      |                               | Common Specifications                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------|------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                       |                                                        | Voltage                            | Current                       |                                                                                                                                                                                                                                       |
|    | Q70L-NR<br>Red LED<br>Steady Module   | Q70L-NR-12<br>Q70L-NR-24<br>Q70L-NR-110<br>Q70L-NR-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble : IP65</li> <li>Product size: Ø70 x 65</li> </ul>  |
|   | Q70L-NA<br>Amber LED<br>Steady Module | Q70L-NA-12<br>Q70L-NA-24<br>Q70L-NA-110<br>Q70L-NA-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q70L-NG<br>Green LED<br>Steady Module | Q70L-NG-12<br>Q70L-NG-24<br>Q70L-NG-110<br>Q70L-NG-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q70L-NB<br>Blue LED<br>Steady Module  | Q70L-NB-12<br>Q70L-NB-24<br>Q70L-NB-110<br>Q70L-NB-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q70L-NC<br>White LED<br>Steady Module | Q70L-NC-12<br>Q70L-NC-24<br>Q70L-NC-110<br>Q70L-NC-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |

### • LED Flashing Module

(Units : mm)

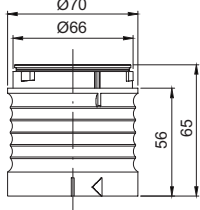
| Layout                                                                              | Parts Name                                        | Model No                                               | Specification                      |                               | Common Specifications                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                                   |                                                        | Voltage                            | Current                       |                                                                                                                                                                                                                                       |
|  | Q70L-FR<br>Red LED<br>Steady/Flashing<br>Module   | Q70L-FR-12<br>Q70L-FR-24<br>Q70L-FR-110<br>Q70L-FR-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble : IP65</li> <li>Product size: Ø70 x 65</li> </ul>  |
|  | Q70L-FA<br>Amber LED<br>Steady/Flashing<br>Module | Q70L-FA-12<br>Q70L-FA-24<br>Q70L-FA-110<br>Q70L-FA-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |
|  | Q70L-FG<br>Green LED<br>Steady/Flashing<br>Module | Q70L-FG-12<br>Q70L-FG-24<br>Q70L-FG-110<br>Q70L-FG-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 120mA<br>55mA<br>25mA<br>25mA |                                                                                                                                                                                                                                       |



# Modular Multi-Functional LED Tower Lights

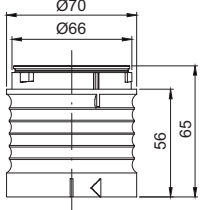
## QT70 Series

(Units : mm)

| Layout                                                                            | Parts Name                                        | Model No    | Specification |         | Common Specifications                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------|---------------------------------------------------|-------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                                                   |             | Voltage       | Current |                                                                                                                                                                                                                                    |
|  | Q70L-FB<br>Blue LED<br>Steady/Flashing<br>Module  | Q70L-FB-12  | DC12V         | 120mA   | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 x 65</li> </ul>  |
|                                                                                   |                                                   | Q70L-FB-24  | DC24V         | 55mA    |                                                                                                                                                                                                                                    |
|                                                                                   |                                                   | Q70L-FB-110 | AC110V        | 25mA    |                                                                                                                                                                                                                                    |
|                                                                                   |                                                   | Q70L-FB-220 | AC220V        | 25mA    |                                                                                                                                                                                                                                    |
|  | Q70L-FC<br>White LED<br>Steady/Flashing<br>Module | Q70L-FC-12  | DC12V         | 120mA   |                                                                                                                                                                                                                                    |
|                                                                                   |                                                   | Q70L-FC-24  | DC24V         | 55mA    |                                                                                                                                                                                                                                    |
|                                                                                   |                                                   | Q70L-FC-110 | AC110V        | 25mA    |                                                                                                                                                                                                                                    |
|                                                                                   |                                                   | Q70L-FC-220 | AC220V        | 25mA    |                                                                                                                                                                                                                                    |

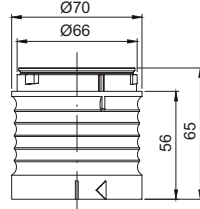
### • LED Strobe Module

(Units : mm)

| Layout                                                                              | Parts Name                            | Model No                 | Specification  |                | Common Specifications                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|---------------------------------------|--------------------------|----------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                       |                          | Voltage        | Current        |                                                                                                                                                                                                                                      |
|   | Q70L-SR<br>Red LED<br>Strobe Module   | Q70L-SR-12<br>Q70L-SR-24 | DC12V<br>DC24V | 120mA<br>120mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 x 65</li> </ul>  |
|  | Q70L-SA<br>Amber LED<br>Strobe Module | Q70L-SA-12<br>Q70L-SA-24 | DC12V<br>DC24V | 120mA<br>120mA |                                                                                                                                                                                                                                      |
|  | Q70L-SG<br>Green LED<br>Strobe Module | Q70L-SG-12<br>Q70L-SG-24 | DC12V<br>DC24V | 120mA<br>120mA |                                                                                                                                                                                                                                      |
|  | Q70L-SB<br>Blue LED<br>Strobe Module  | Q70L-SB-12<br>Q70L-SB-24 | DC12V<br>DC24V | 120mA<br>120mA |                                                                                                                                                                                                                                      |
|  | Q70L-SC<br>White LED<br>Strobe Module | Q70L-SC-12<br>Q70L-SC-24 | DC12V<br>DC24V | 120mA<br>120mA |                                                                                                                                                                                                                                      |

### • LED Revolving Flashing module

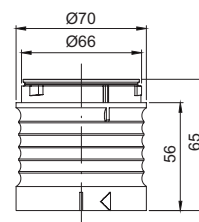
(Units : mm)

| Layout                                                                              | Parts Name                                           | Model No                 | Specification  |              | Common Specifications                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|----------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                                      |                          | Voltage        | Current      |                                                                                                                                                                                                                                      |
|  | Q70L-RR<br>Red LED<br>Revolving Flashing<br>Module   | Q70L-RR-12<br>Q70L-RR-24 | DC12V<br>DC24V | 80mA<br>80mA | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 x 65</li> </ul>  |
|  | Q70L-RA<br>Amber LED<br>Revolving Flashing<br>Module | Q70L-RA-12<br>Q70L-RA-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                                                                                                                                                                      |



(Units : mm)

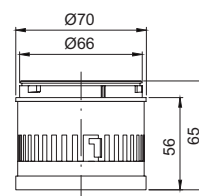
| Layout                                                                            | Parts Name                                           | Model No                 | Specification  |              | Common Specifications                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------|--------------------------|----------------|--------------|----------------------------------------------------------------------------------------|
|                                                                                   |                                                      |                          | Voltage        | Current      |                                                                                        |
|  | Q70L-RG<br>Green LED<br>Revolving Flashing<br>Module | Q70L-RG-12<br>Q70L-RG-24 | DC12V<br>DC24V | 80mA<br>80mA | · Material: PC<br>· Protection ratings with assemble: IP65<br>· Product size: Ø70 x 65 |
|  | Q70L-RB<br>Blue LED<br>Revolving Flashing<br>Module  | Q70L-RB-12<br>Q70L-RB-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                        |
|  | Q70L-RC<br>White LED<br>Revolving Flashing<br>Module | Q70L-RC-12<br>Q70L-RC-24 | DC12V<br>DC24V | 80mA<br>80mA |                                                                                        |



#### · Buzzer module

(Units : mm)

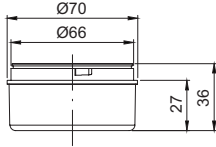
| Layout                                                                              | Parts Name                      | Model No                                                   | Specification                      |                                | Common Specifications                                                                                        |
|-------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------|------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------|
|                                                                                     |                                 |                                                            | Voltage                            | Current                        |                                                                                                              |
|  | Q70L-BZ<br>Buzzer module        | Q70L-BZ-12<br>Q70L-BZ-24<br>Q70L-BZ-110<br>Q70L-BZ-220     | DC12V<br>DC24V<br>AC110V<br>AC220V | 30mA<br>55mA<br>110mA<br>130mA | · Material: PC<br>· Protection ratings with assemble: IP54<br>· Product size: Ø70 x 65<br>· Volume: Max.90dB |
|  | Q70L-BZS<br>Siren Buzzer module | Q70L-BZS-12<br>Q70L-BZS-24<br>Q70L-BZS-110<br>Q70L-BZS-220 | DC12V<br>DC24V<br>AC110V<br>AC220V | 240mA<br>150mA<br>10mA<br>20mA |                                                                                                              |



# QT70 Series

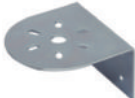
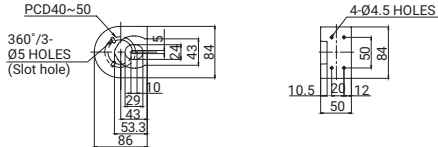
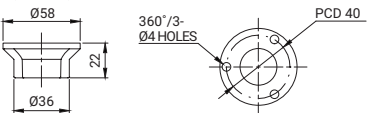
## • Base Module

(Units : mm)

| Layout                                                                            | Parts Name  | Model No | Common Specifications                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Base Module | Q70L-BS  | <ul style="list-style-type: none"> <li>Material: PC</li> <li>Protection ratings with assemble: IP65</li> <li>Product size: Ø70 x 36</li> </ul>  |

## • Mount Bracket Module(Built-in Sounder)

(Units : mm)

| Layout                                                                              | Parts Name         | Model No | Material | Technical Diagram                                                                     |
|-------------------------------------------------------------------------------------|--------------------|----------|----------|---------------------------------------------------------------------------------------|
|    | Wall Mount Bracket | TWS80    | Steel    |     |
|   | Wall Mount Bracket | TWA80    | PC       |    |
|  | Pole Module        | Q70L-PB  | PC       |  |

# Ø70mm Modular Multi-Functional LED Tower Lights

## QT70ML



Product consist of cover, LED modules, signal sound module, base module

### QT70ML Ø70mm Direct Mount Modular LED Tower Lights

| Model number      | Layers | Voltage | Certificates | Weight | Color   |
|-------------------|--------|---------|--------------|--------|---------|
| QT70ML<br>QT70MLF | 1      | DC12V   | CE           | 0.17kg | R-Red   |
|                   |        | DC24V   |              | 0.17kg |         |
|                   |        | AC110V  |              | 0.18kg |         |
|                   |        | AC220V  |              | 0.18kg |         |
|                   | 2      | DC12V   |              | 0.25kg | R-Red   |
|                   |        | DC24V   |              | 0.25kg |         |
|                   |        | AC110V  |              | 0.26kg | G-Green |
|                   |        | AC220V  |              | 0.26kg |         |
|                   | 3      | DC12V   |              | 0.32kg | R-Red   |
|                   |        | DC24V   |              | 0.32kg |         |
|                   |        | AC110V  |              | 0.33kg | A-Amber |
|                   |        | AC220V  |              | 0.33kg |         |
|                   | 4      | DC12V   |              | 0.40kg | R-Red   |
|                   |        | DC24V   |              | 0.40kg |         |
|                   |        | AC110V  |              | 0.41kg | G-Green |
|                   |        | AC220V  |              | 0.41kg |         |
|                   | 5      | DC12V   |              | 0.47kg | R-Red   |
|                   |        | DC24V   |              | 0.47kg |         |
|                   |        | AC110V  |              | 0.48kg | A-Amber |
|                   |        | AC220V  |              | 0.48kg |         |

※ CE compliant: DC12V, DC24V

### module configuration

|                   |                                         |   |                 |
|-------------------|-----------------------------------------|---|-----------------|
| QT70ML<br>QT70MLF | Steady Module<br>Steady/Flashing Module | + | Base Module(BS) |
|-------------------|-----------------------------------------|---|-----------------|

### Light source current(based on 1 layer)

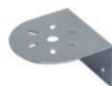
| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 120mA | 55mA  | 25mA   | 25mA   |

### Wiring Instructions

- LED tower light can be wired by using transistor and external contact

### Customization

- Beige color
- LED Strobe(Model number: QT70MLS)
- LED simulated revolving(Model number: QT70MLR)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall mount bracket TWS80



Wall mount bracket TWA80

### Ordering Specifications

|                |   |            |   |            |   |         |
|----------------|---|------------|---|------------|---|---------|
| QT70ML         | - | 3          | - | 220        | - | RAG     |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color] |
| QT70ML         |   | 1-1 Layer  |   | 12-DC12V   |   | R-Red   |
| QT70MLF        |   | 2-2 Layers |   | 24-DC24V   |   | A-Amber |
|                |   | 3-3 Layers |   | 110-AC110V |   | G-Green |
|                |   | 4-4 Layers |   | 220-AC220V |   | B-Blue  |
|                |   | 5-5 Layers |   |            |   | W-White |



QT70ML

Beige color

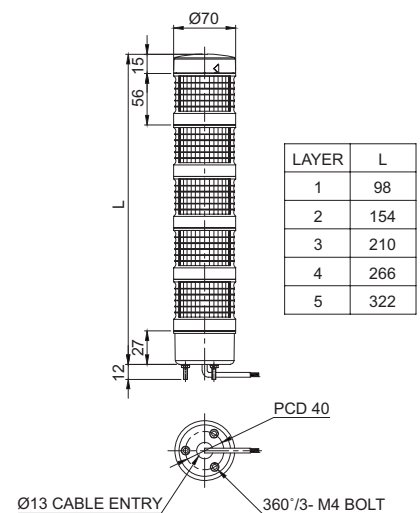
Beige color is available



### Technical Diagram

Units : mm

#### ·QT70ML



# QT70ML-BZ



 **QT70ML-BZ**    **Ø70mm Direct Mount Modular LED Tower Lights with Buzzer**



| Model number                           | Layers | Voltage | Certificates | Weight | Color                                         |
|----------------------------------------|--------|---------|--------------|--------|-----------------------------------------------|
| QT70ML-BZ<br>QT70MLF-BZ<br>(Max. 90dB) | 1      | DC12V   | CE           | 0.26kg | ● R-Red                                       |
|                                        |        | DC24V   |              | 0.26kg |                                               |
|                                        |        | AC110V  |              | 0.27kg |                                               |
|                                        |        | AC220V  |              | 0.27kg |                                               |
|                                        | 2      | DC12V   |              | 0.34kg | ● R-Red<br>● G-Green                          |
|                                        |        | DC24V   |              | 0.34kg |                                               |
|                                        |        | AC110V  |              | 0.35kg |                                               |
|                                        |        | AC220V  |              | 0.35kg |                                               |
|                                        | 3      | DC12V   |              | 0.42kg | ● R-Red<br>● A-Amber<br>● G-Green             |
|                                        |        | DC24V   |              | 0.42kg |                                               |
|                                        |        | AC110V  |              | 0.43kg |                                               |
|                                        |        | AC220V  |              | 0.43kg |                                               |
|                                        | 4      | DC12V   |              | 0.49kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |
|                                        |        | DC24V   |              | 0.49kg |                                               |
|                                        |        | AC110V  |              | 0.50kg |                                               |
|                                        |        | AC220V  |              | 0.50kg |                                               |

## module configuration

|                   |                                         |   |                 |   |                   |
|-------------------|-----------------------------------------|---|-----------------|---|-------------------|
| QT70ML<br>QT70MLF | Steady Module<br>Steady/Flashing Module | + | Base Module(BS) | + | Buzzer module(BZ) |
|-------------------|-----------------------------------------|---|-----------------|---|-------------------|

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 120mA | 55mA  | 25mA   | 25mA   |
| Buzzer current                | 30mA  | 55mA  | 110mA  | 130mA  |

## Units : mm

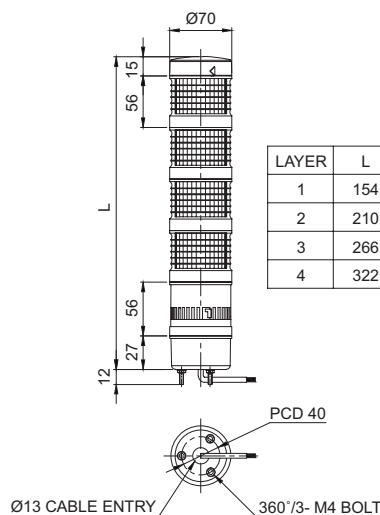
·QT70ML-BZ

- LED tower light can be wired by using transistor and External Contact

- Beige color
- LED Strobe(Model number : QT70MLS-BZ)
- LED simulated revolving (Model number: QT70MLR-BZ)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



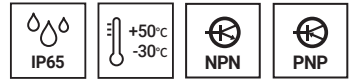
Wall mount  
bracket  
TWA80



| QT70ML-BZ      | - | 3          | - | 220        | - | RAG                                           |
|----------------|---|------------|---|------------|---|-----------------------------------------------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]                                       |
| QT70ML-BZ      |   | 1-1 Layer  |   | 12-DC12V   |   | <span style="color: red;">●</span> R-Red      |
| QT70MLF-BZ     |   | 2-2 Layers |   | 24-DC24V   |   | <span style="color: orange;">●</span> A-Amber |
|                |   | 3-3 Layers |   | 110-AC110V |   | <span style="color: green;">●</span> G-Green  |
|                |   | 4-4 Layers |   | 220-AC220V |   | <span style="color: blue;">●</span> B-Blue    |

# Ø70mm Modular Multi-Functional LED Tower Lights

## QT70L



Product consist of cover, LED modules, base module, and pole module

### QT70L Ø70mm Pole Mount Modular LED Tower Lights

| Model number    | Layers | Voltage | Certificates | Weight | Color                                                      |
|-----------------|--------|---------|--------------|--------|------------------------------------------------------------|
| QT70L<br>QT70LF | 1      | DC12V   | CE           | 0.41kg | ● R-Red                                                    |
|                 |        | DC24V   |              | 0.41kg |                                                            |
|                 |        | AC110V  |              | 0.42kg |                                                            |
|                 |        | AC220V  |              | 0.42kg |                                                            |
|                 | 2      | DC12V   |              | 0.48kg | ● R-Red<br>● G-Green                                       |
|                 |        | DC24V   |              | 0.48kg |                                                            |
|                 |        | AC110V  |              | 0.49kg |                                                            |
|                 |        | AC220V  |              | 0.49kg |                                                            |
|                 | 3      | DC12V   |              | 0.55kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                 |        | DC24V   |              | 0.55kg |                                                            |
|                 |        | AC110V  |              | 0.56kg |                                                            |
|                 |        | AC220V  |              | 0.56kg |                                                            |
|                 | 4      | DC12V   |              | 0.63kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                 |        | DC24V   |              | 0.63kg |                                                            |
|                 |        | AC110V  |              | 0.64kg |                                                            |
|                 |        | AC220V  |              | 0.64kg |                                                            |
|                 | 5      | DC12V   |              | 0.71kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                 |        | DC24V   |              | 0.71kg |                                                            |
|                 |        | AC110V  |              | 0.72kg |                                                            |
|                 |        | AC220V  |              | 0.72kg |                                                            |

※ CE compliant: DC12V, DC24V

### module configuration

|                 |                                         |   |                                         |
|-----------------|-----------------------------------------|---|-----------------------------------------|
| QT70L<br>QT70LF | Steady Module<br>Steady/Flashing Module | + | Base Module(BS)<br>+<br>Pole Module(PB) |
|-----------------|-----------------------------------------|---|-----------------------------------------|

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 120mA | 55mA  | 25mA   | 25mA   |

### Wiring Instructions

· LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                 |   |                                                                   |   |                                                  |   |                                               |   |                                                                           |
|-----------------|---|-------------------------------------------------------------------|---|--------------------------------------------------|---|-----------------------------------------------|---|---------------------------------------------------------------------------|
| QT70L           | - | 3                                                                 | - | 24                                               | - | RAG                                           | - | LW24                                                                      |
| [Model number]  |   | [Layers]                                                          |   | [Voltage]                                        |   | [Color]                                       |   | [Bracket]                                                                 |
| QT70L<br>QT70LF |   | 1-1 Layer<br>2-2 Layers<br>3-3 Layers<br>4-4 Layers<br>5-5 Layers |   | 12-DC12V<br>24-DC24V<br>110-AC110V<br>220-AC220V |   | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |   | · None-Standard<br>· Bracket<br>· LB24-LW24<br>· QZ24-SZ24<br>· QL24-SL24 |



QT70L

Beige color

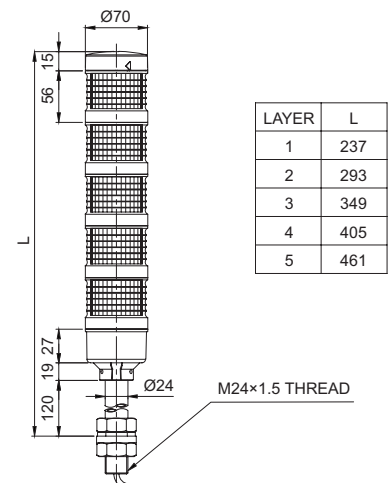
Beige color is available



### Technical Diagram

Units : mm

· QT70L



### Customization

- Customized pole length available
- Beige color
- LED Strobe(Model number: QT70LS)
- LED simulated revolving (Model number: QT70LR)

# Ø70mm Multi-Functional Modular LED Tower Lights with Buzzer

## QT70L-BZ



Product consist of cover, LED modules, buzzer module, base module, and pole module



### QT70L-BZ Ø70mm Pole Mount Modular LED Tower Lights with Buzzer

| Model number                         | Layers | Voltage | Certificates | Weight | Color                                         |
|--------------------------------------|--------|---------|--------------|--------|-----------------------------------------------|
| QT70L-BZ<br>QT70LF-BZ<br>(Max. 90dB) | 1      | DC12V   | CE           | 0.50kg | ● R-Red                                       |
|                                      |        | DC24V   |              | 0.50kg |                                               |
|                                      |        | AC110V  |              | 0.51kg |                                               |
|                                      |        | AC220V  |              | 0.51kg |                                               |
|                                      | 2      | DC12V   |              | 0.58kg | ● R-Red<br>● G-Green                          |
|                                      |        | DC24V   |              | 0.88kg |                                               |
|                                      |        | AC110V  |              | 0.59kg |                                               |
|                                      |        | AC220V  |              | 0.59kg |                                               |
|                                      | 3      | DC12V   |              | 0.65kg | ● R-Red<br>● A-Amber<br>● G-Green             |
|                                      |        | DC24V   |              | 0.65kg |                                               |
|                                      |        | AC110V  |              | 0.66kg |                                               |
|                                      |        | AC220V  |              | 0.66kg |                                               |
|                                      | 4      | DC12V   |              | 0.73kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue |
|                                      |        | DC24V   |              | 0.73kg |                                               |
|                                      |        | AC110V  |              | 0.74kg |                                               |
|                                      |        | AC220V  |              | 0.74kg |                                               |

※ CE compliant: DC12V, DC24V

#### module configuration

|                 |                                            |   |                                         |   |                   |
|-----------------|--------------------------------------------|---|-----------------------------------------|---|-------------------|
| QT70L<br>QT70LF | Steady Module<br>Steady/Flashing<br>Module | + | Base Module(BS)<br>+<br>Pole Module(PB) | + | Buzzer module(BZ) |
|-----------------|--------------------------------------------|---|-----------------------------------------|---|-------------------|

#### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V | AC220V |
|-------------------------------|-------|-------|--------|--------|
| Light source current(1 layer) | 120mA | 55mA  | 25mA   | 25mA   |
| Buzzer current                | 30mA  | 55mA  | 110mA  | 130mA  |

#### Customization

- Customized pole length available
- Beige color
- LED Strobe(Model number: QT70LS-BZ)
- LED simulated revolving(Model number: QT70LR-BZ)

#### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

#### Ordering Specifications

|                |   |            |   |            |   |           |   |                 |
|----------------|---|------------|---|------------|---|-----------|---|-----------------|
| QT70L-BZ       | - | 3          | - | 24         | - | RAG       | - | LW24            |
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color]   |   | [Bracket]       |
| QT70L-BZ       |   | 1-1 Layer  |   | 12-DC12V   |   | ● R-Red   |   | · None-Standard |
| QT70LF-BZ      |   | 2-2 Layers |   | 24-DC24V   |   | ● A-Amber |   | · Bracket       |
|                |   | 3-3 Layers |   | 110-AC110V |   | ● G-Green |   | -LB24 -LW24     |
|                |   | 4-4 Layers |   | 220-AC220V |   | ● B-Blue  |   | -QZ24 -SZ24     |
|                |   |            |   |            |   |           |   | -QL24 -SL24     |



QT70L-BZ

Beige color  
Beige color is  
available



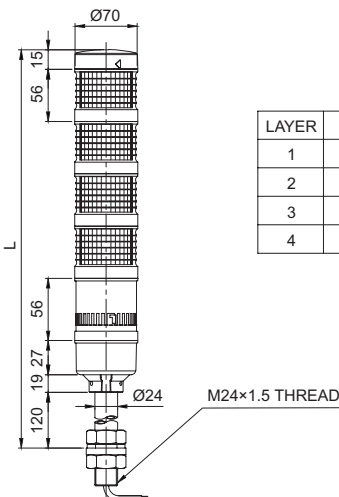
#### Wiring Instructions

- LED tower light can be wired by using transistor and external contact

#### Technical Diagram

Units : mm

##### ·QT70L-BZ



| LAYER | L   |
|-------|-----|
| 1     | 293 |
| 2     | 349 |
| 3     | 405 |
| 4     | 461 |

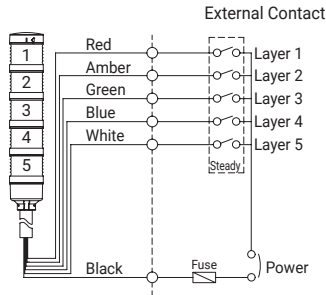
### Wiring Instructions(Wiring using External Contact)

- QT Series can be wired by using both External Contact and transistor.
- In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

#### Wiring instructions

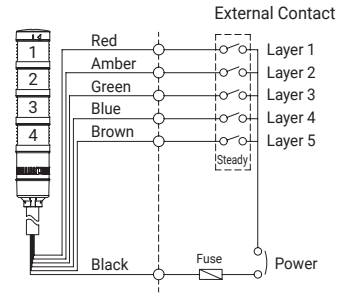
DC/AC standard

QT50ML(F)  
QT50MLS(DC only)  
QT50MLR(DC only)  
QT50L(F)  
QT50LS(DC only)  
QT50LR(DC only)  
QT70ML(F)  
QT70MLS(DC only)  
QT70MLR(DC only)  
QT70L(F)  
QT70LS(DC only)  
QT70LR(DC only)



DC/AC buzzer

QT50ML(F)-BZ  
QT50MLS-BZ(DC only)  
QT50MLR-BZ(DC only)  
QT50L(F)-BZ  
QT50LS-BZ(DC only)  
QT50LR-BZ(DC only)  
QT70ML(F)-BZ  
QT70MLS-BZ(DC only)  
QT70MLR-BZ(DC only)  
QT70L(F)-BZ  
QT70LS-BZ(DC only)  
QT70LR-BZ(DC only)



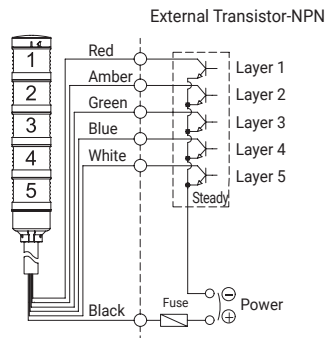
### Wiring Instructions(Wiring using transistor)

- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.

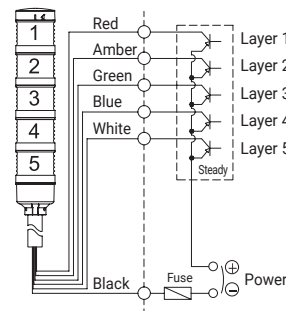
#### Wiring instructions

DC standard

QT50ML(F)  
QT50MLS  
QT50MLR  
QT50L(F)  
QT50LS  
QT50LR  
QT70ML(F)  
QT70MLS  
QT70MLR  
QT70L(F)  
QT70LS  
QT70LR

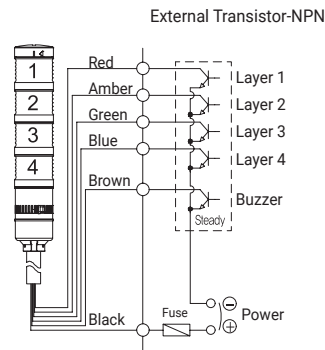


External Transistor-PNP

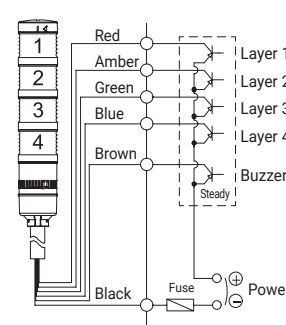


DC buzzer

QT50ML(F)-BZ  
QT50MLS-BZ  
QT50MLR-BZ  
QT50L(F)-BZ  
QT50LS-BZ  
QT50LR-BZ  
QT70ML(F)-BZ  
QT70MLS-BZ  
QT70MLR-BZ  
QT70L(F)-BZ  
QT70LS-BZ  
QT70LR-BZ



External Transistor-PNP



- DC steady type cable specification: External power/ signal line - UL1007 AWG22(0.3sq) 400mm.
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) × 2C 400mm,  
External signal line - UL1007 AWG22(0.3sq) 400mm



## ST45ML-Ex



Non-sparking explosion proof LED tower lights suitable for use in zone 2 hazardous areas



ST45ML-Ex

### PRODUCT SPECIFICATION

ST45ML-Ex | STB45ML-Ex

#### Materials

Lens-PC, Housing-PC, Mounting housing-Al, Cover-PC/Al

**Ambient operating temperature**  $-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$

**Protection rating** IP54

**Explosion protection rating**

KCs- Ex nR II T6 IP54 (Layer2-3)

NEPSI, CCC -Ex nR IIC T6 Gc (Layer1-5)

KCs - Ex nR II T4 IP54 (Customization, Layer1-5)

- Non- sparking explosion protected high-intensity LED steady tower lights
  - Excellent distance visibility by using a special reflector to arrogate the light from the LED filament
  - Reduced maintenance with use of long-lasting LED light source
  - Lens and housing are made of polycarbonate with excellent durability, suitable for potentially hazardous and explosive environments
  - Can be used for Zone 2 application with explosion proof rating of nR
- ※ Zone2 : Equipment is capable of operating under abnormal high risk environmental conditions for a short duration



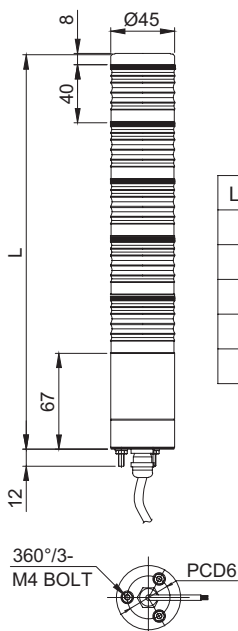
### ST45ML-Ex Non-Sparking Explosion Proof LED Tower Light

| Model number        | Layer | Voltage | Certificates | Weight | Color                             |
|---------------------|-------|---------|--------------|--------|-----------------------------------|
| ST45ML-Ex<br>ST45ML | 1     | DC12V   |              | 0.19kg | ● R-Red                           |
|                     |       | DC24V   |              | 0.19kg |                                   |
|                     | 2     | DC12V   |              | 0.24kg | ● R-Red                           |
|                     |       | DC24V   |              | 0.24kg | ● G-Green                         |
|                     | 3     | DC12V   |              | 0.29kg | ● R-Red                           |
|                     |       | DC24V   |              | 0.29kg | ● A-Amber<br>● G-Green            |
|                     | 4     | DC12V   |              | 0.32kg | ● R-Red<br>● A-Amber<br>● G-Green |
|                     |       | DC24V   |              | 0.32kg | ● B-Blue                          |
|                     | 5     | DC12V   |              | 0.36kg | ● R-Red<br>● A-Amber<br>● G-Green |
|                     |       | DC24V   |              | 0.36kg | ● B-Blue<br>○ W-White             |

### Technical Diagram

Units: mm

• ST45ML-Ex



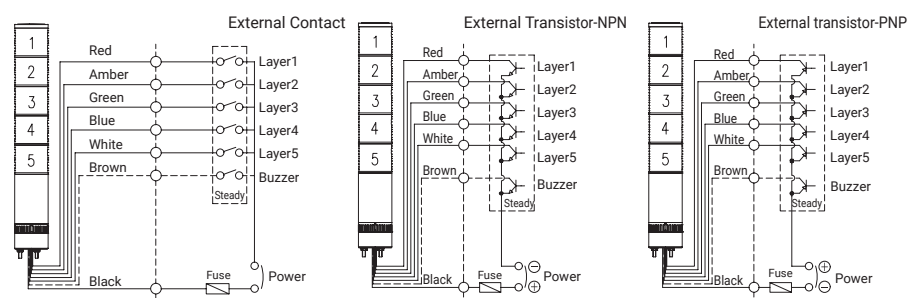
| LAYER | L   |
|-------|-----|
| 1     | 115 |
| 2     | 155 |
| 3     | 195 |
| 4     | 235 |
| 5     | 275 |

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 24mA  | 12mA  |

### Wiring Instructions

• ST45ML-Ex-DC / STB45ML-Ex-DC



# Built-in Buzzer Non-Sparking Explosion Proof Tower Lights

## STB45ML-Ex



Non-sparking explosion proof LED tower lights suitable for use in zone 2 hazardous areas

### STB45ML-Ex Built-in Buzzer Non-Sparking Explosion Proof Tower Lights

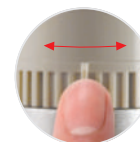
| Model number          | Layer | Voltage | Certificates | Weight | Color                             |
|-----------------------|-------|---------|--------------|--------|-----------------------------------|
| STB45ML-Ex<br>STB45ML | 1     | DC12V   | CCC          | 0.26kg | ● R-Red                           |
|                       |       | DC24V   | EA NEPSI     | 0.26kg |                                   |
|                       | 2     | DC12V   | CCs          | 0.30kg | ● R-Red                           |
|                       |       | DC24V   | CCC          | 0.30kg | ● G-Green                         |
|                       | 3     | DC12V   | EA NEPSI     | 0.34kg | ● R-Red                           |
|                       |       | DC24V   | CE           | 0.34kg | ● A-Amber<br>● G-Green            |
|                       | 4     | DC12V   |              | 0.38kg | ● R-Red<br>● A-Amber<br>● G-Green |
|                       |       | DC24V   | CCC          | 0.38kg | ● B-Blue                          |
|                       | 5     | DC12V   | EA NEPSI     | 0.42kg | ● R-Red<br>● A-Amber<br>● G-Green |
|                       |       | DC24V   |              | 0.42kg | ● B-Blue<br>○ W-White             |

· Sound volume adjustable by volume control lever, Sound volume: Max.83dB at 1m

※ CE compliant: DC24V



STB45ML-Ex



Sound volume adjustable by volume control lever

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 20mA  | 10mA  |
| Buzzer current                | 20mA  | 30mA  |

### Ordering Specification

#### · KCs Certificates - Ex nR II T6

|                    |   |                   |   |           |   |           |   |                |
|--------------------|---|-------------------|---|-----------|---|-----------|---|----------------|
| STB45ML3           | - | Ex                | - | 12        | - | R         | - | KCs            |
| [Model number]     |   | [Explosion Proof] |   | [Voltage] |   | [Color]   |   | [Certificates] |
| ST45ML2(2 layers)  |   |                   |   | 12-DC12V  |   | ● R-Red   |   | KCs            |
| STB45ML2(2 layers) |   |                   |   | 24-DC24V  |   | ● G-Green |   |                |
| ST45ML3(3 layers)  |   |                   |   |           |   | ● R-Red   |   |                |
| STB45ML3(3 layers) |   |                   |   |           |   | ● A-Amber |   |                |
|                    |   |                   |   |           |   | ● G-Green |   |                |

#### · CCC Certificates - Ex nR IIC T6 Gc

|                |   |           |   |           |   |           |   |                |
|----------------|---|-----------|---|-----------|---|-----------|---|----------------|
| STB45ML        | - | 3         | - | 12        | - | R         | - | CCC/NEPSI      |
| [Model number] |   | [Layer]   |   | [Voltage] |   | [Color]   |   | [Certificates] |
| ST45ML         |   | 1-1Layer  |   | 12-DC12V  |   | ● R-Red   |   | CCC(NEPSI)     |
| STB45ML        |   | 2-2Layers |   | 24-DC24V  |   | ● A-Amber |   |                |
|                |   | 3-3Layers |   |           |   | ● G-Green |   |                |
|                |   | 4-4Layers |   |           |   | ● B-Blue  |   |                |
|                |   | 5-5Layers |   |           |   | ○ W-White |   |                |

### Technical Diagram

Units: mm

#### · STB45ML-Ex



| LAYER | L   |
|-------|-----|
| 1     | 149 |
| 2     | 189 |
| 3     | 229 |
| 4     | 269 |
| 5     | 309 |

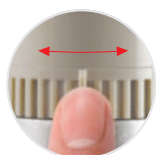
### Cautions in use of explosion proof tower lights

· Contact structure of an explosion proof product must be a qualified part we provide, please do not disassemble, assemble, modify or repair arbitrarily.

## STB45ML-NEC



STB45ML-NEC



Sound volume adjustable by volume control lever

### PRODUCT SPECIFICATION

STB45ML-NEC

#### Materials

Lens-PC, Housing-PC, Mounting housing-Al, Upper cover-Al

**Ambient operating temperature**  $-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$

**Sound volume** Max.83dB at 1m

**Protection rating** IP54

#### Explosion protection rating

Class I, Division 2 Groups A,B,C,D T6

Class I, Zone 2, AEX ec IIC T6 Gc

**Certificates** INTERTEK(NRTL), IECEX, CE

- High brightness LED steady type with NRTL certified Increased safety explosion Proof LED tower lights
- NRTL(Nationally Recognized Testing Laboratory) is a system for product safety testing and certification, this product can be installed and used not only in the United States but also in Canada.
- Excellent distance visibility by using a special reflector to arrogate the light from the LED filament
- Reduced maintenance cost with use of long-lasting LED light source
- Lens and housing are made of polycarbonate with excellent durability, suitable for potentially hazardous and explosive environments

### STB45ML-NEC Built-in Buzzer Increased Safety Explosion Proof LED Tower Lights

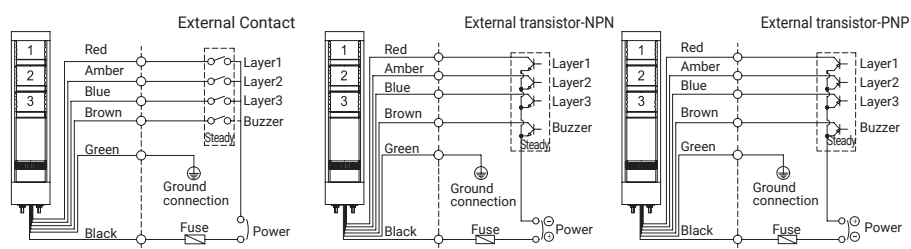
| Model number | Layer | Voltage | Certificates                                                                                                                                                                                                                                                      | Weight | Color                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|-------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STB45ML-NEC  | 3     | DC24V   |    | 0.40kg | <div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="color: red; font-weight: bold; margin-right: 5px;">●</span> R-Red                 </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="color: yellow; font-weight: bold; margin-right: 5px;">●</span> A-Amber                 </div> <div style="display: flex; align-items: center;"> <span style="color: green; font-weight: bold; margin-right: 5px;">●</span> G-Green                 </div> </div> |

#### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC24V |
|-------------------------------|-------|
| Light source current(1 layer) | 12mA  |
| Buzzer current                | 40mA  |

#### Wiring Instructions

##### • STB45ML-NEC-DC

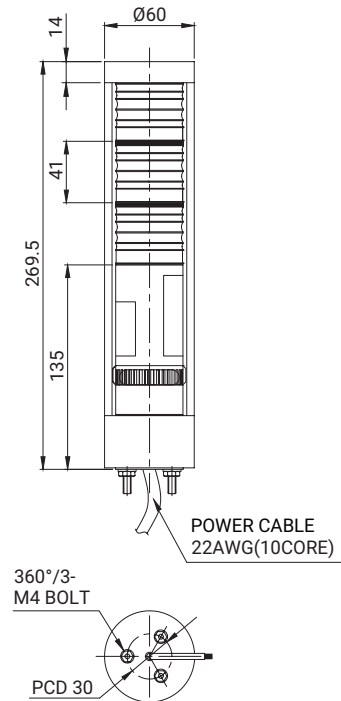




## Technical Diagram

Units: mm

·STB45ML-NEC



## Ordering Specification

|                |   |           |   |           |   |                                   |   |                         |
|----------------|---|-----------|---|-----------|---|-----------------------------------|---|-------------------------|
| STB45ML-NEC    | - | 3         | - | 24        | - | R                                 | - | IECEX                   |
| [Model number] |   | [Layer]   |   | [Voltage] |   | [Color]                           |   | [Certificates]          |
| STB45ML-NEC    |   | 3-3Layers |   | 24-DC24V  |   | ● R-Red<br>● A-Amber<br>● G-Green |   | INTERTEK(NRTL)<br>IECEX |

## Cautions in use of explosion proof tower lights

- Contact structure of an explosion proof product must be a qualified part we provide, please do not disassemble, assemble, modify or repair arbitrarily.

# QTEX Series

Explosion proof LED tower lights with flame proof housing



QTEX Self mount



QTEX Wall mount

## PRODUCT SPECIFICATION

QTEX | QTEXB

### Materials

Lens-Tempered glass, Filter Lens-AS, Housing-Al,  
Reflector-Heat resistant ABS

**Ambient operating temperature**  $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$

**Sound volume** Max.90dB at 1m(QTEXB)

### Explosion protection rating

IECEX - Ex db II C T6 Gb, IP66

Ex tb IIIC T85°C Db, IP66

ATEX - EX II 2G Ex db II C T6 Gb, IP66

EX II 2D Ex tb IIIC T85°C Db, IP66

KCs - Ex d II C T6, IP66

**Certificates** IECEX, ATEX, KCs, TIIS(QTEXB only)

**Cable entry** 3/4" NPT 2WAY

- Explosion proof LED tower lights with Ex d IIC rating can be used in explosive gas environments
- Excellent distance visibility by using a special reflector to aggregate the light from the LED filament
- Ø80 LED tower light mounted inside the flame proof housing
- Aluminum housing provides excellent durability
- Long-lasting high intensity LED light source
- Terminal box located inside the housing for easy power wiring
- Direct mount type and wall mount type available depending on application needs.

## QTEX Explosion Proof LED Tower Lights with Flame Proof Housing

| Model number              | Layer | Voltage    | Certificates                                                                                                                                                                                                                                                            | Weight | Color                                                      |
|---------------------------|-------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------|
| QTEX<br>(Steady/Flashing) | 1     | DC12V      | <br><br> | 4.01kg | ● R-Red                                                    |
|                           |       | DC24V      |                                                                                                                                                                                                                                                                         | 4.01kg |                                                            |
|                           |       | AC95V-230V |                                                                                                                                                                                                                                                                         | 4.02kg |                                                            |
|                           | 2     | DC12V      |                                                                                                                                                                                                                                                                         | 4.15kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                           |       | DC24V      |                                                                                                                                                                                                                                                                         | 4.15kg |                                                            |
|                           |       | AC95V-230V |                                                                                                                                                                                                                                                                         | 4.16kg |                                                            |
|                           | 3     | DC12V      |                                                                                                                                                                                                                                                                         | 4.31kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                           |       | DC24V      |                                                                                                                                                                                                                                                                         | 4.31kg |                                                            |
|                           |       | AC95V-230V |                                                                                                                                                                                                                                                                         | 4.32kg |                                                            |
|                           | 4     | DC12V      |                                                                                                                                                                                                                                                                         | 4.46kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                           |       | DC24V      |                                                                                                                                                                                                                                                                         | 4.46kg |                                                            |
|                           |       | AC95V-230V |                                                                                                                                                                                                                                                                         | 4.47kg |                                                            |
|                           | 5     | DC12V      |                                                                                                                                                                                                                                                                         | 4.61kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
|                           |       | DC24V      |                                                                                                                                                                                                                                                                         | 4.61kg |                                                            |
|                           |       | AC95V-230V |                                                                                                                                                                                                                                                                         | 4.62kg |                                                            |

### Light source current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC95V-230V |
|-------------------------------|-------|-------|------------|
| Light source current(1 layer) | 80mA  | 60mA  | Max.55mA   |



## QTEXB Built-in Siren Buzzer Type Explosion Proof LED Tower Lights with Flame Proof Housing

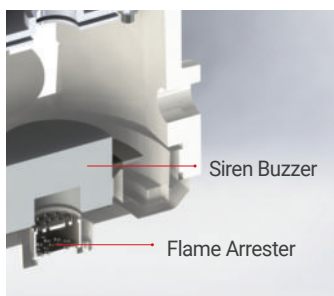
| Model number               | Layer | Voltage    | Certificates | Weight | Color                              |
|----------------------------|-------|------------|--------------|--------|------------------------------------|
| QTEXB<br>(Steady/Flashing) | 1     | DC12V      | <br><br><br> | 4.11kg | ● R-Red                            |
|                            |       | DC24V      |              | 4.11kg |                                    |
|                            |       | AC95V-230V |              | 4.12kg |                                    |
|                            | 2     | DC12V      |              | 4.25kg | ● R-Red                            |
|                            |       | DC24V      |              | 4.25kg | ● A-Amber                          |
|                            |       | AC95V-230V |              | 4.26kg | ● G-Green                          |
|                            | 3     | DC12V      |              | 4.41kg | ● R-Red                            |
|                            |       | DC24V      |              | 4.41kg | ● A-Amber                          |
|                            |       | AC95V-230V |              | 4.42kg | ● G-Green                          |
|                            | 4     | DC12V      |              | 4.56kg | ● R-Red                            |
|                            |       | DC24V      |              | 4.56kg | ● A-Amber                          |
|                            |       | AC95V-230V |              | 4.57kg | ● B-Blue                           |
|                            | 5     | DC12V      |              | 4.71kg | ● R-Red                            |
|                            |       | DC24V      |              | 4.71kg | ● A-Amber                          |
|                            |       | AC95V-230V |              | 4.72kg | ● G-Green<br>● B-Blue<br>○ W-White |

- Explosion proof LED tower lights with visual & audible signal that can be used in hazardous environments
- Sound tone & volume: Siren buzzer, Max.90dB at 1m

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC95V-230V |
|-------------------------------|-------|-------|------------|
| Light source current(1 layer) | 80mA  | 60mA  | Max.55mA   |
| Buzzer current                | 60mA  | 120mA | Max.80mA   |

### Explosion proof structure for buzzer model



#### · FLAME ARRESTER

A flame arrester(also called a deflagration arrester) functions by absorbing the heat from a flame front traveling at sub-sonic velocities, thus dropping the burning gas/air mixture below its auto-ignition temperature: consequently, the flame cannot survive. The heat is absorbed through channels (passages) designed into an element.



QTEXB Self mount



QTEXB Wall mount

### Ordering Specification

|                |   |           |   |                   |   |           |   |                  |
|----------------|---|-----------|---|-------------------|---|-----------|---|------------------|
| QTEX           | - | 3         | - | 12                | - | RAG       | - | IECEx            |
| [Model number] |   | [Layer]   |   | [Voltage]         |   | [Color]   |   | [Certificates]   |
| QTEX           |   | 1-1Layer  |   | 12-DC12V          |   | ● R-Red   |   | IECEx            |
| QTEXB          |   | 2-2Layers |   | 24-DC24V          |   | ● A-Amber |   | ATEX             |
|                |   | 3-3Layers |   | 95/230-AC95V-230V |   | ● G-Green |   | KCs              |
|                |   | 4-4Layers |   |                   |   | ● B-Blue  |   | TIIS(QTEXB only) |
|                |   | 5-5Layers |   |                   |   | ○ W-White |   |                  |

### Customization

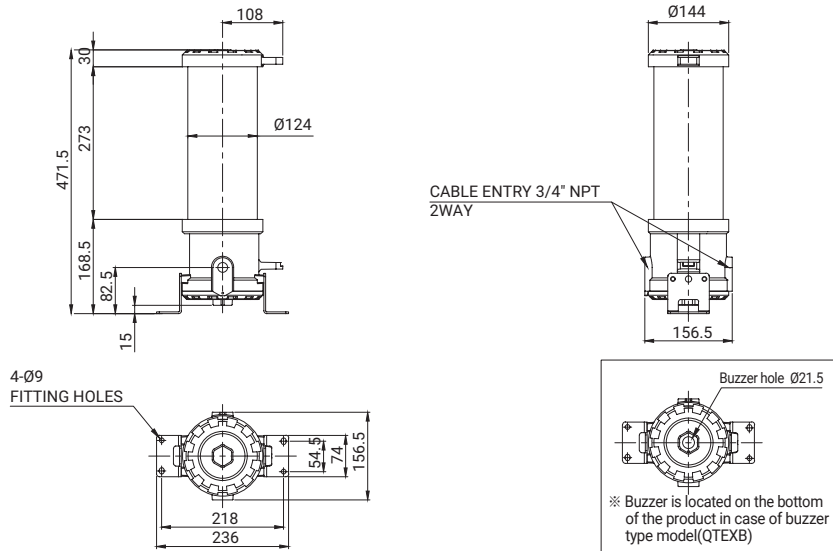
- Explosion proof cable gland attached type available (Standard type does not come with explosion proof cable gland)
- Cable entry 1/2"NPT, M20X1.5, M25X1.5, 1/2"PF(KCs only), 3/4"PF(KCs only)

## QTEX Series

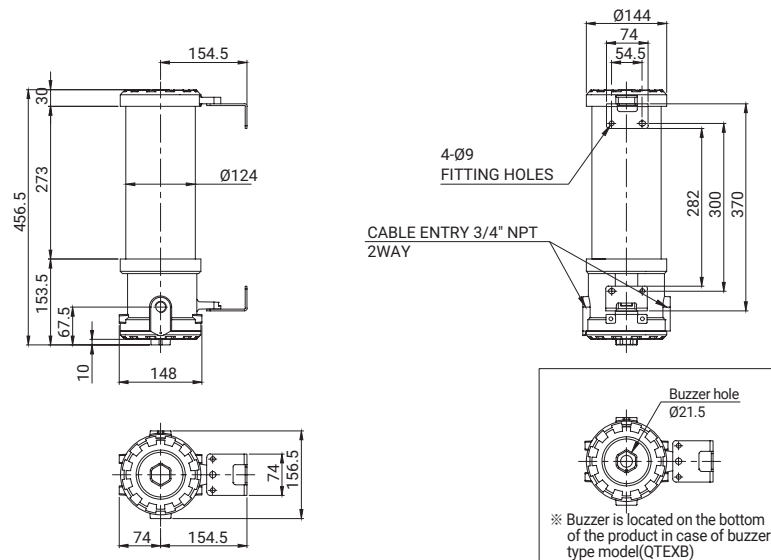
### Technical Diagram

Units: mm

#### · QTEX / QTEXB-Self mount



#### · QTEX / QTEXB-Wall mount



### Cautions in using explosion proof tower lights

- Explosion proof products should be maintained by explosion proof regulation, please do not disassemble, assemble, modify or repair arbitrarily. In case disassembly is required for wiring or repair, structures such as the contact parts should maintain the same initial condition that we provided.
- Cable gland must be used in explosion proof certified products which satisfy the T6 temperature rating and IP66 protection rating.

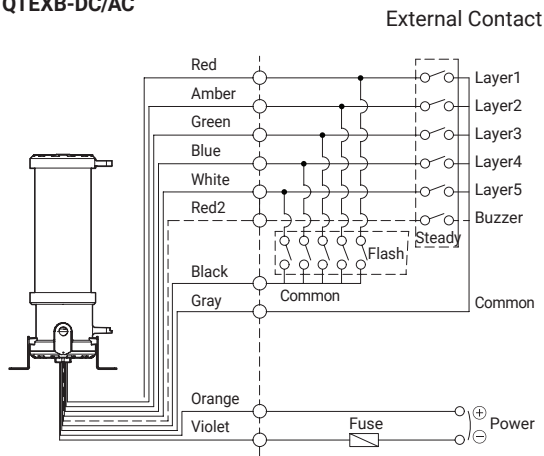


## Wiring Instructions

- QTEX / QTEXB wiring with transistors and External Contacts.
- In case of wiring with transistors, please use PNP transistors and wiring exactly following below technical diagram.

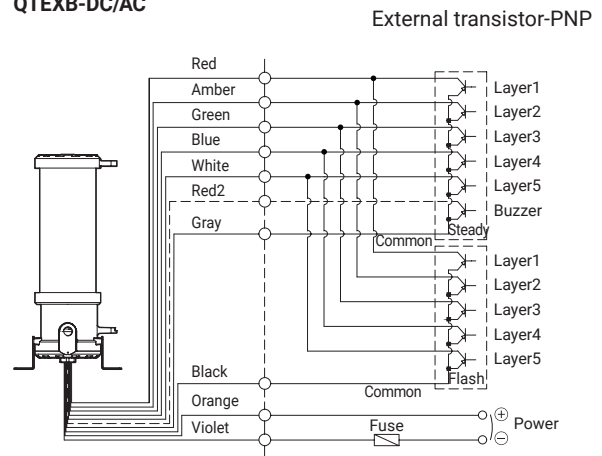
### External Contacts type

QTEX-DC/AC  
QTEXB-DC/AC

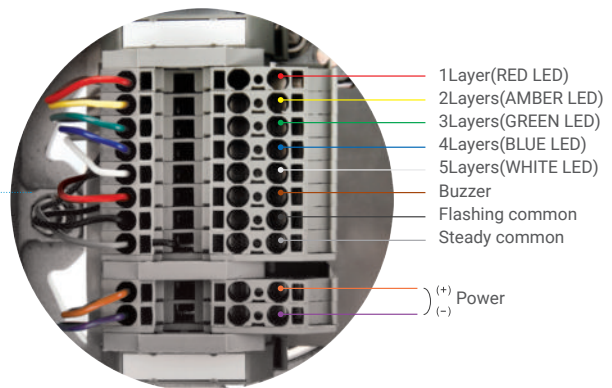


### Transistor type

QTEX-DC/AC  
QTEXB-DC/AC



## Terminal Wiring Information



QTEX series consists of a blocked terminal which is convenient for internal wiring of the terminal box. Please refer to technical diagram for detailed Wiring Instructions.

# Flame and Dust Ignition Proof Slim LED Signal Tower Light

## QST50-Ex



QST50-Ex

### PRODUCT SPECIFICATION

QST50-Ex | QST50B-Ex

#### Materials

Lens-PC, Diffusion lens-PC, Housing-Al, Cover-Al

#### Ambient operating temperature

-40°C ≤ Tamb ≤ +60°C

#### Explosion protection rating

IECEX - Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

ATEX - Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

KCs - Ex db IIC T6 Gb, IP66/IP67

**Certificates** IECEX, ATEX, KCs, NEPSI, CCC

**Sound volume** Max.90dB at 1m

**Housing standard color** Silver

**Cable entry** M20xP1.5, 1/2"NPT

**Flashing rate** 60-80 flashes/min

- Ex db IIC T6 Gb rated flame/dust ignition proof LED tower light for use in explosive gas areas
- Excellent long-distance visibility by applying a special light diffusion tube that condenses LED light
- Aluminum housing provides excellent durability
- Semi-permanent service life with long-lasting LED light source



### QST50-Ex Flame/Dust Ignition Proof Slim LED Signal Tower Light

| Model number | Layer | Voltage     | Certificates | Weight | Color   |
|--------------|-------|-------------|--------------|--------|---------|
| QST50-Ex     | 1     | DC24V       |              | 1.13kg | R-Red   |
|              |       | AC110V-230V |              |        |         |
|              | 2     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | G-Green |
|              | 3     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | A-Amber |
|              | 4     | DC24V       |              |        | G-Green |
|              |       | AC110V-230V |              |        | B-Blue  |
|              | 5     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | A-Amber |

#### Light source current(based on 1 layer)

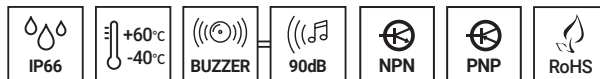
| Voltage                       | DC24V | AC110V-230V |
|-------------------------------|-------|-------------|
| Light source current(1 layer) | 75mA  | Max.55mA    |

#### Ordering Specification

|                |   |           |   |                     |   |         |   |                |
|----------------|---|-----------|---|---------------------|---|---------|---|----------------|
| QST50-Ex       | - | 5         | - | 24                  | - | RAGBW   | - | IECEX          |
| [Model number] |   | [Layer]   |   | [Voltage]           |   | [Color] |   | [Certificates] |
| QST50-Ex       |   | 1-1Layer  |   | 24-DC24V            |   | R-Red   |   | IECEX          |
|                |   | 2-2Layers |   | 110/230-AC110V-230V |   | A-Amber |   | ATEX           |
|                |   | 3-3Layers |   |                     |   | G-Green |   | KCs            |
|                |   | 4-4Layers |   |                     |   | B-Blue  |   | CCC(NEPSI)     |
|                |   | 5-5Layers |   |                     |   | W-White |   |                |

# Flame/Dust Ignition Proof Slim LED Signal Tower Light with Built-in Buzzer

## QST50B-Ex



### QST50B-Ex Flame/Dust Ignition Proof Slim LED Signal Tower Light with Built-in Buzzer

| Model number | Layer | Voltage     | Certificates | Weight | Color                                            |
|--------------|-------|-------------|--------------|--------|--------------------------------------------------|
| QST50B-Ex    | 1     | DC24V       |              | 1.30kg | R-Red                                            |
|              |       | AC110V-230V |              |        |                                                  |
|              | 2     | DC24V       |              |        | R-Red                                            |
|              |       | AC110V-230V |              |        | G-Green                                          |
|              | 3     | DC24V       |              |        | R-Red                                            |
|              |       | AC110V-230V |              |        | A-Amber<br>G-Green                               |
|              | 4     | DC24V       |              |        | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|              |       | AC110V-230V |              |        |                                                  |
|              | 5     | DC24V       |              |        | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |
|              |       | AC110V-230V |              |        |                                                  |

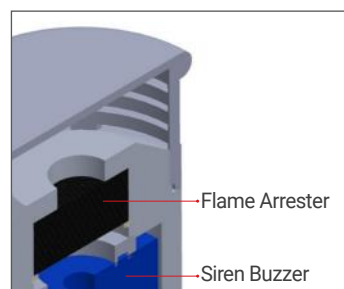


QST50B-Ex

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC24V | AC110V-230V |
|-------------------------------|-------|-------------|
| Light source current(1 layer) | 75mA  | Max.55mA    |
| Buzzer current                | 50mA  | Max.40mA    |

### Explosion proof structure for buzzer model



#### · FLAME ARRESTER

A flame arrester(also called a deflagration arrester) functions by absorbing the heat from a flame front traveling at sub-sonic velocities, thus dropping the burning gas/air mixture below its auto-ignition temperature: consequently, the flame cannot survive. The heat is absorbed through channels (passages) designed into an element.

### Ordering Specification

|                             |   |                                                                         |   |                                              |   |                                                             |   |                                                      |
|-----------------------------|---|-------------------------------------------------------------------------|---|----------------------------------------------|---|-------------------------------------------------------------|---|------------------------------------------------------|
| QST50B-Ex                   | - | 5                                                                       | - | 24                                           | - | RAGBW                                                       | - | IECEx                                                |
| [Model number]<br>QST50B-Ex |   | [Layer]<br>1-1Layer<br>2-2Layers<br>3-3Layers<br>4-4Layers<br>5-5Layers |   | [Voltage]<br>24-DC24V<br>110/230-AC110V-230V |   | [Color]<br>R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |   | [Certificates]<br>IECEx<br>ATEX<br>KCs<br>CCC(NEPSI) |

# Flame/Dust Ignition Proof Slim LED Signal Tower Light with Terminal Block

## QST50T-Ex



QST50T-Ex

### PRODUCT SPECIFICATION

QST50T-Ex | QST50BT-Ex

#### Materials

Lens-PC, Light diffusion Lens-PC, Housing-Al, Cover-Al

**Ambient operating temperature** -40°C ≤ Tamb ≤ +60°C

**Sound volume** Max.90dB at 1m(Built-in buzzer type)

#### Explosion protection rating

IECEX - Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

ATEX - Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

KCs - Ex db IIC T6 Gb, IP66/IP67

**Certificates** IECEX, ATEX, KCs, NEPSI, CCC

**Sound volume** Max.90dB at 1m

**Housing standard color** Silver

**Cable entry** M20xP1.5, 1/2"NPT

**Flashing rate** 60-80 flashes/min

- Ex db IIC T6 Gb rated flame/dust ignition proof LED tower light for use in explosive gas areas
- Excellent long-distance visibility by applying a special light diffusion tube that condenses LED light
- Features superior durability with aluminum housing
- Semi-permanent service life with long-lasting LED light source
- Terminal block located inside the housing for easy power wiring



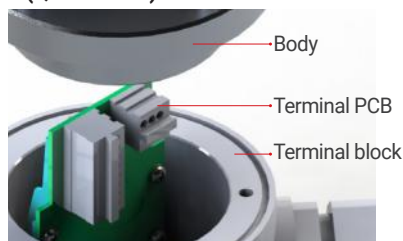
### QST50T-Ex Flame/Dust Ignition Proof Slim LED Signal Tower Light with Terminal Block

| Model number | Layer | Voltage     | Certificates | Weight | Color   |
|--------------|-------|-------------|--------------|--------|---------|
| QST50T-Ex    | 1     | DC24V       |              | 1.77Kg | R-Red   |
|              |       | AC110V-230V |              |        |         |
|              | 2     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | G-Green |
|              | 3     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | A-Amber |
|              | 4     | DC24V       |              |        | G-Green |
|              |       | AC110V-230V |              |        | B-Blue  |
|              | 5     | DC24V       |              |        | R-Red   |
|              |       | AC110V-230V |              |        | A-Amber |

#### Light source current(based on 1 layer)

| Voltage                       | DC24V | AC110V-230V |
|-------------------------------|-------|-------------|
| Light source current(1 layer) | 75mA  | Max.55mA    |

#### Terminal Box Wiring Instructions (QST50T-Ex)

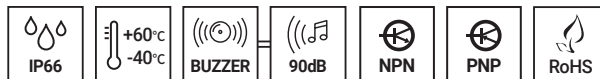


#### Ordering Specification

|                |   |           |   |                     |   |         |   |                |
|----------------|---|-----------|---|---------------------|---|---------|---|----------------|
| QST50T-Ex      | - | 5         | - | 24                  | - | RAGBW   | - | IECEX          |
| [Model number] |   | [Layer]   |   | [Voltage]           |   | [Color] |   | [Certificates] |
| QST50T-Ex      |   | 1-1Layer  |   | 24-DC24V            |   | R-Red   |   | IECEX          |
|                |   | 2-2Layers |   | 110/230-AC110V-230V |   | A-Amber |   | ATEX           |
|                |   | 3-3Layers |   |                     |   | G-Green |   | KCs            |
|                |   | 4-4Layers |   |                     |   | B-Blue  |   | CCC(NEPSI)     |
|                |   | 5-5Layers |   |                     |   | W-White |   |                |

# Flame/Dust Ignition Proof Slim LED Signal Tower Light with Built-in Buzzer and Terminal Block

## QST50BT-Ex



### QST50BT-Ex Flame/Dust Ignition Proof Slim LED Tower Light with Built-in Buzzer & Terminal Block

| Model number | Layer | Voltage     | Certificates | Weight | Color                                   |
|--------------|-------|-------------|--------------|--------|-----------------------------------------|
| QST50BT-Ex   | 1     | DC24V       |              | 1.93Kg | R-Red                                   |
|              |       | AC110V-230V |              |        |                                         |
|              | 2     | DC24V       |              |        | R-Red                                   |
|              |       | AC110V-230V |              |        | G-Green                                 |
|              | 3     | DC24V       |              |        | R-Red                                   |
|              |       | AC110V-230V |              |        | A-Amber<br>G-Green                      |
|              | 4     | DC24V       |              |        | R-Red                                   |
|              |       | AC110V-230V |              |        | A-Amber<br>G-Green<br>B-Blue            |
|              | 5     | DC24V       |              |        | R-Red                                   |
|              |       | AC110V-230V |              |        | A-Amber<br>G-Green<br>B-Blue<br>W-White |

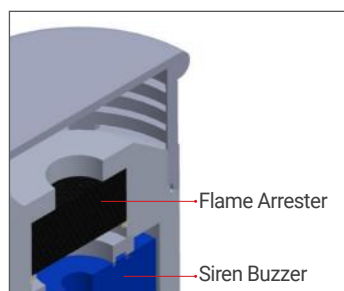


QST50BT-Ex

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC24V | AC110V-230V |
|-------------------------------|-------|-------------|
| Light source current(1 layer) | 75mA  | Max.55mA    |
| Buzzer current                | 50mA  | Max.40mA    |

### Explosion proof structure for buzzer model



#### · FLAME ARRESTER

A flame arrester(also called a deflagration arrester) functions by absorbing the heat from a flame front traveling at sub-sonic velocities, thus dropping the burning gas/air mixture below its auto-ignition temperature: consequently, the flame cannot survive. The heat is absorbed through channels (passages) designed into an element.

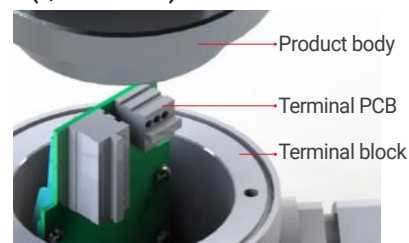
### Customization

- Explosion proof cable gland attached type available(Standard type does not come with explosion proof cable gland)
- Cable entry size 3/4"NPT
- Explosion Proof Certification cable gland

### Ordering Specification

|                |                                                              |                                 |                                                  |                                    |
|----------------|--------------------------------------------------------------|---------------------------------|--------------------------------------------------|------------------------------------|
| QST50BT-Ex     | 5                                                            | 24                              | RAGBW                                            | IECEx                              |
| [Model number] | [Layer]                                                      | [Voltage]                       | [Color]                                          | [Certificates]                     |
| QST50BT-Ex     | 1-1Layer<br>2-2Layers<br>3-3Layers<br>4-4Layers<br>5-5Layers | 24-DC24V<br>110/230-AC110V-230V | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White | IECEx<br>ATEX<br>KCs<br>CCC(NEPSI) |

### Terminal Box Wiring Instructions (QST50BT-Ex)

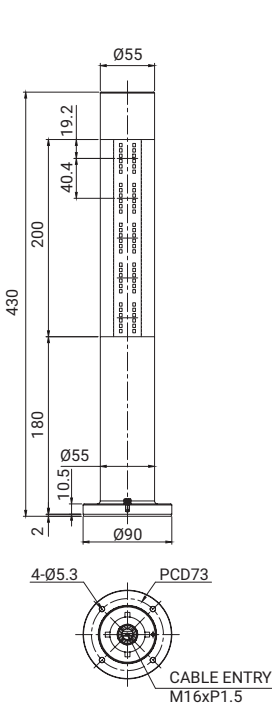


QST50-Ex Series

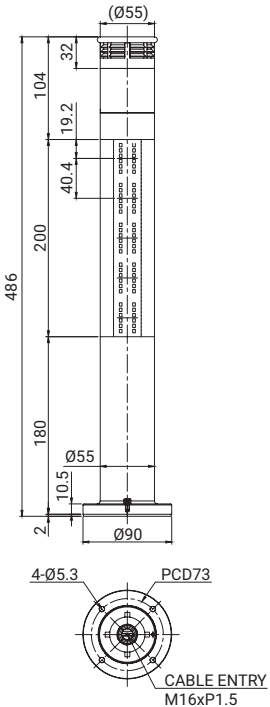
Technical Diagram

Units: mm

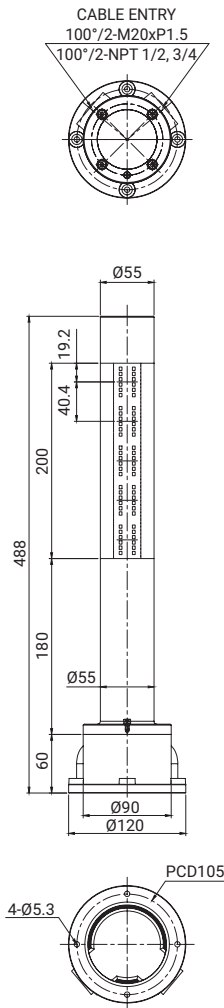
·QST50-Ex-5: DC/AC



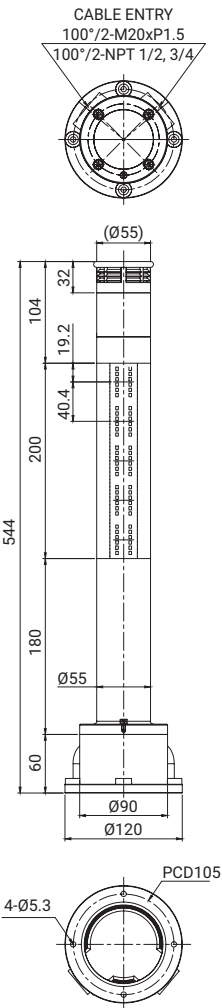
·QST50B-Ex-5: DC/AC



·QST50T-Ex-5: DC/AC



·QST50BT-Ex-5: DC/AC

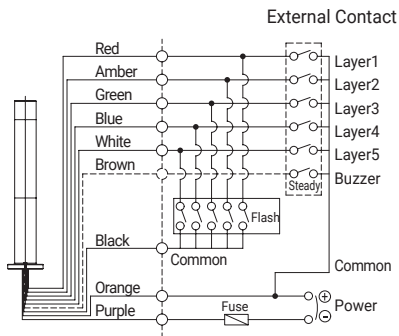


## Wiring Instructions

- QST50-Ex Series can be wired with either External Contact or transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please follow wiring instructions below.

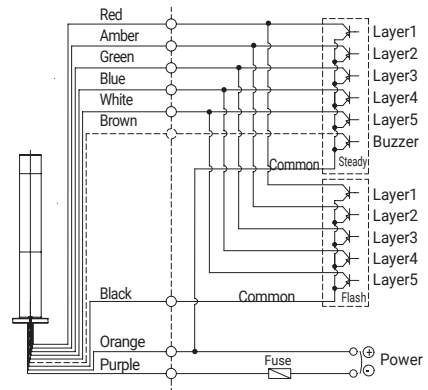
External Contact

DC  
Steady/Flashing



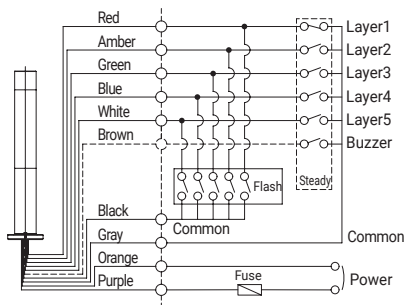
Transistor

External transistor-PNP

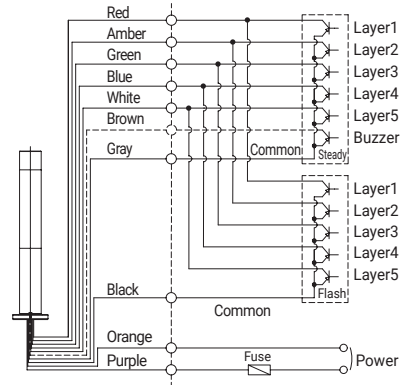


AC  
Steady/Flashing

External Contact



External transistor-PNP

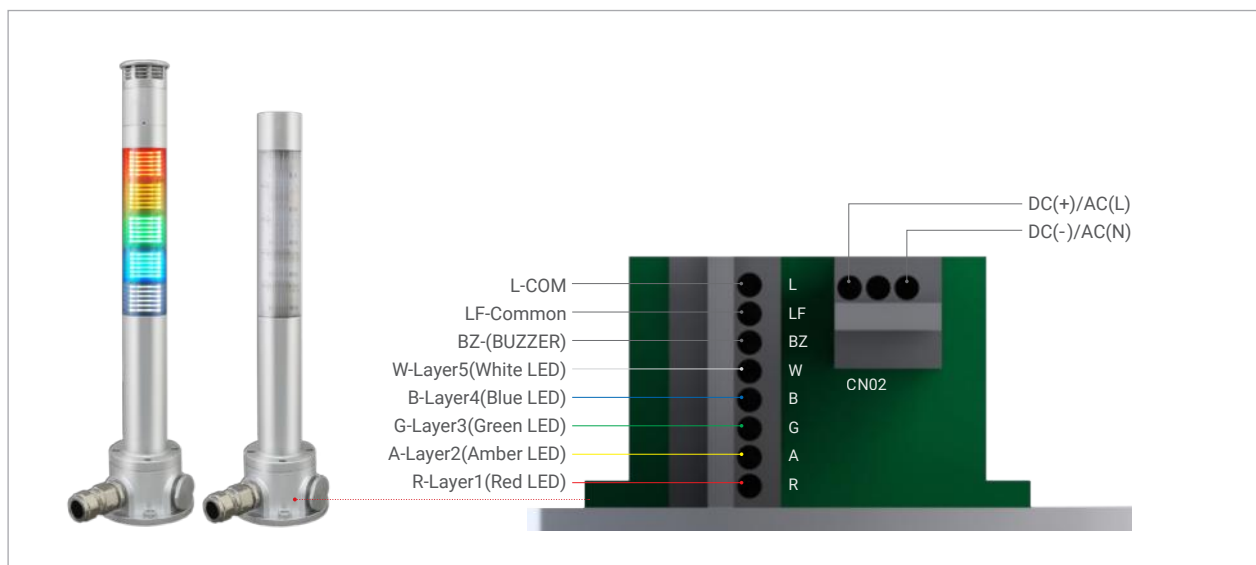




## QST50-Ex Series



### Terminal Wiring Information



# QTG60(M)L-WV

Modular LED Signal Tower Lights with 8 channels custom voice

## PRODUCT SPECIFICATION

QTG60(M)L-WV

**Materials** Lens-PC, Housing-ABS, Pole-Al  
**Ambient operating temperature** -30°C to +50°C  
**Sound volume** Max. 85dB at 1m  
**Protection rating** IP23  
**Certificates** CE  
**Compliant with RoHS directive**

- Modular steady type signal tower lights
- Excellent visibility from a distance with the use of a special color diffusing lens
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTGA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Transistors can be connected and can be operated on PLC directly
- Can be selected one sound tone among a variety of 31 available tones
- Each channel's sum of the sound tone length is 80 seconds
- Sampling rate: 16KHz



### Each modular color lens can be added without additional tools



QTG60(M)L-WV model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.

### WV-Voice alarm with 8 tones



Voice alarm with 8 tones can be configured in accordance with working environment. Please refer to [Sound tone and combination for standard product] on this catalogue for detailed sound tone specification

### The input method of built-in sound type

|     | 1                        | 2                        | 3                        | 4                        | 5                        |
|-----|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| ON  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| OFF | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| No. | 1                        | 2                        | 3                        | 4                        | 5                        |
| 0   | 0                        | 0                        | 0                        | 0                        | 0                        |
| 1   | 0                        | 0                        | 0                        | 0                        | 1                        |
| 2   | 0                        | 0                        | 0                        | 1                        | 0                        |
| :   | :                        | :                        | :                        | :                        | :                        |
| 31  | 1                        | 1                        | 1                        | 1                        | 1                        |

Select from 31 pre-recorded output sound options by using a combination of the 5 channel input switches.

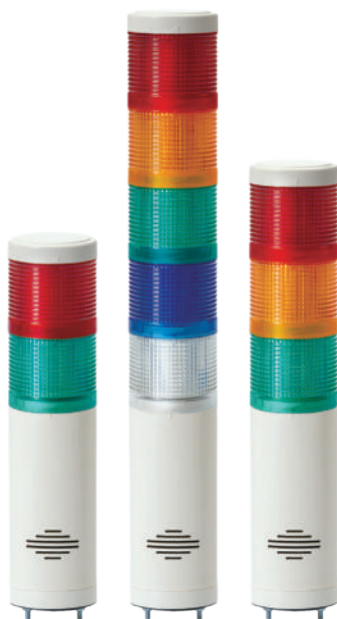
The binary input method allows you to express each of the 31 alarm sound signals with a "0" or "1" by switching the 5 channels on and off as shown in the table.

1. Voice messages are pre-recorded and provided from factory upon user's request
2. Each channel has recording space for 16 sec
3. When only one channel is used, maximum recordable space is 80 sec.



- 1 **Integrated cover and lens mode**  
QTG60(M)L-WV the sleek lens cover model is made of one piece for a simple unified look.
- 2 **Can select from a variety of Mounting brackets option to fit your application needs and build environment**  
There are a variety of Mounting bracket options available depending on cost and installation requirements.

# QTG60ML-WV / QTG60L-WV



QTG60ML-WV Series

## QTG60ML-WV Ø60mm Pole Mount Type, LED Steady Type

| Model number      | Layers | Voltage | Sound Pattern and Volume          | Certificates | Weight | Color                                            |
|-------------------|--------|---------|-----------------------------------|--------------|--------|--------------------------------------------------|
| QTG60ML-WV Steady | 1      | DC24V   | 31 Customizable voices: 80dB-85dB | CE           | 0.38kg | R-Red                                            |
|                   | 2      | DC24V   |                                   |              | 0.43kg | R-Red<br>G-Green                                 |
|                   | 3      | DC24V   |                                   |              | 0.48kg | R-Red<br>A-Amber<br>G-Green                      |
|                   | 4      | DC24V   |                                   |              | 0.53kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                   | 5      | DC24V   |                                   |              | 0.58kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |

※ In case of customized WV 31 tone type, there may be difference of volume depending on user's audio file type.

### Light source/signal sound current (based on 1 layer)

| Voltage                       | DC24V |
|-------------------------------|-------|
| Light source current(1 layer) | 70mA  |
| Signal sound current          | 160mA |

### Technical Diagram

Units: mm



| LAYER | L1  |
|-------|-----|
| 1     | 199 |
| 2     | 249 |
| 3     | 299 |
| 4     | 349 |
| 5     | 399 |

### Wiring Instructions

- External signal line
  - UL1007 AWG22(0.3sq) 400m
- External power line
  - UL1015 AWG18(0.75sq)×2C 400mm

### Customization

- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



### Ordering Specifications

|                              |   |                                                                               |   |                       |   |                                                             |
|------------------------------|---|-------------------------------------------------------------------------------|---|-----------------------|---|-------------------------------------------------------------|
| QTG60ML-WV                   | - | 3                                                                             | - | 24                    | - | RAG                                                         |
| [Model number]<br>QTG60ML-WV |   | [Layers]<br>1-1 Layer<br>2-2 Layers<br>3-3 Layers<br>4-4 Layers<br>5-5 Layers |   | [Voltage]<br>24-DC24V |   | [Color]<br>R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |



## QGT60L-WV Ø60mm Pole Mount Type, LED Steady Type

| Model number     | Layers | Voltage | Sound Pattern and Volume          | Certificates | Weight | Color                                            |
|------------------|--------|---------|-----------------------------------|--------------|--------|--------------------------------------------------|
| QGT60L-WV Steady | 1      | DC24V   | 31 Customizable voices: 80dB-85dB | CE           | 0.53kg | R-Red                                            |
|                  | 2      | DC24V   |                                   |              | 0.58kg | R-Red<br>G-Green                                 |
|                  | 3      | DC24V   |                                   |              | 0.63kg | R-Red<br>A-Amber<br>G-Green                      |
|                  | 4      | DC24V   |                                   |              | 0.68kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                  | 5      | DC24V   |                                   |              | 0.73kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |



QGT60L-WV Series

※ In case of customized WV 31 tone type, there may be difference of volume depending on user's audio file type.

### Light source/signal sound current (based on 1 layer)

|                               | Voltage | DC24V |
|-------------------------------|---------|-------|
| Light source current(1 layer) |         | 70mA  |
| Signal sound current          |         | 160mA |

### Wiring Instructions

- External signal line - UL1007 AWG22(0.3sq) 400m
- External power line - UL1015 AWG18(0.75sq)×2C 400mm

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

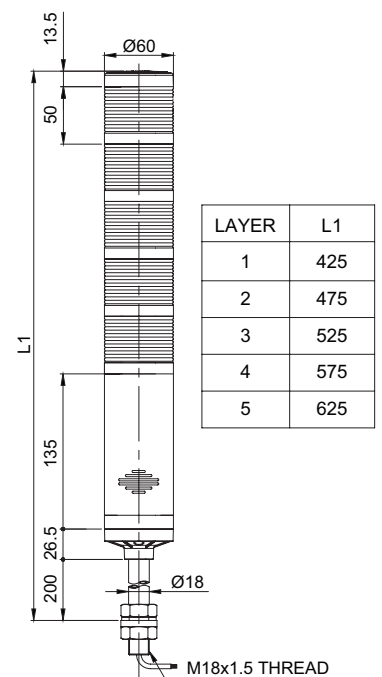
### Ordering Specifications

|                |   |                                                                   |   |           |   |                                                  |   |                                                                 |
|----------------|---|-------------------------------------------------------------------|---|-----------|---|--------------------------------------------------|---|-----------------------------------------------------------------|
| QGT60L-WV      | - | 3                                                                 | - | 24        | - | RAG                                              | - | LW18                                                            |
| [Model number] |   | [Layers]                                                          |   | [Voltage] |   | [Color]                                          |   | [Bracket]                                                       |
| QGT60L-WV      |   | 1-1 Layer<br>2-2 Layers<br>3-3 Layers<br>4-4 Layers<br>5-5 Layers |   | 24-DC24V  |   | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |   | None-Standard<br>Bracket<br>LB18-LW18<br>QZ18-SZ18<br>QL18-SL18 |

### Technical Diagram

Units: mm

#### QGT60L-WV



QTG60(M)L-WV

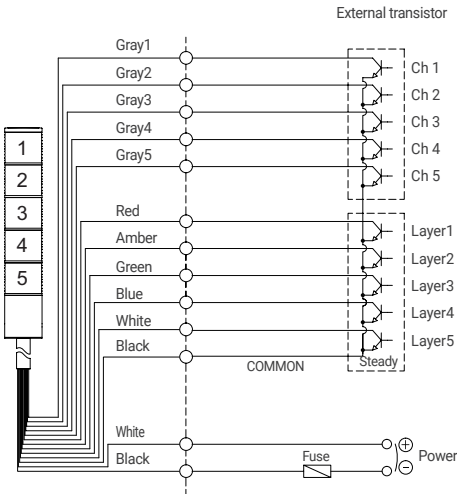
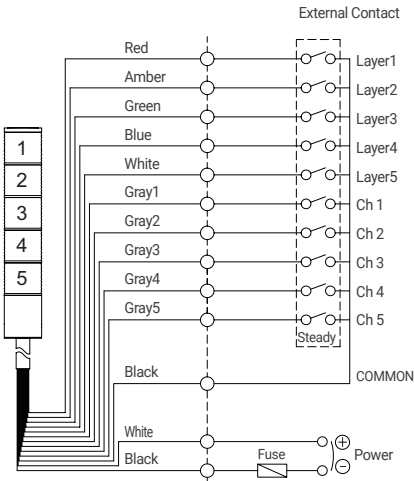


Wiring Instructions(using External Contact )

· Please wiring based below instruction in case of using External Contact

Wiring Instructions

QTG60ML-WV  
QTG60L-WV



Common

External Contact

ON(1)  
OFF(0)

Binary input  
modeCan select  
up to 31 sound  
options

| Ch. | 1 | 2 | 3 | 4 | 5 |
|-----|---|---|---|---|---|
| 0   | 0 | 0 | 0 | 0 | 0 |
| 1   | 1 | 0 | 0 | 0 | 0 |
| 2   | 0 | 1 | 0 | 0 | 0 |
| :   | : | : | : | : | : |
| 30  | 1 | 1 | 1 | 0 | 1 |
| 31  | 1 | 1 | 1 | 1 | 0 |

- ※ Up to 31 pre-recorded tones available via binary input as left table
- ※ You can only show 2 numbers with 1 switch "0", "1". With 5 switches you can have 31 combinations. Selecting one sound from 5 switches is the Binary input method.
- "0" : OFF
- "1" : ON

# USB/Ethernet Signal Tower Lights

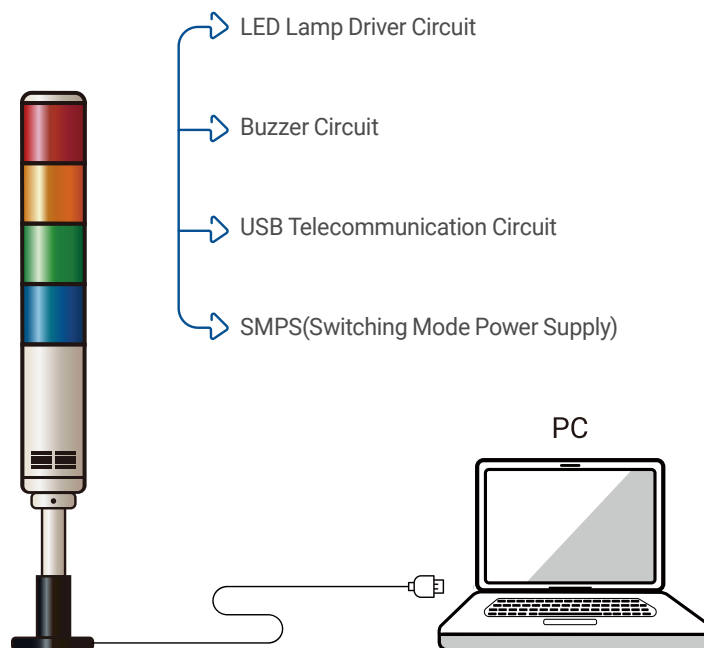


|                                |        |
|--------------------------------|--------|
| USB Technical Information      | P. 188 |
| Product Specifications         | P. 193 |
| Product Information            | P. 196 |
| Ethernet Technical Information | P. 209 |
| Product Specifications         | P. 217 |
| Product Information            | P. 219 |

## Technical Data for USB Type LED Tower Light

**Can be connected to the USB port of your PC without any additional power supply**

- The LED tower light that is fully controllable by the PC application program of a PC via an USB port connection
- The USB communication cable is comprised of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in clear melody, alarm sound, the type of sound can be chosen when ordered
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)
- Qlight's USB Tower Light is a LED tower lamp connected to a USB interface and controlled by a PC program. These products work on hosts that support USB 1.1 or higher and allow up to 4 USB Tower Light connections per PC
- Supports Low speed (1.5Mbps) and Full speed (12Mbps) communication
- Provides MS Runtime libraries for developers(VC++, VB, Delphi) to utilize in various PC applications. A sample program (VC++) is available for testing purposes.
- The product uses device drivers in the PC for built-in HID (Human Interface Devices). Therefore, the operating system (OS) does not need a separate driver to control and to communicate with the LED Tower Light through the PC application Native support for 32bit OS, and supports 64bit in Windows XP, Win7. For other OS, please contact us(32bit 64bit)



※ Image to the left shows the Tower Light Connections.



## 1. Basic USB Information

USB is an abbreviation for Universal Serial Bus, a PC peripheral bus standard developed to satisfy the industries growing need in the mid-1990s for a new interconnection between computers and electronic devices. Developed by companies such as Intel, Microsoft, Compaq, IBM, NEC, Nortel, DEC etc. the USB can connect up to 127 devices without reboot or setup for new peripherals. Data transfer speed have been improving rapidly.

| Communication        | DEVICE CLASS CODE | INTERFACE CLASS CODE |
|----------------------|-------------------|----------------------|
| Audio Interface      | 0 x 00            | 0 x 01               |
| Communication Device | 0 x 02            | -                    |
| HID                  | 0 x 00            | 0 x 00               |
| HUB                  | 0 x 09            | 0 x 09               |
| Storage              | 0 x 00            | 0 x 08               |
| Monitor              | Same as HID       | Same as HID          |
| Print                | -                 | 0 x 07               |

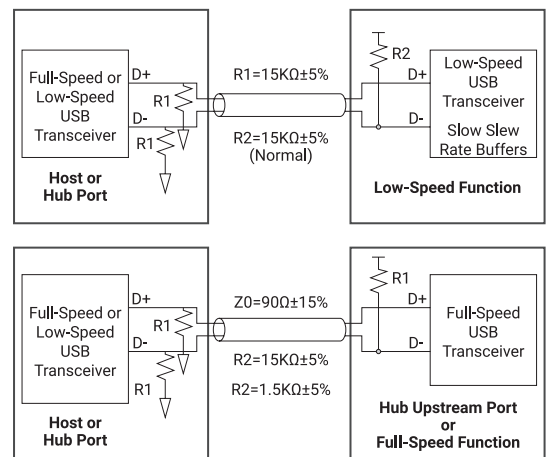
### \*HID(Human Interface Devices)?

Interface Device (HID). These devices can be used to control the PC. A typical HID device includes a mouse, keyboard, joystick, etc.

The data from the devices is sent to the host(PC) by a "interrupt" type IN-endpoint format.

## 2. CONNECTION

The process of connecting and detecting the device to the USB port is called "the initial determination". After "the initial determination" is made, the host PC requests the device's specific role and the function is then specified by the Descriptor. At that moment the device and the PC periodically exchanges requests, and the descriptor. This process is called "Enumeration". After the finishing the "enumeration" process the PC detects the device and registers it as a USB Device. When the registration is completed, the USB Device exchanges data and perform its designated function.



### The process how the USB Device is connected to the PC

- ① When you connect a USB Device to the PC, Device is powered on.
- ② Normally the D+, D- of the PC is on low signal with both D+ and D- having pull down resistors of 15KΩ.
- ③ A full speed USB Device has a pull-up resistor of 1.5KΩ hung on D+, Low speed devices on the other hand have a pull-up resistor of 1.5KΩ on the D-.
- ④ Therefore, the PC usually has a low signal on the data line but when the USB device is connected the PC it detects the high signal of the data line and notifies the host of the USB device connection.

# Technical Data for USB Type LED Tower Light

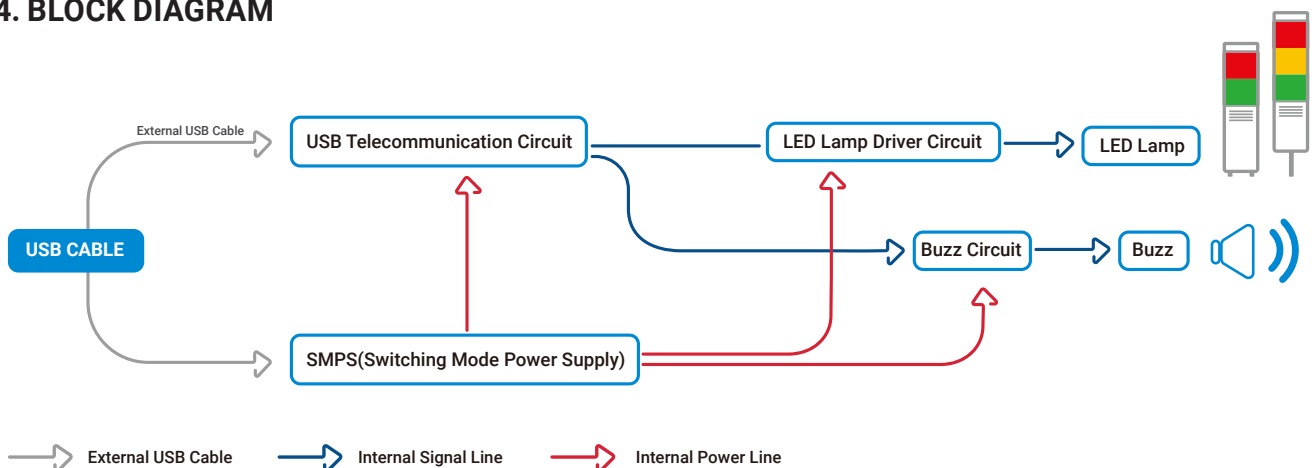
## 3.Communication data format of the USB product

Developers can use the programming format below to control the LED USB Tower light via PC.  
For detailed programing information, please see the reference code that is provided separately.

PC to USB TOWER LAMP

| No. | TYPE                  | ABB            | DESCRIPT                                                                                                                                                                                                                                                       | Size(Byte) |
|-----|-----------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1   | DEVICE<br>INFORMATION | VID            | VENDOR ID : 0x04D8(Provided by IC manufacturer)                                                                                                                                                                                                                | 2          |
| 2   |                       | PID            | PRODUCT ID: 0xE73C(QLIGHT ID)                                                                                                                                                                                                                                  | 2          |
| 3   |                       | INDEX          | 1. Maximum of 4 USB tower lights can be installed per PC.<br>2. Field value helps to distinguish each USB tower light.<br>3. Reference - USB0 : 0x4970/ USB1 : 0x4971/ USB2 : 0x4972/ usb3 : 0x4973<br>4. Assign 0-3 for convenient use in IBM PC environment. | 2          |
| 1   | DATA                  | Write          | 1. Send 'W=0x57' which means transferring the data from PC to USB.                                                                                                                                                                                             | 1          |
| 2   |                       | Sound<br>Group | 1. Field for sound pattern designation.<br>0 : WS/ 1 : WP/ 2 : WM/ 3 : WA/ 4 : WB/ 5 : BZ/ 6 : WM(8)/ 7 : WA(8)<br>2. Total 8 groups are provided and each group has channel 1 to 5.                                                                           | 1          |
| 3   |                       | R LAMP         | 1. Field for controlling Red lamp.<br>2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care                                                                                                                                      | 1          |
| 4   |                       | A LAMP         | 1. Field for controlling Amber lamp.<br>2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care                                                                                                                                    | 1          |
| 5   |                       | G LAMP         | 1. Field for controlling Green lamp.<br>2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care                                                                                                                                    | 1          |
| 6   |                       | B LAMP         | 1. Field for controlling Blue lamp.<br>2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care                                                                                                                                     | 1          |
| 7   |                       | W LAMP         | 1. Field for controlling White lamp.<br>2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care                                                                                                                                    | 1          |

## 4. BLOCK DIAGRAM

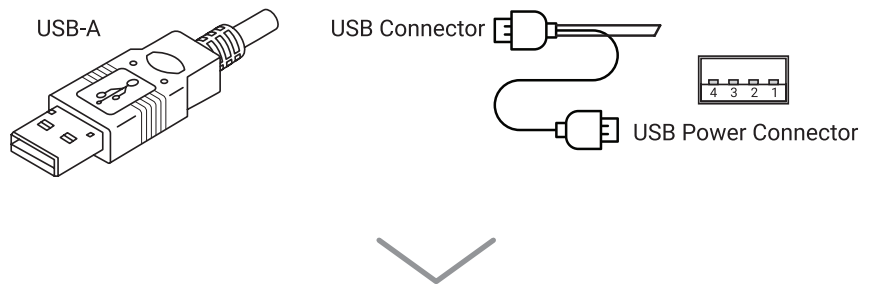


## 5. SPECIFICATION

| Category     | Specification                                                                                                                         | Category      | Specification                                                                          |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------|
| Tower light  | ·Layers(Layer): 1-5<br>·Voltage(Voltage): DC12V<br>·Current(Current): 300mA<br>·Color(Color):<br>● Red ● Amber ● Green ● Blue ○ White | Cable         | 1. VCC (Red)<br>2. D- (White)<br>3. D+ (Green)<br>4. GND (Black)<br>5. Shield          |
| Speaker      | ·Speaker Rated(Rated): 1W<br>·Volume(Volume): Max. 85dB at 1m                                                                         | Buzzer        | ·Voltage(Voltage): DC12V<br>·Current(Current): 20mA<br>·Volume(Volume): Max.90dB at 1m |
| USB standard | ·Available on hosts that support USB 1.1 or higher<br>·5V/500mA rated (uses 2 USB port)                                               | Input voltage | ·USB DC 5V×2PORT<br>(Built-in 5V To 12V converter)                                     |

## 6. USB CABLE

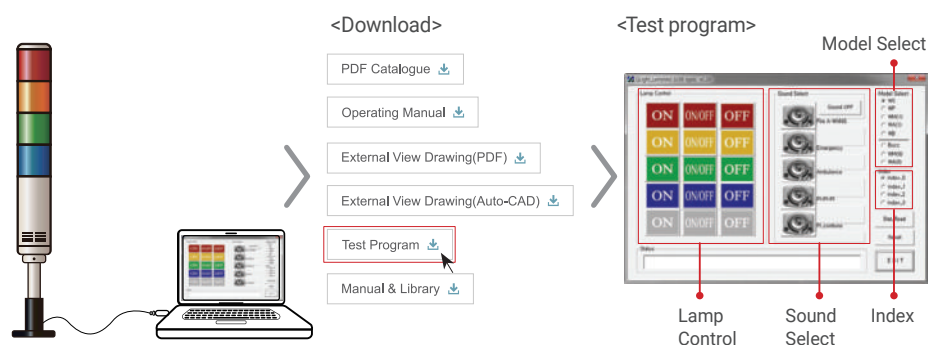
1. The power consumption of a USB Tower light(3 layers type) is only about 2.5W.
2. The USB specification is 5VDC/(300mA/500mA) per PC port which equals approximately 1.5W.  
Thus, using two ports will supply the proper power to the product.
3. It is possible to use multiple colors at the same time by using the USB power supply, but using one lamp and one alarm sound at a time is recommended.
4. There are two types of USB connections as shown in the image below; a standard USB connector and a USB power connector with a power line connected in parallel.



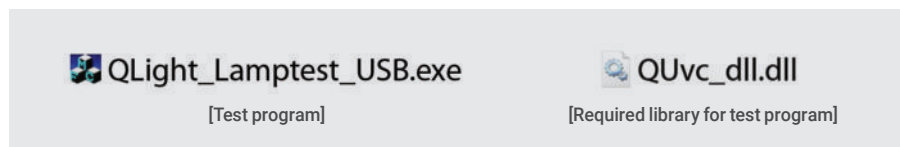
| Pin | Name | WIRE Color | Description |
|-----|------|------------|-------------|
| 1   | VCC  | RED        | +5V         |
| 2   | D-   | WHITE      | Data-       |
| 3   | D+   | GREEN      | Data+       |
| 4   | GND  | BLACK      | Ground      |

# Technical Data for USB Type LED Tower Light

## 7. Use of the USB device



1. Connect the USB tower light to the PC as shown in the illustration above.
2. Download the test program from the provided CD or from our homepage.
3. The downloaded sample program will be saved as "USB Test Program.zip".  
When you unzip the file, there will be a file with the names below.



※ When developing the program, please download and refer to the file "manual and library" (sample programs and manuals for developers).

4. When you run the "QLight lamptest\_usb.exe" file, a test programs will show up as above.  
Product's sound options are classified as WS/WP/WA/WM/BZ. The product will only play the sound option selected when the order was placed.

| Article      | Detailed specification                                                                                                                                                                                                                                                                          |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lamp Control | <ul style="list-style-type: none"> <li>- ON: Lamp turns on when the button is clicked</li> <li>- ON/OFF: Lamp flashes when the button is clicked</li> <li>- OFF: Lamp turns off when the button is clicked</li> </ul>                                                                           |
| Sound Select | <ul style="list-style-type: none"> <li>- 1ch-5ch: Has 5 sounds per model, turns on the chosen sound</li> <li>- Click "Sound off" button to turn off the sound</li> </ul>                                                                                                                        |
| Model Select | <ul style="list-style-type: none"> <li>- WS : 5 warning sounds(mono)</li> <li>- WP : 5 special warning sounds(mono)</li> <li>- WM(1) : 5 Melodies(mono)</li> <li>- WA(1) : 5 alarms(mono)</li> <li>- WB : Software Buzzer 5 sounds(speaker type)</li> <li>- Buzzer : 5 Buzzer sounds</li> </ul> |
| Index        | <ul style="list-style-type: none"> <li>- You can connect up to a Maximum of 4 USB Tower lights per PC</li> <li>- Must be controlled by selecting Index0 - Index3 for controlling the USB tower light. The default is set to Index0</li> </ul>                                                   |

# Specification List for USB LED Tower Lights



| Model number             | ST45ML-USB                                              | ST45L-USB                                                   | ST56ML-USB                                                                   | ST56EL-USB                                                                       | ST80ML-USB                                                                   | ST80EL-USB                                                                       |
|--------------------------|---------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Voltage                  | USB DC5V                                                | USB DC5V                                                    | USB DC5V                                                                     | USB DC5V                                                                         | USB DC5V                                                                     | USB DC5V                                                                         |
| Outdia                   | Ø45                                                     | Ø45                                                         | Ø56                                                                          | Ø56                                                                              | Ø80                                                                          | Ø80                                                                              |
| Height                   | 198-358                                                 | 412-572                                                     | 192-352                                                                      | 406-566                                                                          | 230-390                                                                      | 367-527                                                                          |
| Depth                    |                                                         |                                                             |                                                                              |                                                                                  |                                                                              |                                                                                  |
| Material                 | Lens-AS<br>Housing-ABS                                  | Lens-AS<br>Housing-ABS                                      | Lens-AS<br>Housing-ABS                                                       | Lens-AS<br>Housing-ABS                                                           | Lens-AS<br>Housing-ABS                                                       | Lens-AS<br>Housing-ABS                                                           |
| Layers                   | 1-5 Layers                                              | 1-5 Layers                                                  | 1-5 Layers                                                                   | 1-5 Layers                                                                       | 1-5 Layers                                                                   | 1-5 Layers                                                                       |
| Light source & Operation | LED Steady/<br>Flashing                                 | ●                                                           | ●                                                                            | ●                                                                                | ●                                                                            | ●                                                                                |
| Buzzer sound             | Max.90dB at 1m                                          | Max.90dB at 1m                                              | Max.90dB at 1m                                                               | Max.90dB at 1m                                                                   | Max.90dB at 1m                                                               | Max.90dB at 1m                                                                   |
| Signal sounds            | Max.85dB at 1m                                          | Max.85dB at 1m                                              | Max.85dB at 1m                                                               | Max.85dB at 1m                                                                   | Max.85dB at 1m                                                               | Max.85dB at 1m                                                                   |
| Layer color change       | Yes                                                     | Yes                                                         | Yes                                                                          | Yes                                                                              | Yes                                                                          | Yes                                                                              |
| Mount bracket            | Direct mount                                            | Pole mount                                                  | Direct mount                                                                 | Pole mount                                                                       | Direct mount                                                                 | Pole mount                                                                       |
| Bracket                  | TWS45, TWA45                                            | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                       | TWS45, TWA45                                                                 | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                            | TWS80, TWA80                                                                 | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                            |
| Protection rating        | IP23                                                    | IP23                                                        | IP23                                                                         | IP23                                                                             | IP23                                                                         | IP23                                                                             |
| Usage place              | Indoor Use                                              | Indoor Use                                                  | Indoor Use                                                                   | Indoor Use                                                                       | Indoor Use                                                                   | Indoor Use                                                                       |
| Certificates             | CE                                                      | CE                                                          | CE                                                                           | CE                                                                               | -                                                                            | -                                                                                |
| Customization            | Customized color<br>arrangements,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment | Customized color<br>arrangements,<br>70mm lens height,<br>Wall mount bracket | Customized color<br>arrangements,<br>70mm lens height,<br>Pole length adjustment | Customized color<br>arrangements,<br>70mm lens height,<br>Wall mount bracket | Customized color<br>arrangements,<br>70mm lens height,<br>Pole length adjustment |
| Page                     | P196                                                    | P196                                                        | P197                                                                         | P197                                                                             | P198                                                                         | P198                                                                             |



| Model number             | QTG50ML-USB                                             | QTG50L-USB                                                  | QTG60ML-USB                                             | QTG60L-USB                                                  | QTG70ML-USB                                             | QTG70L-USB                                                  |
|--------------------------|---------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|
| Voltage                  | USB DC5V                                                | USB DC5V                                                    | USB DC5V                                                | USB DC5V                                                    | USB DC5V                                                | USB DC5V                                                    |
| Outdia                   | Ø50                                                     | Ø50                                                         | Ø60                                                     | Ø60                                                         | Ø70                                                     | Ø70                                                         |
| Height                   | 204-364                                                 | 432-592                                                     | 199-399                                                 | 435-635                                                     | 199-399                                                 | 357-557                                                     |
| Depth                    |                                                         |                                                             |                                                         |                                                             |                                                         |                                                             |
| Material                 | Lens-PC<br>Housing-ABS                                  | Lens-PC<br>Housing-ABS                                      | Lens-PC<br>Housing-ABS                                  | Lens-PC<br>Housing-ABS                                      | Lens-PC<br>Housing-ABS                                  | Lens-PC<br>Housing-ABS                                      |
| Layers                   | 1-5 Layers                                              | 1-5 Layers                                                  | 1-5 Layers                                              | 1-5 Layers                                                  | 1-5 Layers                                              | 1-5 Layers                                                  |
| Light source & Operation | LED Steady/<br>Flashing                                 | ●                                                           | ●                                                       | ●                                                           | ●                                                       | ●                                                           |
| Buzzer sound             | Max.85dB at 1m                                          | Max.85dB at 1m                                              | Max.85dB at 1m                                          | Max.85dB at 1m                                              | Max.85dB at 1m                                          | Max.85dB at 1m                                              |
| Layer color change       | Yes                                                     | Yes                                                         | Yes                                                     | Yes                                                         | Yes                                                     | Yes                                                         |
| Mount bracket            | Direct mount                                            | Pole mount                                                  | Direct mount                                            | Pole mount                                                  | Direct mount                                            | Pole mount                                                  |
| Bracket                  | TWS45, TWA45                                            | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                       | TWS45, TWA45                                            | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                       | TWS80, TWA80                                            | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                       |
| Protection rating        | IP54                                                    | IP54                                                        | IP54                                                    | IP54                                                        | IP54                                                    | IP54                                                        |
| Usage place              | Indoor                                                  | Indoor                                                      | Indoor                                                  | Indoor                                                      | Indoor                                                  | Indoor                                                      |
| Certificates             | CE                                                      | CE                                                          | CE                                                      | CE                                                          | CE                                                      | CE                                                          |
| Customization            | Customized color<br>arrangements,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment | Customized color<br>arrangements,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment | Customized color<br>arrangements,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment |
| Page                     | P200-201                                                | P200-201                                                    | P200-201                                                | P200-201                                                    | P202                                                    | P202                                                        |

# Specification List for USB LED Tower Lights



| Model number             | QTC50ML-USB                                       | QTC50L-USB                                            | QTC60ML-USB                                       | QTC60L-USB                                            | QTC70ML-USB                                       | QTC70L-USB                                            |
|--------------------------|---------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|
| Voltage                  | USB DC5V                                          | USB DC5V                                              | USB DC5V                                          | USB DC5V                                              | USB DC5V                                          | USB DC5V                                              |
| Dimension (mm)           | Outdia                                            | Ø50                                                   | Ø50                                               | Ø60                                                   | Ø60                                               | Ø70                                                   |
|                          | Height                                            | 204-364                                               | 432-592                                           | 199-399                                               | 435-635                                           | 199-399                                               |
|                          | Depth                                             |                                                       |                                                   |                                                       |                                                   |                                                       |
| Material                 | Lens, Inner Lens -PC Housing-ABS                  | Lens, Inner Lens -PC Housing-ABS                      | Lens, Inner Lens -PC Housing-ABS                  | Lens, Inner Lens -PC Housing-ABS                      | Lens, Inner Lens -PC Housing-ABS                  | Lens, Inner Lens -PC Housing-ABS                      |
| Layers                   | 1-5 Layers                                        | 1-5 Layers                                            | 1-5 Layers                                        | 1-5 Layers                                            | 1-5 Layers                                        | 1-5 Layers                                            |
| Light source & Operation | LED Steady/Flashing                               | ●                                                     | ●                                                 | ●                                                     | ●                                                 | ●                                                     |
| Sound & Volume           | Buzzer sound                                      | Max.85dB at 1m                                        | Max.85dB at 1m                                    | Max.85dB at 1m                                        | Max.85dB at 1m                                    | Max.85dB at 1m                                        |
| Layer color change       | Yes                                               | Yes                                                   | Yes                                               | Yes                                                   | Yes                                               | Yes                                                   |
| Mount bracket            | Direct mount                                      | Pole mount                                            | Direct mount                                      | Pole mount                                            | Direct mount                                      | Pole mount                                            |
| Bracket                  | TWS45, TWA45                                      | LB18, LW18, QZ18, SZ18, QL18, SL18                    | TWS45, TWA45                                      | LB18, LW18, QZ18, SZ18, QL18, SL18                    | TWS80, TWA80                                      | LB24, LW24, QZ24, SZ24, QL24, SL24                    |
| Protection rating        | IP54                                              | IP54                                                  | IP54                                              | IP54                                                  | IP54                                              | IP54                                                  |
| Usage place              | Indoor                                            | Indoor                                                | Indoor                                            | Indoor                                                | Indoor                                            | Indoor                                                |
| Certificates             | CE                                                | CE                                                    | CE                                                | CE                                                    | CE                                                | CE                                                    |
| Customization            | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment |
| Page                     | P203                                              | P203                                                  | P204                                              | P204                                                  | P205                                              | P205                                                  |



| Model number             | QTR50ML-USB                                       | QTR50L-USB                                            | QTR60ML-USB                                       | QTR60L-USB                                            | QTR70ML-USB                                       | QTR70L-USB                                            |
|--------------------------|---------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|
| Voltage                  | USB DC5V                                          | USB DC5V                                              | USB DC5V                                          | USB DC5V                                              | USB DC5V                                          | USB DC5V                                              |
| Dimension (mm)           | Outdia                                            | Ø50                                                   | Ø60                                               | Ø60                                                   | Ø70                                               | Ø70                                                   |
|                          | Height                                            | 204-364                                               | 432-592                                           | 199-399                                               | 435-635                                           | 199-399                                               |
|                          | Depth                                             |                                                       |                                                   |                                                       |                                                   |                                                       |
| Material                 | Lens-PC Housing-ABS                               | Lens-PC Housing-ABS                                   | Lens-PC Housing-ABS                               | Lens-PC Housing-ABS                                   | Lens-PC Housing-ABS                               | Lens-PC Housing-ABS                                   |
| Layers                   | 1-5 Layers                                        | 1-5 Layers                                            | 1-5 Layers                                        | 1-5 Layers                                            | 1-5 Layers                                        | 1-5 Layers                                            |
| Light source & Operation | LED Steady/Flashing                               | ●                                                     | ●                                                 | ●                                                     | ●                                                 | ●                                                     |
| Sound & Volume           | Buzzer sound                                      | Max.85dB at 1m                                        | Max.85dB at 1m                                    | Max.85dB at 1m                                        | Max.85dB at 1m                                    | Max.85dB at 1m                                        |
| Layer color change       | Yes                                               | Yes                                                   | Yes                                               | Yes                                                   | Yes                                               | Yes                                                   |
| Mount bracket            | Direct mount                                      | Pole mount                                            | Direct mount                                      | Pole mount                                            | Direct mount                                      | Pole mount                                            |
| Bracket                  | TWS45, TWA45                                      | LB18, LW18, QZ18, SZ18, QL18, SL18                    | TWS45, TWA45                                      | LB18, LW18, QZ18, SZ18, QL18, SL18                    | TWS80, TWA80                                      | LB24, LW24, QZ24, SZ24, QL24, SL24                    |
| Protection rating        | IP54                                              | IP54                                                  | IP54                                              | IP54                                                  | IP54                                              | IP54                                                  |
| Usage place              | Indoor                                            | Indoor                                                | Indoor                                            | Indoor                                                | Indoor                                            | Indoor                                                |
| Certificates             | -                                                 | -                                                     | -                                                 | -                                                     | -                                                 | -                                                     |
| Customization            | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment | Customized color arrangements, Wall mount bracket | Customized color arrangements, Pole length adjustment |
| Page                     | P206-207                                          | P206-207                                              | P206-207                                          | P206-207                                              | P208                                              | P208                                                  |

# Specification List for USB LED Tower Lights

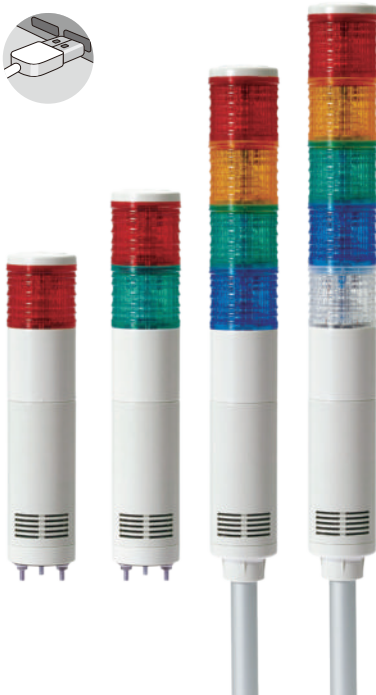
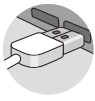


| Model number                   |                            | STDEL-USB                                             |
|--------------------------------|----------------------------|-------------------------------------------------------|
| Voltage                        |                            | DC12V, DC24V<br>AC110V, AC220V                        |
| Dimension<br>(mm)              | Outdia                     | Ø80(Lens)<br>Ø119(Body)                               |
|                                | Height                     | 284-444                                               |
|                                | Depth                      |                                                       |
| Material                       |                            | Lens-AS<br>Housing-ABS                                |
| Layers                         |                            | 1-5 Layers                                            |
| Light<br>source &<br>Operation | LED Steady/<br>Flashing    | ●                                                     |
|                                | LED Strobe                 |                                                       |
|                                | LED Simulated<br>revolving |                                                       |
| Sound &<br>volume              | Buzzer sound               |                                                       |
|                                | Signal sounds              | Max. 105dB at 1m                                      |
| Layer color change             |                            | Yes                                                   |
| Mount bracket                  |                            | Direct mount                                          |
| Bracket                        |                            | -                                                     |
| Protection rating              |                            | IP54                                                  |
| Usage place                    |                            | Indoor/Outdoor Use                                    |
| Certificates                   |                            | -                                                     |
| Customization                  |                            | Customized color<br>arrangements,<br>70mm lens height |
| Page                           |                            | P199                                                  |



# ST45(M)L-USB

Connected to PC USB port without power supply unit



ST45(M)L-USB Series

## PRODUCT SPECIFICATION

ST45(M)L-USB  
ST56, 80(M)EL-USB

**Buzzer sounds** Max.90dB at 1m  
**Warning sounds** Max.85dB at 1m(Based on WS-Ch1)  
**Protection rating** IP23  
**Compliant with RoHS directive**

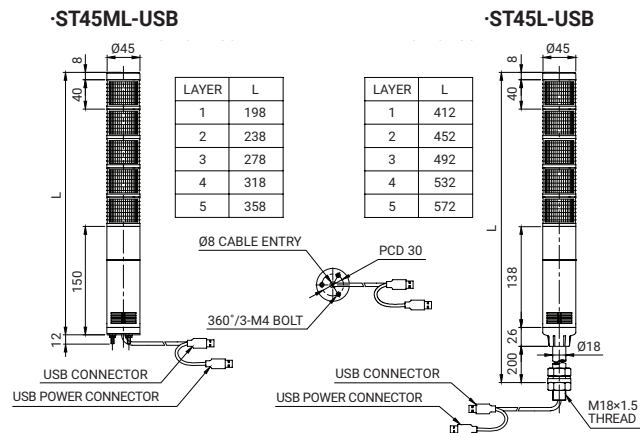
- Software controls the steady/flashing function
  - USB control port and power supply port are provided with product
  - The number of activated LED lights are limited to the capacity of USB port current
  - Multiple connections on 1 PC is optionally available (up-to 4 units)
  - LED module Standard Operation
- 2 layers will operate at the same time : ST56EL-USB / ST56MEL-USB / ST80EL-USB / ST80MEL-USB
- 3 layers will operate at the same time : ST45L-USB / ST45ML-USB

## ST45L-USB Ø45mm Pole Mount USB LED Tower Light

| Model number | Layers           | Certificates | Color                         |
|--------------|------------------|--------------|-------------------------------|
| ST45L-USB-BZ | 5 Buzzer sounds  | 1 layer      | 1 layer: ● R                  |
| ST45L-USB-WS | 5 Warning sounds | 2 layers     | 2 layers: ● R ● G             |
| ST45L-USB-WM | 5 Melodies       | 3 layers     | 3 layers: ● R ● A ● G         |
| ST45L-USB-WA | 5 Alarms         | 4 layers     | 4 layers: ● R ● A ● G ● B     |
|              |                  | 5 layers     | 5 layers: ● R ● A ● G ● B ● W |

## Technical Diagram

Units : mm



## ST45ML-USB Ø45mm Direct Mount USB LED Tower Light

| Model number  | Layers           | Certificates | Color                         |
|---------------|------------------|--------------|-------------------------------|
| ST45ML-USB-BZ | 5 Buzzer sounds  | 1 layer      | 1 layer: ● R                  |
| ST45ML-USB-WS | 5 Warning sounds | 2 layers     | 2 layers: ● R ● G             |
| ST45ML-USB-WM | 5 Melodies       | 3 layers     | 3 layers: ● R ● A ● G         |
| ST45ML-USB-WA | 5 Alarms         | 4 layers     | 4 layers: ● R ● A ● G ● B     |
|               |                  | 5 layers     | 5 layers: ● R ● A ● G ● B ● W |

## Ordering Specifications

| ST45L-USB-BZ   | - | 3          | - | RAG       | - | LW18          |
|----------------|---|------------|---|-----------|---|---------------|
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| ST45L-USB-BZ   |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| ST45L-USB-WS   |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| ST45L-USB-WM   |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| ST45L-USB-WA   |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
| ST45ML-USB-BZ  |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |
| ST45ML-USB-WS  |   |            |   |           |   |               |
| ST45ML-USB-WM  |   |            |   |           |   |               |
| ST45ML-USB-WA  |   |            |   |           |   |               |

## Mounting bracket

Standard LB18 LW18 QZ18



Steel Steel ABS ABS

SZ18 QL18 SL18



AI ABS AI

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

## Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS45 Wall mount bracket TWA45

※ Mount brackets are available for the pole mount type(ST45L-USB series) only.

## Ø56mm USB LED Tower Lights

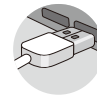
# ST56(M)EL-USB



Connected to PC USB port without power supply unit

### ST56EL-USB Ø56mm Pole Mount USB LED Tower Light

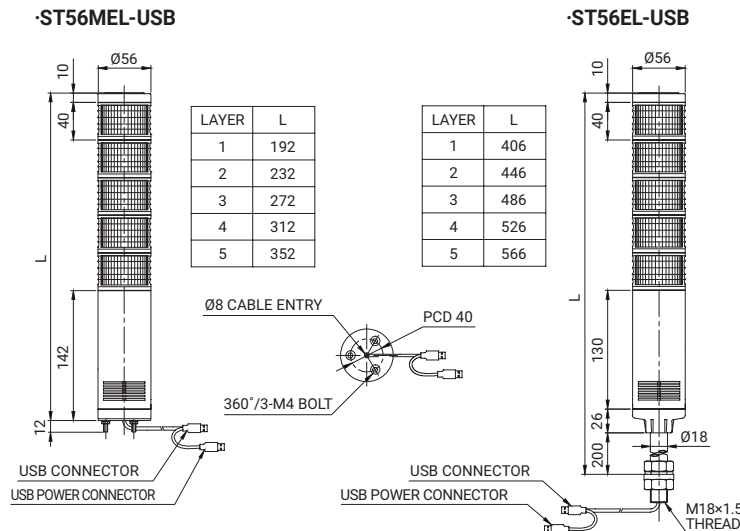
| Model number  |                  | Layers   | Certificates | Color               |
|---------------|------------------|----------|--------------|---------------------|
| ST56EL-USB-BZ | 5 Buzzer sounds  | 1 layer  | CE           | 1 layer: R          |
| ST56EL-USB-WS | 5 Warning sounds | 2 layers |              | 2 layers: R G       |
| ST56EL-USB-WM | 5 Melodies       | 3 layers |              | 3 layers: R A G     |
| ST56EL-USB-WA | 5 Alarms         | 4 layers |              | 4 layers: R A G B   |
|               |                  | 5 layers |              | 5 layers: R A G B W |



ST56(M)EL-USB Series

### Technical Diagram

Units : mm



### ST56MEL-USB Ø56mm Direct Mount USB LED Tower Light

| Model number   |                  | Layers   | Certificates | Color                         |
|----------------|------------------|----------|--------------|-------------------------------|
| ST56MEL-USB-BZ | 5 Buzzer sounds  | 1 layer  | CE           | 1 layer: ● R                  |
| ST56MEL-USB-WS | 5 Warning sounds | 2 layers |              | 2 layers: ● R ● G             |
| ST56MEL-USB-WM | 5 Melodies       | 3 layers |              | 3 layers: ● R ● A ● G         |
| ST56MEL-USB-WA | 5 Alarms         | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                |                  | 5 layers |              | 5 layers: ● R ● A ● G ● B ○ W |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |           |   |               |
|----------------|---|------------|---|-----------|---|---------------|
| ST56EL-USB-WS  | - | 3          | - | RAG       | - | QL18          |
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| ST56EL-USB-BZ  |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| ST56EL-USB-WS  |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| ST56EL-USB-WM  |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| ST56EL-USB-WA  |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
| ST56MEL-USB-BZ |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |
| ST56MEL-USB-WS |   |            |   |           |   |               |
| ST56MEL-USB-WM |   |            |   |           |   |               |
| ST56MEL-USB-WA |   |            |   |           |   |               |

※ Mount brackets are available for the pole mount type(ST56EL-USB series) only.

### Wiring Instructions

- Connect both USB connector and USB power connector to PC



### Customization

- Customized color arrangement available
- Customized pole length available
- 70mm lens height(Standard: 40mm)
- Wall mount bracket



## Ø80mm USB LED Tower Lights

# ST80(M)EL-USB

Connected to PC USB port without power supply unit



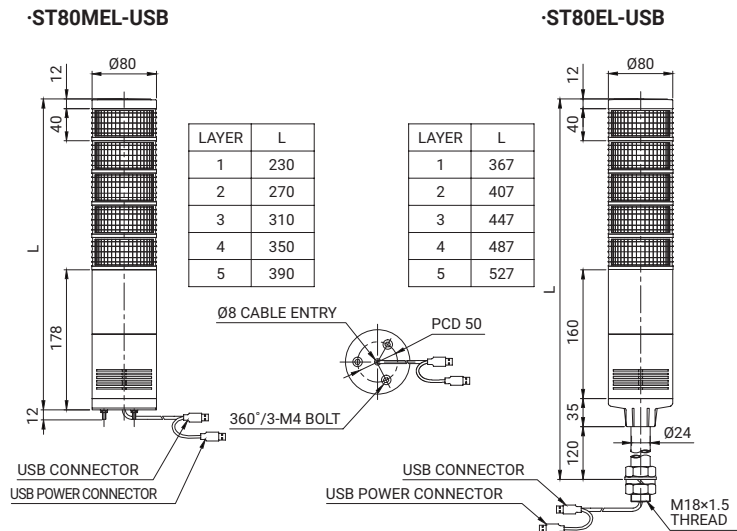
ST80(M)EL-USB Series

### ST80EL-USB Ø80mm Pole Mount USB LED Tower Light

| Model number  | Layers           | Certificates | Color                         |
|---------------|------------------|--------------|-------------------------------|
| ST80EL-USB-BZ | 5 Buzzer sounds  | 1 layer      | 1 layer: ● R                  |
| ST80EL-USB-WS | 5 Warning sounds | 2 layers     | 2 layers: ● R ● G             |
| ST80EL-USB-WM | 5 Melodies       | 3 layers     | 3 layers: ● R ● A ● G         |
| ST80EL-USB-WA | 5 Alarms         | 4 layers     | 4 layers: ● R ● A ● G ● B     |
|               |                  | 5 layers     | 5 layers: ● R ● A ● G ● B ○ W |

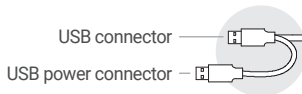
### Technical Diagram

Units : mm



### Wiring Instructions

- Connect both USB connector and USB power connector to PC



### Mounting bracket

| Standard | LB24  | LW24 | QZ24 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ24     | QL24  | SL24 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### ST80MEL-USB Ø80mm Direct Mount USB LED Tower Light

| Model number   | Layers           | Certificates | Color                         |
|----------------|------------------|--------------|-------------------------------|
| ST80MEL-USB-BZ | 5 Buzzer sounds  | 1 layer      | 1 layer: ● R                  |
| ST80MEL-USB-WS | 5 Warning sounds | 2 layers     | 2 layers: ● R ● G             |
| ST80MEL-USB-WM | 5 Melodies       | 3 layers     | 3 layers: ● R ● A ● G         |
| ST80MEL-USB-WA | 5 Alarms         | 4 layers     | 4 layers: ● R ● A ● G ● B     |
|                |                  | 5 layers     | 5 layers: ● R ● A ● G ● B ○ W |

### Customization

- Customized color arrangements
- 70mm lens height(Standard 40mm)
- Customized pole length available
- Wall mount bracket



### Ordering Specifications

| ST80EL-USB-WS  | - | 3          | - | RAG       | - | QL24          |
|----------------|---|------------|---|-----------|---|---------------|
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| ST80EL-USB-BZ  |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| ST80EL-USB-WS  |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| ST80EL-USB-WM  |   | 3-3 Layers |   | ● G-Green |   | -LB24 -LW24   |
| ST80EL-USB-WA  |   | 4-4 Layers |   | ● B-Blue  |   | -QZ24 -SZ24   |
| ST80MEL-USB-BZ |   | 5-5 Layers |   | ○ W-White |   | -QL24 -SL24   |
| ST80MEL-USB-WS |   |            |   |           |   |               |
| ST80MEL-USB-WM |   |            |   |           |   |               |
| ST80MEL-USB-WA |   |            |   |           |   |               |

※ Mount brackets are available for the pole mount type(ST80EL-USB series) only.

# USB LED Steady/ Flashing Tower Light & Electric Horn Combination

## STDEL-USB



High signal volume controlled via USB

### PRODUCT SPECIFICATION

STDEL-USB

**Materials** Lens-AS, Housing-ABS, Resonator-ABS

**Ambient operating temperature** -30°C to +50°C

**Volume** Max. 105dB at 1m(Based on WS-Ch1)

**Protection rating** IP54

**Compliant with RoHS directive**

- Ideal solution for building smart factories with state-of-the-art technology
- LED tower light that is fully controlled by a PC application via USB port connection
- Possible to use USB cable connection without an additional power supply
- LED Module Standard Operation: 2 layers will operate at the same time



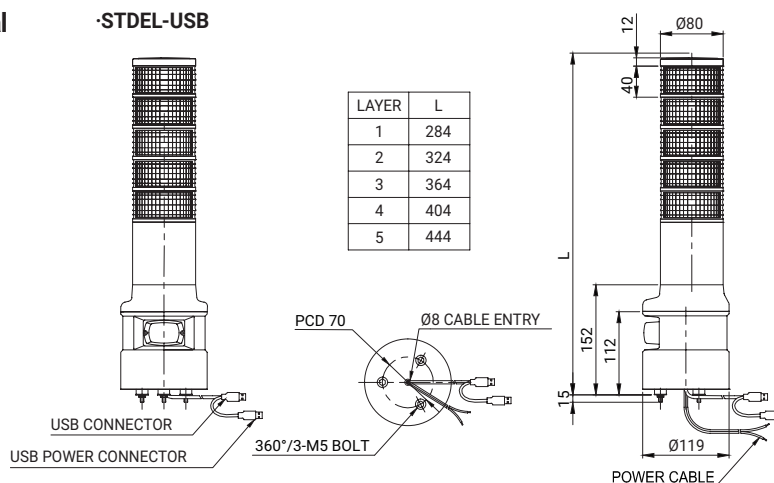
STDEL-USB

### STDEL-USB Ø80mm USB Steady/ Flashing Tower Light & Electric Combination

| Model number | Layers           | Certificates | Color                 |
|--------------|------------------|--------------|-----------------------|
| STDEL-USB-WS | 5 Warning sounds | 1 layer      | 1 layer: R            |
| STDEL-USB-WM | 5 Melodies       | 2 layers     | 2 layers: R G         |
| STDEL-USB-WA | 5 Alarms         | 3 layers     | 3 layers: R Y A G     |
|              |                  | 4 layers     | 4 layers: R Y A G B   |
|              |                  | 5 layers     | 5 layers: R Y A G B W |

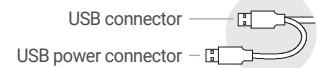
### Technical Diagram

Units : mm



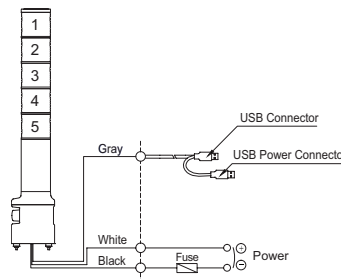
### Wiring Instructions

- External power line
  - UL1015 AWG18(0.75sq) x 2C 400mm
- USB Cable : Connect both USB connector and USB power connector to PC



### Wiring Instructions

STDEL-USB



### Customization

- Customized color arrangements
- 70mm lens height (Standard 40mm)

### Ordering Specifications

| STDEL-USB-WS   | - | 3          | - | 24         | - | RAG     |
|----------------|---|------------|---|------------|---|---------|
| [Model number] |   | [Layers]   |   | [Voltage]  |   | [Color] |
| STDEL-USB-WS   |   | 1-1 Layer  |   | 12-DC12V   |   | R-Red   |
| STDEL-USB-WM   |   | 2-2 Layers |   | 24-DC24V   |   | A-Amber |
| STDEL-USB-WA   |   | 3-3 Layers |   | 110-AC110V |   | G-Green |
|                |   | 4-4 Layers |   | 220-AC220V |   | B-Blue  |
|                |   | 5-5 Layers |   |            |   | W-White |

## QTG50(M)L-USB / QTG60(M)L-USB



QTG50(M)L-USB Series

### PRODUCT SPECIFICATION

QTG50(M)L-USB  
QTG60(M)L-USB  
QTG70(M)L-USB

**Materials** Lens-PC, Housing-ABS

**Ambient operating temperature** -30°C to +50°C

**Volume** Max. 85dB at 1m

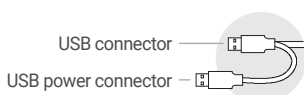
**Protection rating** IP54

**Compliant with RoHS directive**

- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprised of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- Multiple connections on 1 PC is optionally available (up-to 4 units)
- LED module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)

### Wiring Instructions

- Connect both USB connector and USB power connector to PC



### QTG50(M)L-USB ø50mm USB Tower Light

| Model number      | Layers   | Certificates | Color                         |
|-------------------|----------|--------------|-------------------------------|
| QTG50(M)L-USB-BZ  | 1 layer  | CE           | 1 layer: ● R                  |
| QTGA50(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                   | 3 layers |              | 3 layers: ● R ● A ● G         |
|                   | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                   | 5 layers |              | 5 layers: ● R ● A ● G ● B ● W |



### QTG60(M)L-USB ø60mm USB Tower Light

| Model number      | Layers   | Certificates | Color                         |
|-------------------|----------|--------------|-------------------------------|
| QTG60(M)L-USB-BZ  | 1 layer  | CE           | 1 layer: ● R                  |
| QTGA60(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                   | 3 layers |              | 3 layers: ● R ● A ● G         |
|                   | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                   | 5 layers |              | 5 layers: ● R ● A ● G ● B ● W |

### Mounting bracket

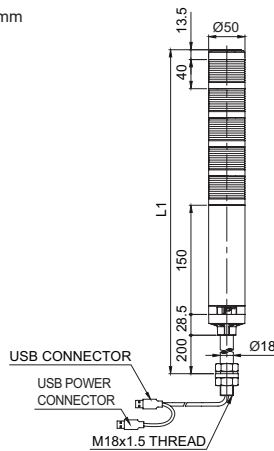
| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

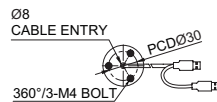


Units : mm

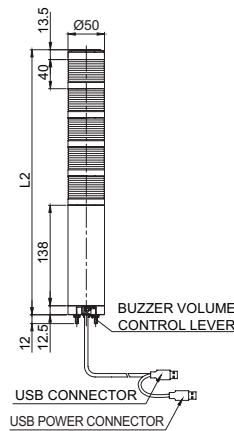
·QTG50L-USB-BZ



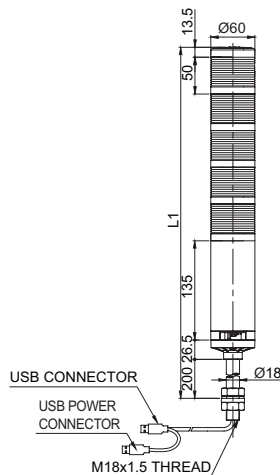
| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 432 | 204 |
| 2     | 472 | 244 |
| 3     | 512 | 284 |
| 4     | 552 | 324 |
| 5     | 592 | 364 |



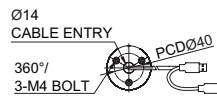
·QTG50ML-USB-BZ



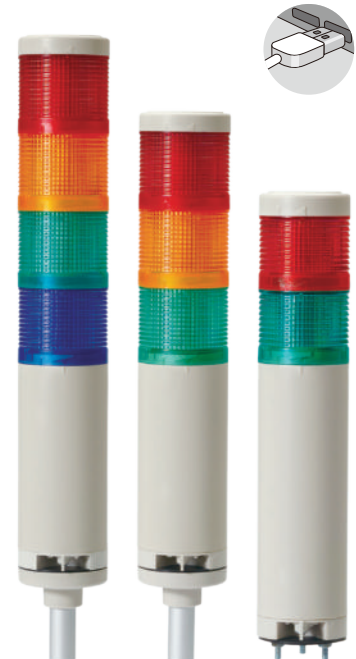
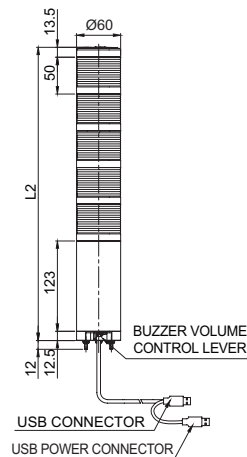
•QTG60L-USB-BZ



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 435 | 199 |
| 2     | 485 | 249 |
| 3     | 535 | 299 |
| 4     | 585 | 349 |
| 5     | 635 | 399 |



·QTG60ML-USB-BZ



## QTG60(M)L-USB Series

## Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount  
bracket  
TWS45



Wall mount  
bracket  
TWA45

## Ordering Specifications

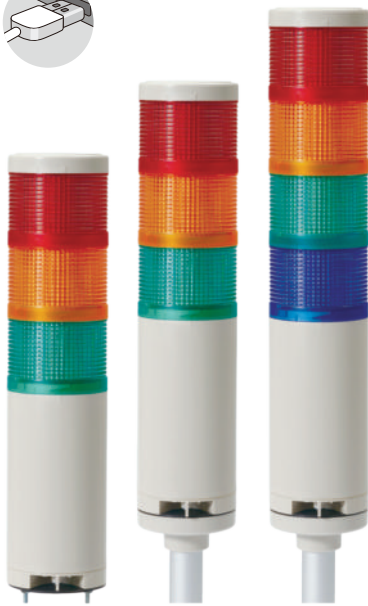
| QTG50L-USB-BZ   | 3          | RAG                                           | LW18          |
|-----------------|------------|-----------------------------------------------|---------------|
| [Model number]  | [Layers]   | [Color]                                       | [Bracket]     |
| QTG50L-USB-BZ   | 1-1 Layer  | <span style="color: red;">●</span> R-Red      | None-Standard |
| QTG50ML-USB-BZ  | 2-2 Layers | <span style="color: yellow;">●</span> A-Amber | Bracket       |
| QTGA50L-USB-BZ  | 3-3 Layers | <span style="color: green;">●</span> G-Green  | -LB18 -LW18   |
| QTGA50ML-USB-BZ | 4-4 Layers | <span style="color: blue;">●</span> B-Blue    | -QZ18 -SZ18   |
|                 | 5-5 Layers | <span style="color: white;">○</span> W-White  | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type (QTG50L-USB Series) only

| QTG60L-USB-BZ   | 3          | RAG                                                                                         | LW18          |
|-----------------|------------|---------------------------------------------------------------------------------------------|---------------|
| [Model number]  | [Layers]   | [Color]                                                                                     | [Bracket]     |
| QTG60L-USB-BZ   | 1-1 Layer  |  R-Red   | None-Standard |
| QTG60ML-USB-BZ  | 2-2 Layers |  A-Amber | Bracket       |
| QTGA60L-USB-BZ  | 3-3 Layers |  G-Green | -LB18 -LW18   |
| QTGA60ML-USB-BZ | 4-4 Layers |  B-Blue  | -QZ18 -SZ18   |
|                 | 5-5 Layers |  W-White | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type(QTG60L-USB Series) only

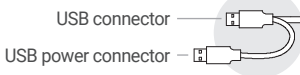
# QTG70(M)L-USB



QTG70(M)L-USB Series

## Wiring Instructions

- Connect both USB connector and USB power connector to PC



## Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS80



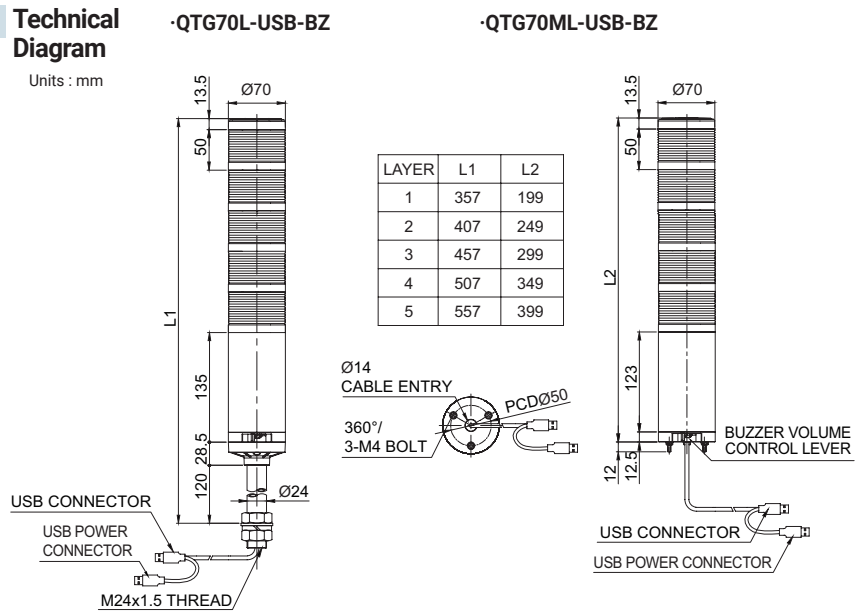
Wall mount bracket TWA80

## QTG70(M)L-USB Ø70mm USB Tower Light

| Model number      | Layers   | Certificates | Color                         |
|-------------------|----------|--------------|-------------------------------|
| QTG70(M)L-USB-BZ  | 1 layer  | CE           | 1 layer: ● R                  |
| QTGA70(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                   | 3 layers |              | 3 layers: ● R ● A ● G         |
|                   | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                   | 5 layers |              | 5 layers: ● R ● A ● G ● B ● W |

## Technical Diagram

Units : mm



## Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | AI   | ABS  | AI   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

## Ordering Specifications

|                 |   |            |   |           |   |               |
|-----------------|---|------------|---|-----------|---|---------------|
| QTG70L-USB-BZ   | - | 3          | - | RAG       | - | LW24          |
| [Model number]  |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTG70L-USB-BZ   |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTG70ML-USB-BZ  |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTGA70L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB24 -LW24   |
| QTGA70ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ24 -SZ24   |
|                 |   | 5-5 Layers |   | ○ W-White |   | -QL24 -SL24   |

※ Mount brackets are available for the pole mount type(QTG70L-USB Series) only



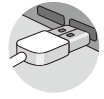


## PRODUCT SPECIFICATION

QTC50(M)L-USB  
QTC60(M)L-USB  
QTC70(M)L-USB

**Materials** Lens, Inner Lens -PC, Housing-ABS  
**Ambient operating temperature** -30°C to +50°C  
**Volume** Max. 85dB at 1m  
**Protection rating** IP54  
**Compliant with RoHS directive**

- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprised of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- Multiple connections on 1 PC is optionally available (up-to 4 units)
- LED module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)



QTC50(M)L-USB Series

## QTC50(M)L-USB Ø50mm USB Tower Light

| Model number     | Layers          | Certificates | Color                         |
|------------------|-----------------|--------------|-------------------------------|
| QTC50(M)L-USB-BZ | 5 Buzzer sounds | CE           | 1 layer: ● R                  |
| QTC50(M)L-USB-BZ |                 |              | 2 layers: ● R ● G             |
|                  |                 |              | 3 layers: ● R ● A ● G         |
|                  |                 |              | 4 layers: ● R ● A ● G ● B     |
|                  |                 |              | 5 layers: ● R ● A ● G ● B ○ W |

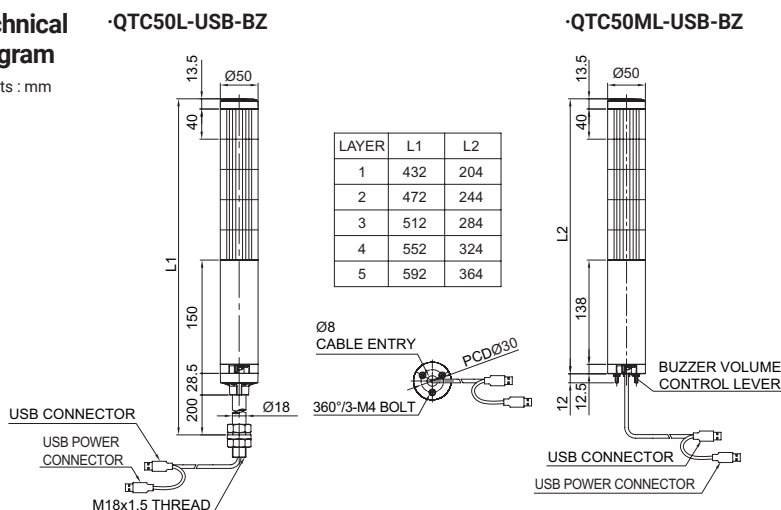
## Wiring Instructions

- Connect both USB connector and USB power connector to PC



## Technical Diagram

Units : mm



## Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

## Ordering Specifications

|                |   |            |   |           |   |               |
|----------------|---|------------|---|-----------|---|---------------|
| QTC50L-USB-BZ  | - | 3          | - | RAG       | - | LW18          |
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTC50L-USB-BZ  |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTC50ML-USB-BZ |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTC50L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| QTC50ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type(QTC50L-USB Series) only

## Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS45

Wall mount bracket TWA45

# QTC60(M)L-USB



## QTC60(M)L-USB Ø60mm USB Tower Light

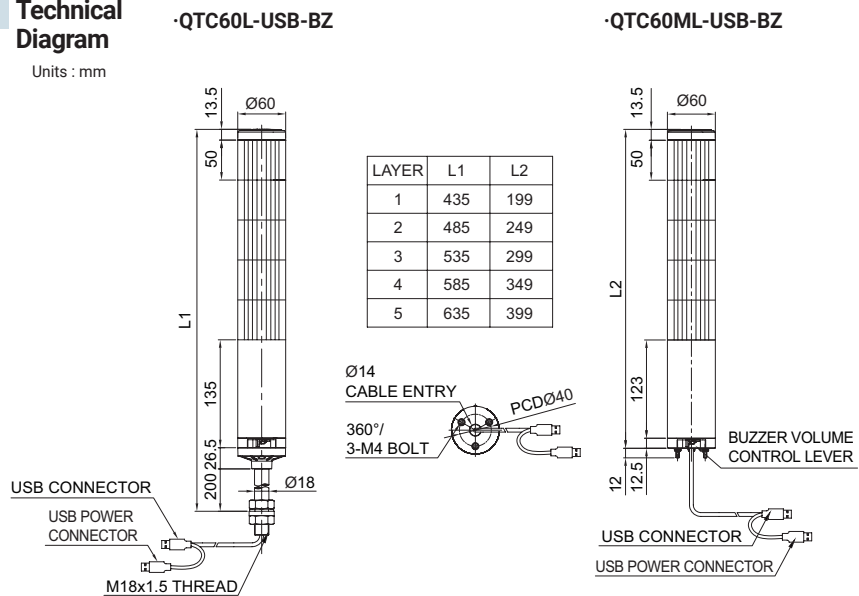
| Model number     | Layers   | Certificates | Color                         |
|------------------|----------|--------------|-------------------------------|
| QTC60(M)L-USB-BZ | 1 layer  | CE           | 1 layer: ● R                  |
| QTC60(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                  | 3 layers |              | 3 layers: ● R ● A ● G         |
|                  | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                  | 5 layers |              | 5 layers: ● R ● A ● G ● B ● W |



QTC60(M)L-USB Series

### Technical Diagram

Units : mm



### Wiring Instructions

- Connect both USB connector and USB power connector to PC



### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS45



Wall mount bracket TWA45

### Ordering Specifications

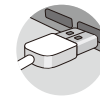
| QTC60L-USB-BZ  | - | 3          | - | RAG       | - | LW18          |
|----------------|---|------------|---|-----------|---|---------------|
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTC60L-USB-BZ  |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTC60ML-USB-BZ |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTC60L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| QTC60ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type(QTC60L-USB Series) only



## QTC70(M)L-USB Ø70mm USB Tower Light

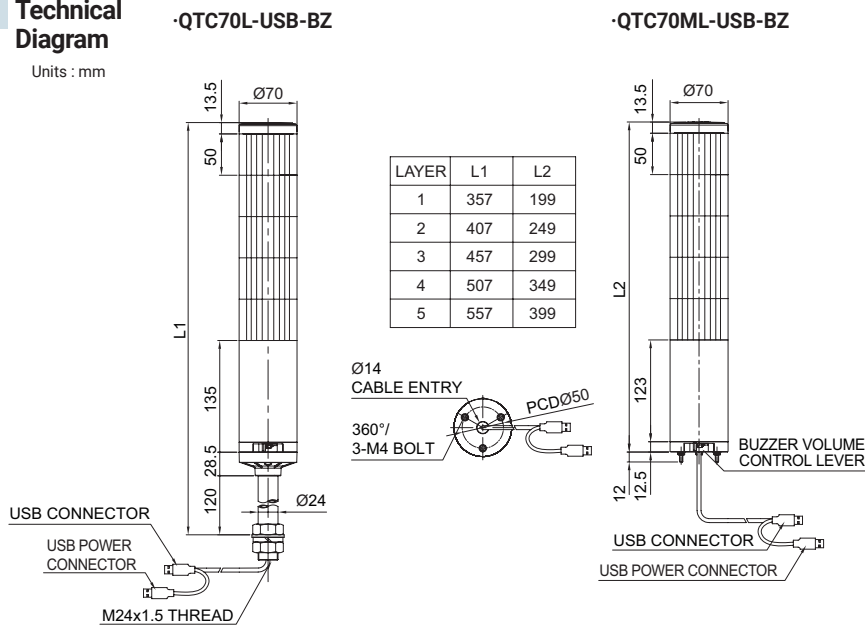
| Model number     | Layers          | Certificates | Color                         |
|------------------|-----------------|--------------|-------------------------------|
| QTC70(M)L-USB-BZ | 5 Buzzer sounds | CE           | 1 layer: ● R                  |
| QTC70(M)L-USB-BZ |                 |              | 2 layers: ● R ● G             |
|                  |                 |              | 3 layers: ● R ● A ● G         |
|                  |                 |              | 4 layers: ● R ● A ● G ● B     |
|                  |                 |              | 5 layers: ● R ● A ● G ● B ● W |



QTC70(M)L-USB Series

### Technical Diagram

Units : mm



### Mounting bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

|                |   |            |   |           |   |               |
|----------------|---|------------|---|-----------|---|---------------|
| QTC70L-USB-BZ  | - | 3          | - | RAG       | - | LW24          |
| [Model number] |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTC70L-USB-BZ  |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTC70ML-USB-BZ |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTC70L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB24 -LW24   |
| QTC70ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ24 -SZ24   |
|                |   | 5-5 Layers |   | ○ W-White |   | -QL24 -SL24   |

### Wiring Instructions

- Connect both USB connector and USB power connector to PC



### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



※ Mount brackets are available for the pole mount type(QTC70L-USB Series) only

# QTR50(M)L-USB / QTR60(M)L-USB



QTR50(M)L-USB Series

## PRODUCT SPECIFICATION

QTR50(M)L-USB  
QTR60(M)L-USB  
QTR70(M)L-USB

**Materials** Lens-PC, Housing-ABS

**Ambient operating temperature** -30°C to +50°C

**Volume** Max. 85dB at 1m

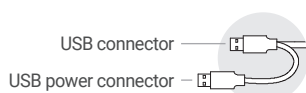
**Protection rating** IP54

**Compliant with RoHS directive**

- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprised of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- When two or more USB products are used in one PC, it can be made to order specification
- Multiple connections on 1 PC is optionally available (up-to 4 units)
- LED module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)

## Wiring Instructions

- Connect both USB connector and USB power connector to PC



## QTR50(M)L-USB Ø50mm USB Tower Light

| Model number      | Layers   | Certificates | Color                         |
|-------------------|----------|--------------|-------------------------------|
| QTR50(M)L-USB-BZ  | 1 layer  | CE           | 1 layer: ● R                  |
| QTRA50(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                   | 3 layers |              | 3 layers: ● R ● A ● G         |
|                   | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                   | 5 layers |              | 5 layers: ● R ● A ● G ● B ○ W |

## QTR60(M)L-USB Ø60mm USB Tower Light

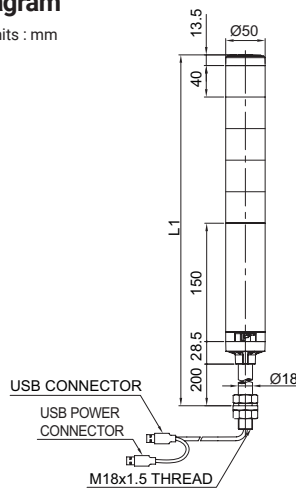
| Model number      | Layers   | Certificates | Color                         |
|-------------------|----------|--------------|-------------------------------|
| QTR60(M)L-USB-BZ  | 1 layer  | CE           | 1 layer: ● R                  |
| QTRA60(M)L-USB-BZ | 2 layers |              | 2 layers: ● R ● G             |
|                   | 3 layers |              | 3 layers: ● R ● A ● G         |
|                   | 4 layers |              | 4 layers: ● R ● A ● G ● B     |
|                   | 5 layers |              | 5 layers: ● R ● A ● G ● B ○ W |

## Mounting bracket

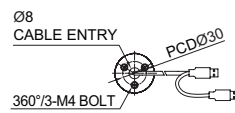
| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

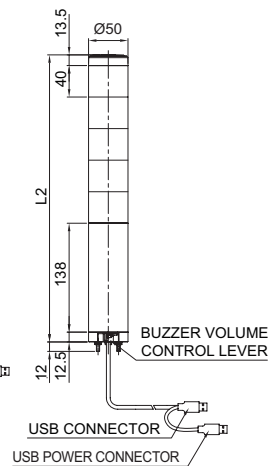
Units : mm



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 432 | 204 |
| 2     | 472 | 244 |
| 3     | 512 | 284 |
| 4     | 552 | 324 |
| 5     | 592 | 364 |

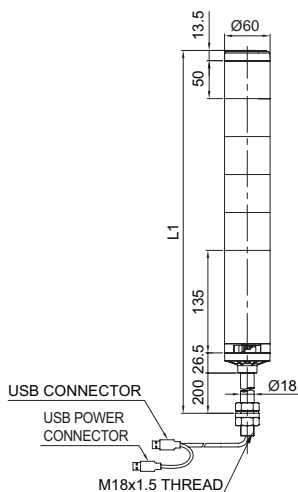


·QTR50ML-USB-BZ

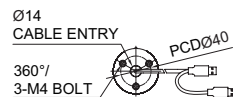


## QTR60(M)L-USB Series

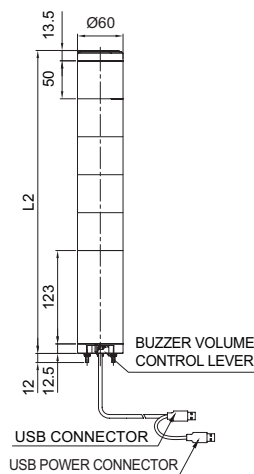
·QTR60L-USB-BZ



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 435 | 199 |
| 2     | 485 | 249 |
| 3     | 535 | 299 |
| 4     | 585 | 349 |
| 5     | 635 | 399 |



·QTR60ML-USB-BZ



## Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

## Ordering Specifications

| QTR50L-USB-BZ   | - | 3          | - | RAG       | - | LW18          |
|-----------------|---|------------|---|-----------|---|---------------|
| [Model number]  |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTR50L-USB-BZ   |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTR50ML-USB-BZ  |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTRA50L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| QTRA50ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                 |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type(QTR50L-USB Series) only

| QTR60L-USB-BZ   | - | 3          | - | RAG       | - | LW18          |
|-----------------|---|------------|---|-----------|---|---------------|
| [Model number]  |   | [Layers]   |   | [Color]   |   | [Bracket]     |
| QTR60L-USB-BZ   |   | 1-1 Layer  |   | ● R-Red   |   | None-Standard |
| QTR60ML-USB-BZ  |   | 2-2 Layers |   | ● A-Amber |   | Bracket       |
| QTRA60L-USB-BZ  |   | 3-3 Layers |   | ● G-Green |   | -LB18 -LW18   |
| QTRA60ML-USB-BZ |   | 4-4 Layers |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                 |   | 5-5 Layers |   | ○ W-White |   | -QL18 -SL18   |

※ Mount brackets are available for the pole mount type(QTR60L-USB Series) only



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### Controllable LED tower light connected to the application program in the PC using a PC and ETN(Ethernet) interface

- ETN tower light is a controllable LED tower light connected to the application program in the PC using a PC and ETN(Ethernet) Interface.
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC.
- Provides MS runtime libraries for developers(VC ++, VB, Delphi(32bit), c#(64bit)) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose.
- Supported OS(32bit 64bit) : Windows XP, Windows 7, Windows 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)
- Communication speed : 10M/ half duplex method





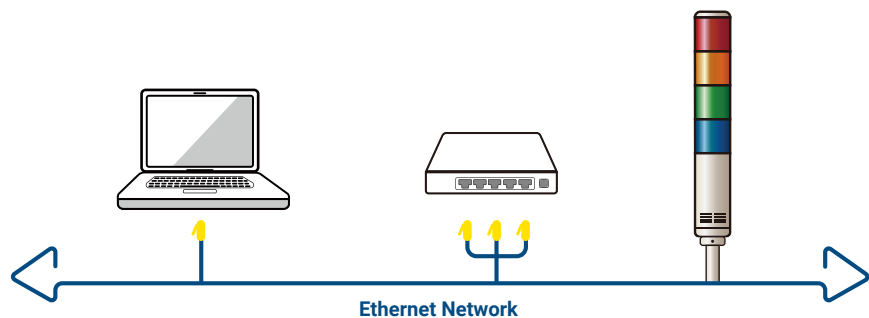
## 1. What is Ethernet?

Ethernet is the most popular physical layer LAN technology in use today. It defines the number of conductors that are required for a connection, the performance thresholds that can be expected, and provides the framework for data transmission. A standard Ethernet network can transmit data at a rate up to 10 Megabits per second (10 Mbps). The Institute for Electrical and Electronic Engineers developed an Ethernet standard known as IEEE Standard 802.3. This standard defines rules for configuring an Ethernet network and also specifies how the elements in an Ethernet network interact with one another. By adhering to the IEEE standard, network equipment and network protocols can communicate efficiently.

## 2. What is TCP/IP Protocol?

TCP/IP (Transmission Control Protocol/Internet Protocol) is the basic communication language or protocol of the Internet. It can also be used as a communications protocol in a private network (either an intranet or an extranet). TCP/IP is a two-layer program. The higher layer, Transmission Control Protocol, manages the assembling of a message or file into smaller packets that are transmitted over the Internet and received by a TCP layer that reassembles the packets into the original message. The lower layer, Internet Protocol, handles the address part of each packet so that it gets to the right destination.

Each gateway computer on the network checks this address to see where to forward the message. TCP/IP communication is primarily point-to-point, meaning each communication is from one point (or host computer) in the network to another point or host computer.



※ The figure below shows the connection of the ETN tower light.

### 3. IP Address format

The format of an IP address is a 32-bit numeric address written as four numbers separated by periods. Each number can be zero to 255. For example, 203.172.12.7 could be an IP address.

An IP address is divided into network address and computer address, and classified as Class A, B, C, D, and E depending on the size of the network or the number of hosts. Of these, only Class A, B, C are given to a general user. The IP address what we are about to test is classified as C Class.

|                 |   |                 |   |                 |   |                 |
|-----------------|---|-----------------|---|-----------------|---|-----------------|
| 192             | . | 168             | . | 0               | . | 128             |
| 1 <sup>st</sup> |   | 2 <sup>nd</sup> |   | 3 <sup>rd</sup> |   | 4 <sup>th</sup> |

| No              | Description                                                                                                                                                                                                         | Command                                                                                                                                     |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1 <sup>st</sup> | 1 <sup>st</sup> address, Classes are A,B,C,D,E.<br>A CLASS : Large network<br>B CLASS : Large network<br>C CLASS : Small network(private IP)<br>D CLASS : Multi cast(use in designated group)<br>E CLASS : Stand by | A CLASS address : 1-127<br>B CLASS address : 128-191<br>C CLASS address : 192-223<br>D CLASS address : 224-239<br>E CLASS address : 240-255 |
| 2 <sup>nd</sup> | 2 <sup>nd</sup> address, Being Network ID or Host ID depending on 1 <sup>st</sup> Address                                                                                                                           |                                                                                                                                             |
| 3 <sup>rd</sup> | 3 <sup>rd</sup> address, Being Network ID or Host ID depending on 1 <sup>st</sup> Address                                                                                                                           |                                                                                                                                             |
| 4 <sup>th</sup> | 4 <sup>th</sup> address, Being Network ID or Host ID depending on 1 <sup>st</sup> 1 <sup>st</sup> Address                                                                                                           |                                                                                                                                             |

#### IP ADDRESS ASSIGNMENT BY CLASS

| GROUP   | 1 <sup>st</sup> address | 2 <sup>nd</sup> address | 3 <sup>rd</sup> address | 4 <sup>th</sup> address |
|---------|-------------------------|-------------------------|-------------------------|-------------------------|
| A CLASS | 1-127                   | 0.0.0-255.255.255       |                         |                         |
| B CLASS | 128.0-191.255           |                         | 0.0-255.255             |                         |
| C CLASS | 192.0.0-223.255.255     |                         |                         | 0-255                   |



## 4. What is MAC Address?

MAC address (Media Access Control) is a global unique identifier assigned to network devices. In other words, you can use the Mac Address IP address to find a separate device. It delivers Data Packet just like a postman delivers a letter.

So, what would be the difference between IP address and Mac address? Both IP address and MAC address are the address of its destination. IP address is simply the address while Mac address is a social security number of people living in the house IP address can be changed dynamically, but Mac address only has one unique address per device.

### Mac Address

an address for computers to communicate with each other, and there is no other PC that has a same Mac Addr as yours.

### IP Address

needed routing when other computers are searching for your computer address, that is an address of your computer for others to search.

An IP address is assigned to every device on a network so that device can be located on the network. The internet is a network, and every device on a TCP/IP network must have a unique IP address. IP addresses are assigned, either automatically by DHCP, or by manual configuration. That number is used by the network routing equipment so that when you ask for a page from the site, that request is routed to the right server. MAC addresses are typically used only to direct packets in the device-to-device portion of a network transaction. That means that your computer's MAC address will be in network packets only until the next device in the chain. If you have a router, then your machine's MAC address will go no further than that. Your router's MAC address will show up in packets sent further upstream, until that too is replaced by the MAC address of the next device.

## 5. What is PORT?

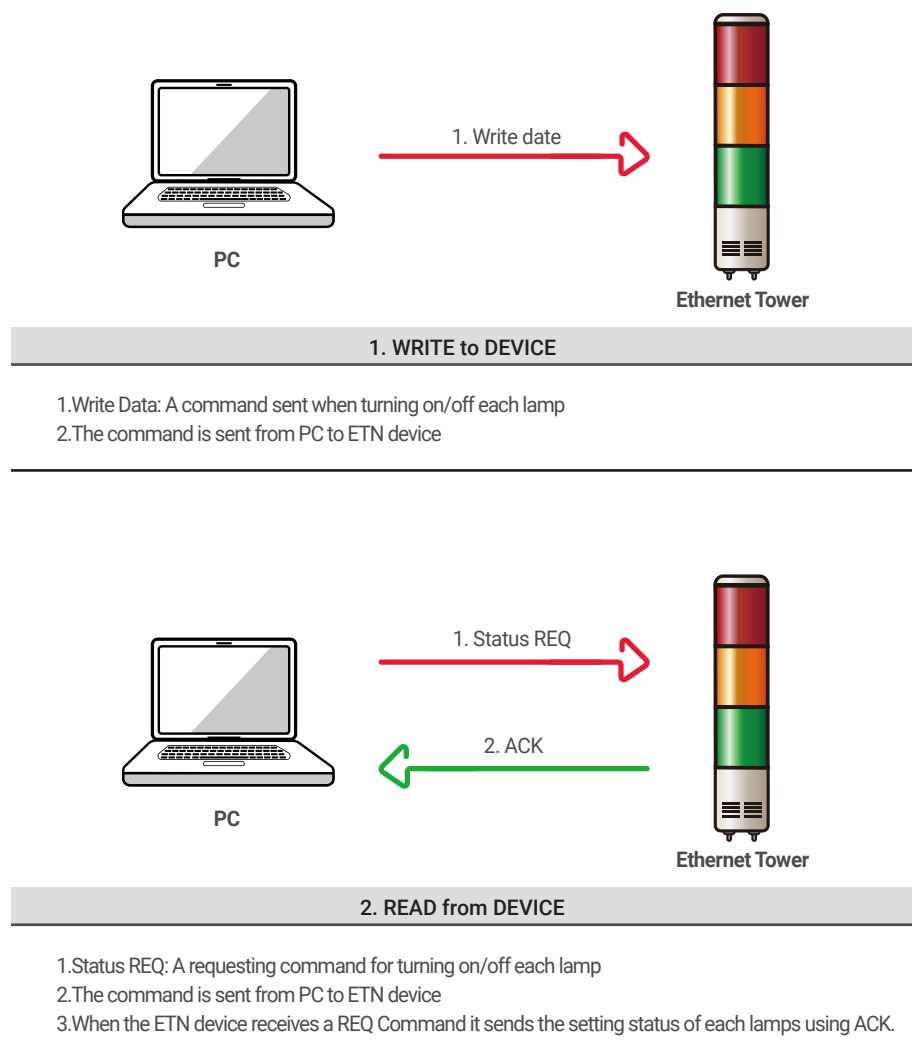
A port (noun) is a "logical connection place" and specifically, using the Internet's protocol and TCP/IP, the way a client's program specifies a particular server program on a computer in a network. Higher-level applications that use TCP/IP such as the Web protocol, Hypertext Transfer Protocol, have ports with preassigned numbers. These are known as "well-known ports" that have been assigned by the Internet Assigned Numbers Authority (IANA). Other application processes are given port numbers dynamically for each connection. When a service (server program) initially starts, it is said to be bound to its designated port number. As any client's program wants to use that server, it also must request to bind to the designated port number.

Port numbers are from 0 to 65535. Ports 0 to 1024 are reserved for use by certain privileged services. For the HTTP service, port 80 is defined as a default and it does not have to be specified in the Uniform Resource Locator.

## 6. What is Socket Program?

It is to implement a program to send and receive data between host PCs that are apart from each other in network programming. However, the connection between host PCs is far away so a device is that has a feature of connecting the two at a software level is required, and that device is the socket. Generally, the terms “socket programming” and “network programming” have the same meaning. We have provided a library file for users so that they can easily use the socket program.

※ The figure below show the sequence of our ETN Tower Lamp.





## 7. Applying the Ethernet Device

1. Proceed to check the current network and the assigned IP address of your PC.  
Start(run) -> CMD – ipconfig/all

Ethernet adapter Local Area Connection:

```
Connection-specific DNS Suffix . :  
IP Address. . . . . : 192.168.10.101  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.10.1
```

2. Because the ETN tower light is connected to a hub with the PC that is same as the picture on the front page, ETN tower light and the PC are now connected with the same network.
3. Download the library file, test programs and manuals from the CD provided or from our website.
4. When you unzip the file, there will be a file with the same name below. The instructions are listed inside the file.

### [Download]

PDF Catalogue [↓](#)

Operating Manual [↓](#)

Test Program [↓](#)

Manual & Library [↓](#)



### 1.Dev. ETN Program Sample

Program Sample needed when developing (x32bit/x64bit compatibility)



### 2.How to use

Instructions of how to use the product and library file

5. When you unzip "ETN TEST PROGRAM.zip" file, following folders are created.



### 1.ETN Test Program

A program for setting IP before testing the ETN device

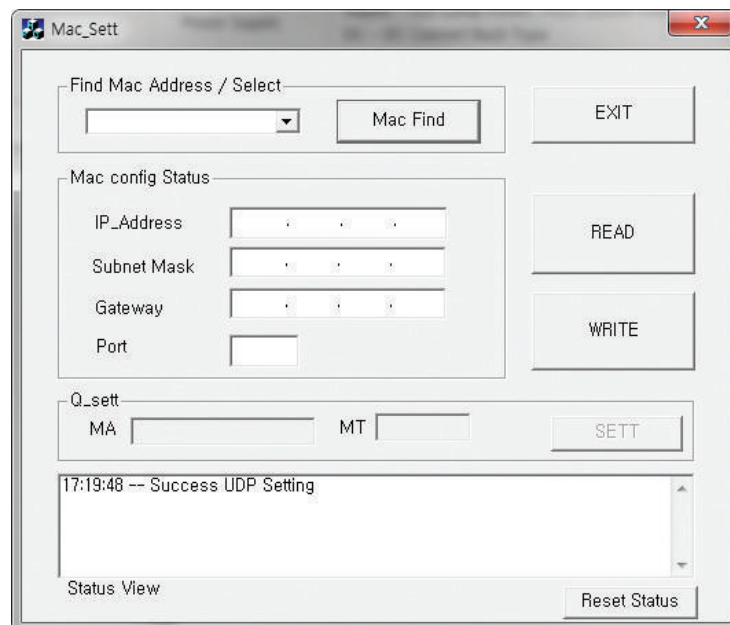


### 2.IP Set Program

A program for setting testing the ETN device

6. Run the "Mac\_Setting.exe" program that is inside the IP Set Program Folder

- When the program is running such as the right figure, click the "Mac Find" button in the "Find Mac Address/Select" section
- MAC Address of the connected device appears when you click the device List combo box.  
(If the Mac Addr does not appear, make sure that the connection status or the power supply is functional and then retry.)
- Select the Mac Addr of the device you want to change, and then click on the "eRad" button.
- Check the information and settings from the "Mac config status"
- Set the value of users network information identified in the previous chapter (subnet mask, gateway) in each text box, and set a different IP\_Addr than your PC apply the settings by pressing the write buttons
- The port is set to "20,000"by default and the port number can be changed if necessary
- Reconnect after disconnecting the power from the tower light.



7. ETN Test Program Files folder includes the followings

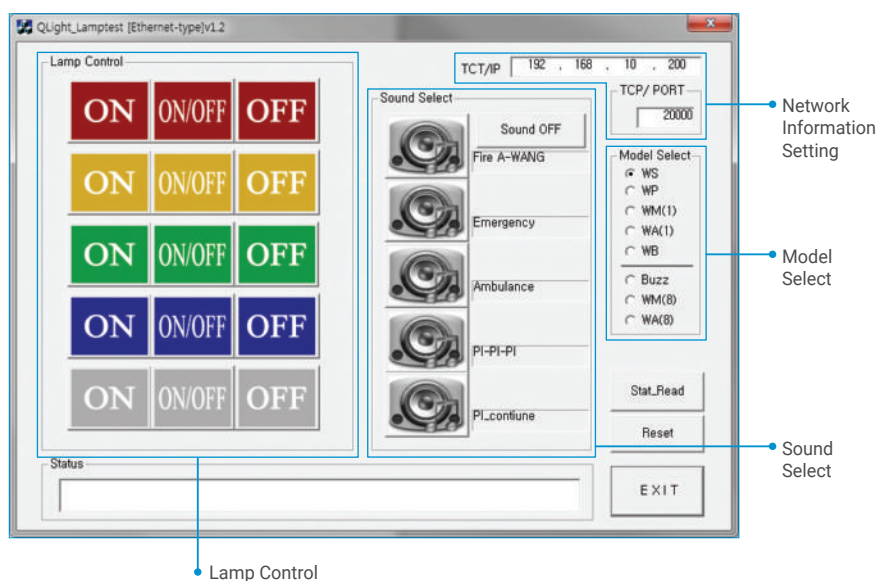
 QLight\_Lamptest\_TCP.exe

 QTvc\_dll.dll

8. Run the "QLight\_Lamptest\_TCP" program

| Article                     | Detailed specification                                                                                                                                                                                          |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network Information Setting | - Input port on TCP/PORT and IP address on TCP/IP that set on Ethernet tower lights                                                                                                                             |
| Lamp Control                | - ON : Click the button Lamp ON<br>- ON/OFF : Click the button Lamp Flash<br>- OFF : Click the button Lamp OFF                                                                                                  |
| Model Select                | - WS : 5 warning sounds(mono)<br>- WP : 5 special warning sounds(mono)<br>- WM(1) : 5 Melodies(mono)<br>- WA(1) : 5 alarms(mono)<br>- WB : Software Buzzer 5 sounds(speaker type)<br>- Buzzer : 5 Buzzer sounds |
| Sound Select                | - Select 5 sounds based on model which is fixed on "Model select"                                                                                                                                               |

· User can select appropriate sound pattern by using 'Model select' menu. There're WS, WP, WM, WA and WB sound patterns and user can choose the option when placing order.





# Specification List for Ethernet LED Tower Lights



| Model number             | ST45ML-ETN                                                | ST45L-ETN                                                   | ST56MEL-ETN                                                                  | ST56EL-ETN                                                                       | ST80MEL-ETN                                                                  | ST80EL-ETN                                                                       |
|--------------------------|-----------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V-220V                               | DC12V, DC24V<br>AC110V-220V                                 | DC12V, DC24V<br>AC110V-220V                                                  | DC12V, DC24V<br>AC110V-220V                                                      | DC12V, DC24V<br>AC110V-220V                                                  | DC12V, DC24V<br>AC110V-220V                                                      |
| Dimension (mm)           | Outdia                                                    | Ø45                                                         | Ø45                                                                          | Ø56                                                                              | Ø56                                                                          | Ø80                                                                              |
|                          | Height                                                    | 244-404                                                     | 458-618                                                                      | 257-517                                                                          | 471-631                                                                      | 230-390                                                                          |
|                          | Depth                                                     |                                                             |                                                                              |                                                                                  |                                                                              |                                                                                  |
| Material                 | Lens-AS<br>Housing-ABS                                    | Lens-AS<br>Housing-ABS                                      | Lens-AS<br>Housing-ABS                                                       | Lens-AS<br>Housing-ABS                                                           | Lens-AS<br>Housing-ABS                                                       | Lens-AS<br>Housing-ABS                                                           |
| Layers                   | 1-5 Layers                                                | 1-5 Layers                                                  | 1-5 Layers                                                                   | 1-5 Layers                                                                       | 1-5 Layers                                                                   | 1-5 Layers                                                                       |
| Light source & Operation | LED Steady/<br>Flashing                                   | ●                                                           | ●                                                                            | ●                                                                                | ●                                                                            | ●                                                                                |
|                          |                                                           |                                                             |                                                                              |                                                                                  |                                                                              |                                                                                  |
| Sound & Volume           | Buzzer sound                                              | Max.90dB at 1m                                              | Max.90dB at 1m                                                               | Max.90dB at 1m                                                                   | Max.90dB at 1m                                                               | Max.90dB at 1m                                                                   |
|                          | Signal sounds                                             | Max.85dB at 1m                                              | Max.85dB at 1m                                                               | Max.85dB at 1m                                                                   | Max.85dB at 1m                                                               | Max.85dB at 1m                                                                   |
| Layer color change       | Yes                                                       | Yes                                                         | Yes                                                                          | Yes                                                                              | Yes                                                                          | Yes                                                                              |
| Mount bracket            | Direct mount                                              | Pole mount                                                  | Direct mount                                                                 | Pole mount                                                                       | Direct mount                                                                 | Pole mount                                                                       |
| Bracket                  | TWS45, TWA45                                              | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                       | TWS45, TWA45                                                                 | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                            | TWS80, TWA80                                                                 | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                            |
| Protection rating        | IP23                                                      | IP23                                                        | IP23                                                                         | IP23                                                                             | IP23                                                                         | IP23                                                                             |
| Usage place              | Indoor Use                                                | Indoor Use                                                  | Indoor Use                                                                   | Indoor Use                                                                       | Indoor Use                                                                   | Indoor Use                                                                       |
| Certificates             | CE                                                        | CE                                                          | CE, KC                                                                       | CE, KC                                                                           | -                                                                            | -                                                                                |
| Customization            | Customized color arrange-<br>ments,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment | Customized color<br>arrangements,<br>70mm lens height,<br>Wall mount bracket | Customized color<br>arrangements,<br>70mm lens height,<br>Pole length adjustment | Customized color<br>arrangements,<br>70mm lens height,<br>Wall mount bracket | Customized color<br>arrangements,<br>70mm lens height,<br>Pole length adjustment |
| Page                     | P219                                                      | P219                                                        | P220                                                                         | P220                                                                             | P221                                                                         | P221                                                                             |



| Model number             | QTG50(M)L-ETN                                                                      | QTG60(M)L-ETN                                                                      | QTG70(M)L-ETN                                                                      | QTC50(M)L-ETN                                                                      | QTC60(M)L-ETN                                                                      | QTC70(M)L-ETN                                                                      |
|--------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Voltage                  | DC12V, DC24V<br>AC110V-220V                                                        | DC12V, DC24V<br>AC110V-220V                                                        | DC12V, DC24V<br>AC110V-220V                                                        | DC12V, DC24V<br>AC110V-220V                                                        | DC12V, DC24V<br>AC110V-220V                                                        | DC12V, DC24V<br>AC110V-220V                                                        |
| Dimension (mm)           | Outdia                                                                             | Ø50                                                                                | Ø60                                                                                | Ø70                                                                                | Ø50                                                                                | Ø60                                                                                |
|                          | Height                                                                             | 204-364(ML)<br>432-592(L)                                                          | 199-399(ML)<br>435-635(L)                                                          | 199-399(ML)<br>357-557(L)                                                          | 204-364(ML)<br>432-592(L)                                                          | 199-399(ML)<br>435-635(L)                                                          |
|                          | Depth                                                                              |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                    |
| Material                 | Lens-PC<br>Housing-ABS                                                             | Lens-PC<br>Housing-ABS                                                             | Lens-PC<br>Housing-ABS                                                             | Lens, Inner Lens -PC<br>Housing-ABS                                                | Lens, Inner Lens -PC<br>Housing-ABS                                                | Lens, Inner Lens -PC<br>Housing-ABS                                                |
| Layers                   | 1-5 Layers                                                                         | 1-5 Layers                                                                         | 1-5 Layers                                                                         | 1-5 Layers                                                                         | 1-5 Layers                                                                         | 1-5 Layers                                                                         |
| Light source & Operation | LED Steady/<br>Flashing                                                            | ●                                                                                  | ●                                                                                  | ●                                                                                  | ●                                                                                  | ●                                                                                  |
|                          |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                    |
| Sound & Volume           | Buzzer sound                                                                       | Max.85dB at 1m                                                                     | Max.85dB at 1m                                                                     | Max.85dB at 1m                                                                     | Max.85dB at 1m                                                                     | Max.85dB at 1m                                                                     |
|                          |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                    |                                                                                    |
| Layer color change       | Yes                                                                                | Yes                                                                                | Yes                                                                                | Yes                                                                                | Yes                                                                                | Yes                                                                                |
| Mount bracket            | Direct mount/Pole mount                                                            | Direct mount/Pole mount                                                            | Direct mount/Pole mount                                                            | Direct mount/Pole mount                                                            | Direct mount/Pole mount                                                            | Direct mount/Pole mount                                                            |
| Bracket                  | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                             | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                             | TWS80, TWA80,<br>LB24, LW24, QZ24,<br>SZ24, QL24, SL24                             | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                             | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                             | TWS80, TWA80,<br>LB24, LW24, QZ24,<br>SZ24, QL24, SL24                             |
| Protection rating        | IP54                                                                               | IP54                                                                               | IP54                                                                               | IP54                                                                               | IP54                                                                               | IP54                                                                               |
| Usage place              | Indoor                                                                             | Indoor                                                                             | Indoor                                                                             | Indoor                                                                             | Indoor                                                                             | Indoor                                                                             |
| Certificates             | CE                                                                                 | CE                                                                                 | CE                                                                                 | CE                                                                                 | CE                                                                                 | CE                                                                                 |
| Customization            | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Pole length adjustment,<br>Wall mount bracket |
| Page                     | P223-224                                                                           | P225                                                                               | P226                                                                               | P227-228                                                                           | P229                                                                               | P230                                                                               |

# Specification List for Ethernet LED Tower Lights



| Model number             |                         | QTR50(M)L-ETN                                                                                      | QTR60(M)L-ETN                                                                                      | QTR70(M)L-ETN                                                                                      |
|--------------------------|-------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Dimension (mm)           | Voltage                 | DC12V, DC24V<br>AC110V-220V                                                                        | DC12V, DC24V<br>AC110V-220V                                                                        | DC12V, DC24V<br>AC110V-220V                                                                        |
|                          | Outdia                  | Ø50                                                                                                | Ø60                                                                                                | Ø70                                                                                                |
|                          | Height                  | 204-364(ML)<br>432-592(L)                                                                          | 199-399(ML)<br>435-635(L)                                                                          | 199-399(ML)<br>357-557(L)                                                                          |
|                          | Depth                   |                                                                                                    |                                                                                                    |                                                                                                    |
| Material                 |                         | Lens-PC<br>Housing-ABS                                                                             | Lens-PC<br>Housing-ABS                                                                             | Lens-PC<br>Housing-ABS                                                                             |
| Layers                   |                         | 1-5 Layers                                                                                         | 1-5 Layers                                                                                         | 1-5 Layers                                                                                         |
| Light source & Operation | LED Steady/<br>Flashing | ●                                                                                                  | ●                                                                                                  | ●                                                                                                  |
|                          |                         |                                                                                                    |                                                                                                    |                                                                                                    |
| Sound & Volume           | Buzzer sound            | Max.85dB at 1m                                                                                     | Max.85dB at 1m                                                                                     | Max.85dB at 1m                                                                                     |
|                          |                         |                                                                                                    |                                                                                                    |                                                                                                    |
| Layer color change       |                         | Yes                                                                                                | Yes                                                                                                | Yes                                                                                                |
| Mount bracket            |                         | Direct mount/Pole mount                                                                            | Direct mount/Pole mount                                                                            | Direct mount/Pole mount                                                                            |
| Bracket                  |                         | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                             | TWS45, TWA45,<br>LB18, LW18, QZ18,<br>SZ18, QL18, SL18                                             | TWS80, TWA80,<br>LB24, LW24, QZ24,<br>SZ24, QL24, SL24                                             |
| Protection rating        |                         | IP54                                                                                               | IP54                                                                                               | IP54                                                                                               |
| Usage place              |                         | Indoor                                                                                             | Indoor                                                                                             | Indoor                                                                                             |
| Certificates             |                         |                                                                                                    |                                                                                                    |                                                                                                    |
| Customization            |                         | Customized color<br>arrangements,<br>Beige color,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Beige color,<br>Pole length adjustment,<br>Wall mount bracket | Customized color<br>arrangements,<br>Beige color,<br>Pole length adjustment,<br>Wall mount bracket |
| Page                     |                         | P231-232                                                                                           | P233                                                                                               | P234                                                                                               |

## Ø45mm Ethernet LED Tower Lights

# ST45(M)L-ETN



Remote control through internet or local area network

### PRODUCT SPECIFICATION

ST45(M)L-ETN | ST56(M)EL-ETN  
ST80(M)EL-ETN

**Buzzer sounds** Max.90dB at 1m  
**Warning sounds** Max.85dB at 1m(Based on WS-Ch1)  
**Protection rating** IP23

- Software controls the steady/flashing function
- Please refer to [Pre-recorded Sound Tone and Sound Combination Chart] for detailed information about selectable sound patterns.
- Ethernet port and power cable are provided with product
- LED Module Standard Operation: 2 layers will operate at the same time



ST45(M)L-ETN Series

### ST45(M)L-ETN Ø45mm Ethernet LED Tower Lights

| Model number            | Layers | Voltage                       | Certificates | Color                                                      |
|-------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| ST45L-ETN<br>ST45ML-ETN | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red                                                    |
|                         | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                         | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                         | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                         | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/signal sound current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 230mA | 160mA | Max.60mA    |
| Signal sound current          | 350mA | 230mA | Max.85mA    |

### Customization

- Customized color arrangements
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS45



Wall mount bracket TWA45

### Ordering Specifications

| ST45L-ETN-WS   | 3          | 24                  | RAG       | LW18                                                |
|----------------|------------|---------------------|-----------|-----------------------------------------------------|
| [Model number] | [Layers]   | [Voltage]           | [Color]   | [Bracket]                                           |
| ST45L-ETN-BZ   | 1-1 Layer  | 12-DC12V            | ● R-Red   | None-Standard Bracket<br>-LB18 -LW18<br>-QZ18 -SZ18 |
| ST45L-ETN-WS   | 2-2 Layers | 24-DC24V            | ● A-Amber |                                                     |
| ST45L-ETN-WM   | 3-3 Layers | 110/220-AC110V-220V | ● G-Green |                                                     |
| ST45L-ETN-WA   | 4-4 Layers |                     | ● B-Blue  |                                                     |
| ST45ML-ETN-BZ  | 5-5 Layers |                     | ○ W-White |                                                     |
| ST45ML-ETN-WS  |            |                     |           |                                                     |
| ST45ML-ETN-WM  |            |                     |           |                                                     |
| ST45ML-ETN-WA  |            |                     |           |                                                     |

Mount brackets are available for the pole mount type(ST45L-ETN series) only.

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| Al       | ABS   | Al   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line :  
UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable
- DC type : Black output line is negative(-).

# ST56(M)EL-ETN

Remote control through internet or local area network



ST56(M)EL-ETN Series

## ST56(M)EL-ETN Ø56mm Ethernet LED Tower Lights

| Model number              | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| ST56EL-ETN<br>ST56MEL-ETN | 1      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red                                                    |
|                           | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                           | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                           | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                           | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ KC Certification: AC220V(ST56EL-ETNS)

### Light source/signal sound current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 240mA | 165mA | Max.65mA    |
| Signal sound current          | 350mA | 230mA | Max.85mA    |

### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable
- DC type : Black output line is negative(-).

### Customization

- Customized color arrangement available
- 70mm lens height(Standard 40mm)
- Customized pole length available
- Wall mount bracket
- KC Certification is available (Model number: ST56EL-ETNS, AC220V)



### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Ordering Specifications

| ST56EL-ETN-WS  | - | 3          | - | 220                 | - | RAG       | - | QZ18          |
|----------------|---|------------|---|---------------------|---|-----------|---|---------------|
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]     |
| ST56EL-ETN-BZ  |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard |
| ST56EL-ETN-WS  |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Bracket       |
| ST56EL-ETN-WM  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18   |
| ST56EL-ETN-WA  |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18   |
| ST56MEL-ETN-BZ |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18   |
| ST56MEL-ETN-WS |   |            |   |                     |   |           |   |               |
| ST56MEL-ETN-WM |   |            |   |                     |   |           |   |               |
| ST56MEL-ETN-WA |   |            |   |                     |   |           |   |               |

Mount brackets are available for the pole mount type(ST56EL-ETN series) only.

## Ø80mm Ethernet LED Tower Lights

# ST80(M)EL-ETN



Remote control through internet or local area network

### ST80(M)EL-ETN Ø80mm Ethernet LED Tower Lights

| Model number              | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| ST80EL-ETN<br>ST80MEL-ETN | 1      | DC12V<br>DC24V<br>AC110V-220V | -            | ● R-Red                                                    |
|                           | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                           | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                           | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                           | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |



ST80(M)EL-ETN Series

### Light source/signal sound current(based on 1 layer)

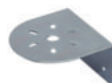
| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 260mA | 180mA | Max.70mA    |
| Signal sound current          | 350mA | 230mA | Max.85mA    |

### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable
- DC type : Black output line is negative(-).

### Customization

- Customized color arrangements available
- 70mm lens height(Standard 40mm)  
(Model number: ST80(M)L-ETN)
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Ordering Specifications

| ST80EL-ETN-WS  | 3          | 24                  | RAG       | QZ24                                                                  |
|----------------|------------|---------------------|-----------|-----------------------------------------------------------------------|
| [Model number] | [Layers]   | [Voltage]           | [Color]   | [Bracket]                                                             |
| ST80EL-ETN-BZ  | 1-1 Layer  | 12-DC12V            | ● R-Red   | None-Standard<br>Bracket<br>-LB24 -LW24<br>-QZ24 -SZ24<br>-QL24 -SL24 |
| ST80EL-ETN-WS  | 2-2 Layers | 24-DC24V            | ● A-Amber |                                                                       |
| ST80EL-ETN-WM  | 3-3 Layers | 110/220-AC110V-220V | ● G-Green |                                                                       |
| ST80EL-ETN-WA  | 4-4 Layers |                     | ● B-Blue  |                                                                       |
| ST80MEL-ETN-BZ | 5-5 Layers |                     | ○ W-White |                                                                       |
| ST80MEL-ETN-WS |            |                     |           |                                                                       |
| ST80MEL-ETN-WM |            |                     |           |                                                                       |
| ST80MEL-ETN-WA |            |                     |           |                                                                       |

### Mounting bracket

| Standard | LB24  | LW24 | QZ24 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ24     | QL24  | SL24 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

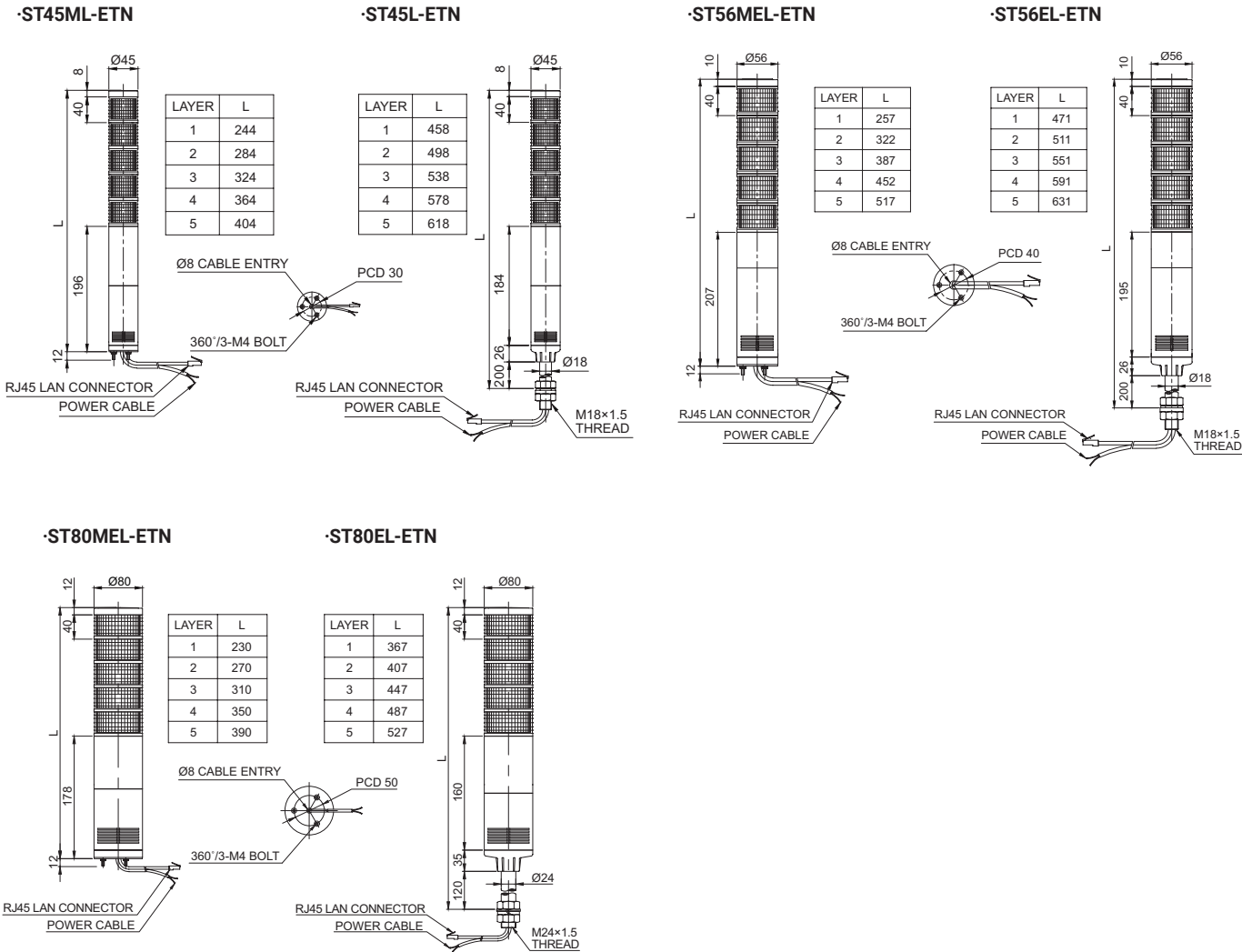
Mount brackets are available for the pole mount type(ST80EL-ETN series) only.

# ST-ETN Series



## Technical Diagram

Units : mm



# QTG50(M)L-ETN



Remote control through internet or local area network

## PRODUCT SPECIFICATION

QTG50(M)L-ETN | QTG60(M)L-ETN  
QTG70(M)L-ETN

**Volume** Max. 85dB at 1m  
**Communication speed** 10M/Half Duplex method  
**Protection rating** IP54  
**Compliant with RoHS directive**

- LED tower lamp capable of remote-control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Brower) and TCP/IP protocol
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- LED signal tower light controlled by PC application program though the network
- Ethernet cable and power cable are provided with the product
- LED Module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)

## QTG50(M)L-ETN Ø50mm Ethernet LED Tower Lights

| Model number                                                  | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTG50(M)L-ETN-BZ<br>QTGA50(M)L-ETN-BZ<br>(BZ: 5 buzzer sound) | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red                                                    |
|                                                               | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                               | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                               | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                               | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 265mA | 285mA | Max.70mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



QTG50(M)L-ETN Series

### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45



QTG50(M)L-ETN

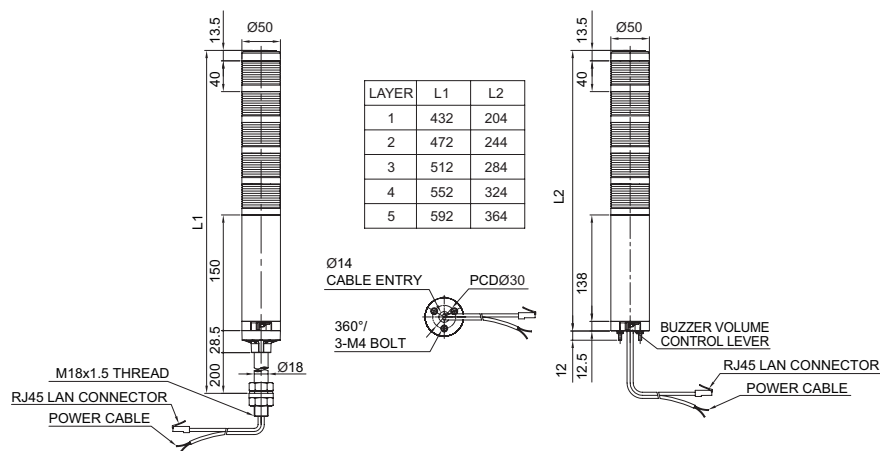


Technical Diagram

Units : mm

·QTG50L-ETN-BZ

·QTG50ML-ETN-BZ



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

Ordering Specifications

|                 |   |            |   |                     |   |           |   |                       |
|-----------------|---|------------|---|---------------------|---|-----------|---|-----------------------|
| QTG50L-ETN-BZ   | - | 3          | - | 24                  | - | RAG       | - | LW18                  |
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]             |
| QTG50L-ETN-BZ   |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard Bracket |
| QTG50ML-ETN-BZ  |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | -LB18 -LW18           |
| QTGA50L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -QZ18 -SZ18           |
| QTGA50ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QL18 -SL18           |
|                 |   | 5-5 Layers |   |                     |   | ○ W-White |   |                       |

## Ø60mm Ethernet LED Tower Lights

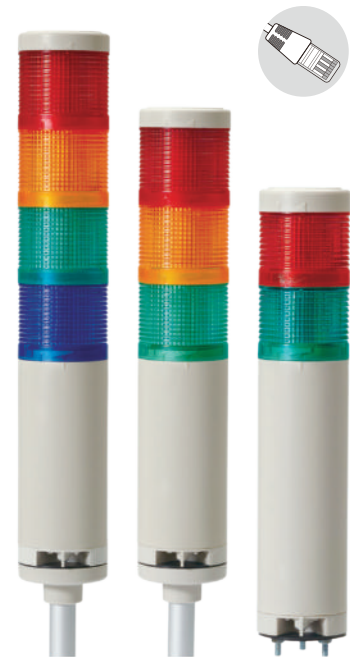
# QTG60(M)L-ETN



Remote control through internet or local area network

### QTG60(M)L-ETN Ø60mm Ethernet LED Tower Lights

| Model number                                                  | Layers | Voltage                       | Certificates | Color                                            |
|---------------------------------------------------------------|--------|-------------------------------|--------------|--------------------------------------------------|
| QTG60(M)L-ETN-BZ<br>QTGA60(M)L-ETN-BZ<br>(BZ: 5 buzzer sound) | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | R-Red                                            |
|                                                               | 2      | DC12V<br>DC24V<br>AC110V-220V |              | R-Red<br>G-Green                                 |
|                                                               | 3      | DC12V<br>DC24V<br>AC110V-220V |              | R-Red<br>A-Amber<br>G-Green                      |
|                                                               | 4      | DC12V<br>DC24V<br>AC110V-220V |              | R-Red<br>A-Amber<br>G-Green<br>B-Blue            |
|                                                               | 5      | DC12V<br>DC24V<br>AC110V-220V |              | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |



QTG60(M)L-ETN Series

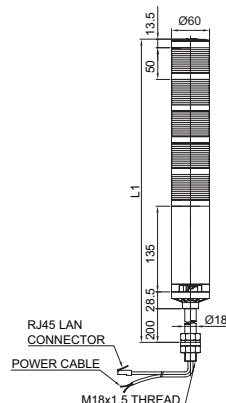
### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 285mA | 300mA | Max.75mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

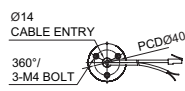
### Technical Diagram

Units : mm

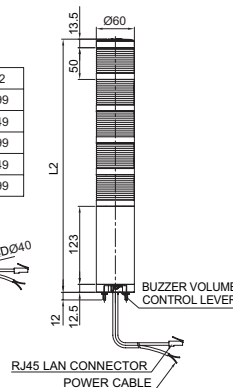
#### ·QTG60L-ETN-BZ



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 435 | 199 |
| 2     | 485 | 249 |
| 3     | 535 | 299 |
| 4     | 585 | 349 |
| 5     | 635 | 399 |



#### ·QTG60ML-ETN-BZ



### Wiring Instructions

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS45



Wall mount bracket TWA45

### Ordering Specifications

|                 |            |                     |         |               |
|-----------------|------------|---------------------|---------|---------------|
| QTG60L-ETN-BZ   | 3          | 24                  | RAG     | LW18          |
| [Model number]  | [Layers]   | [Voltage]           | [Color] | [Bracket]     |
| QTG60L-ETN-BZ   | 1-1 Layer  | 12-DC12V            | R-Red   | None-Standard |
| QTG60ML-ETN-BZ  | 2-2 Layers | 24-DC24V            | A-Amber | Bracket       |
| QTGA60L-ETN-BZ  | 3-3 Layers | 110/220-AC110V-220V | G-Green | -LB18 -LW18   |
| QTGA60ML-ETN-BZ | 4-4 Layers |                     | B-Blue  | -QZ18 -SZ18   |
|                 | 5-5 Layers |                     | W-White | -QL18 -SL18   |

### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line
  - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

## Ø70mm Ethernet LED Tower Lights

# QTG70(M)L-ETN

Remote control through internet or local area network



QTG70(M)L-ETN Series

### Customization

- Customized color arrangements
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Mounting bracket

Standard LB24 LW24 QZ24



Steel Steel ABS ABS  
SZ24 QL24 SL24



AI ABS AI

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

## QTG70(M)L-ETN Ø70mm Ethernet LED Tower Lights

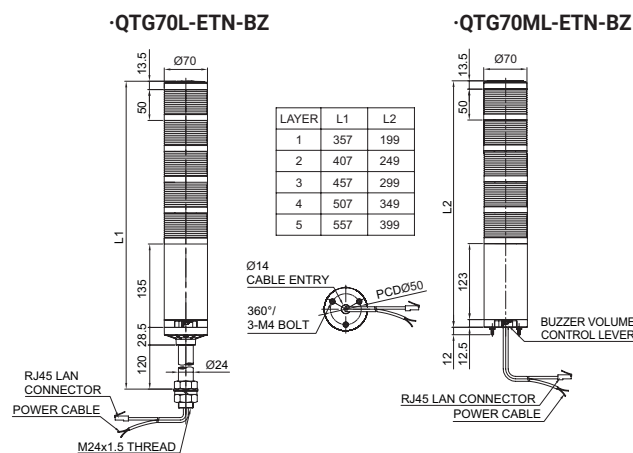
| Model number                                                   | Layers | Voltage                       | Certificates | Color                                                      |
|----------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTG70(M)L-ETN-BZ<br>QTGA70(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red                                                    |
|                                                                | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                                | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                                | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                                | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 285mA | 300mA | Max.75mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

### Technical Diagram

Units : mm



### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

### Ordering Specifications

|                 |   |            |   |                     |   |           |   |                       |
|-----------------|---|------------|---|---------------------|---|-----------|---|-----------------------|
| QTG70L-ETN-BZ   | - | 3          | - | 24                  | - | RAG       | - | LW24                  |
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]             |
| QTG70L-ETN-BZ   |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard Bracket |
| QTG70ML-ETN-BZ  |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | -LB24 -LW24           |
| QTGA70L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -QZ24 -SZ24           |
| QTGA70ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QL24 -SL24           |
|                 |   | 5-5 Layers |   |                     |   | ○ W-White |   |                       |

# QTC50(M)L-ETN



Remote control through internet or local area network

## PRODUCT SPECIFICATION

QTC50(M)L-ETN | QTC60(M)L-ETN  
QTC70(M)L-ETN

**Volume** Max. 85dB at 1m  
**Communication speed** 10M/Half Duplex method  
**Protection rating** IP54  
**Compliant with RoHS directive**

- LED tower lamp capable of remote-control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Browser) and TCP/IP protocol
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC ++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- LED signal tower light controlled by PC application program though the network
- Ethernet cable and power cable are provided with the product
- LED Module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)



QTC50(M)L-ETN Series

## QTC50(M)L-ETN Ø50mm Ethernet LED Tower Lights

| Model number                                                  | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
|                                                               | 1      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red                                                    |
|                                                               | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
| QTC50(M)L-ETN-BZ<br>QTC60(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 3      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                               | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                               | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 265mA | 285mA | Max.70mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 |
|----------|-------|------|------|------|------|
|          |       |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

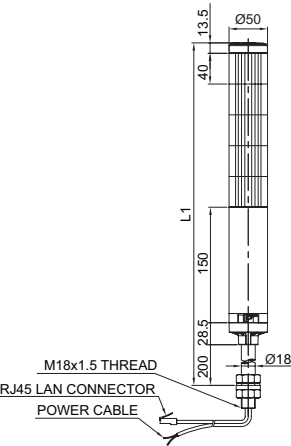
QTC50(M)L-ETN



Technical Diagram

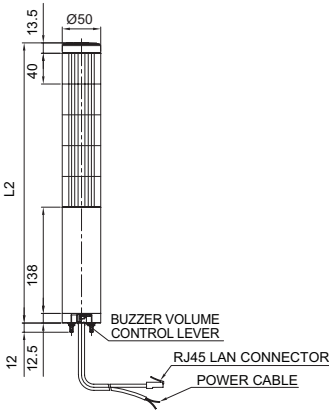
Units : mm

·QTC50L-ETN-BZ



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 432 | 204 |
| 2     | 472 | 244 |
| 3     | 512 | 284 |
| 4     | 552 | 324 |
| 5     | 592 | 364 |

·QTC50ML-ETN-BZ



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

Ordering Specifications

|                |   |            |   |                     |   |           |   |               |
|----------------|---|------------|---|---------------------|---|-----------|---|---------------|
| QTC50L-ETN-BZ  | - | 3          | - | 24                  | - | RAG       | - | LW18          |
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]     |
| QTC50L-ETN-BZ  |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard |
| QTC50ML-ETN-BZ |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Bracket       |
| QTC50L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18   |
| QTC50ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18   |

## Ø60mm Ethernet LED Tower Lights

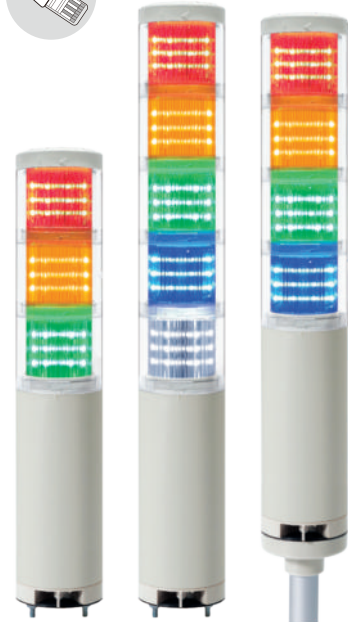
# QTC60(M)L-ETN



Remote control through internet or local area network

### QTC60(M)L-ETN Ø60mm Ethernet LED Tower Lights

| Model number                                                  | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTC60(M)L-ETN-BZ<br>QTC60(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red                                                    |
|                                                               | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                               | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                               | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                               | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |



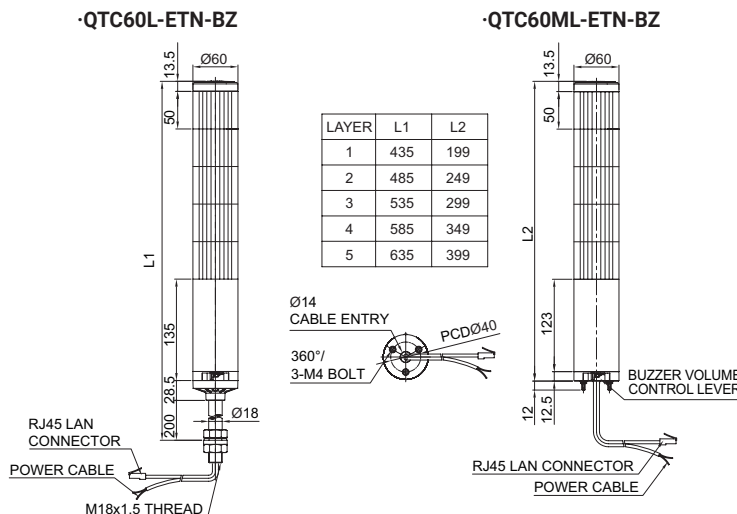
QTC60(M)L-ETN Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 285mA | 300mA | Max.75mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

### Technical Diagram

Units : mm



### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

### Ordering Specifications

|                |            |                     |           |               |
|----------------|------------|---------------------|-----------|---------------|
| QTC60L-ETN-BZ  | 3          | 24                  | RAG       | LW18          |
| [Model number] | [Layers]   | [Voltage]           | [Color]   | [Bracket]     |
| QTC60L-ETN-BZ  | 1-1 Layer  | 12-DC12V            | ● R-Red   | None-Standard |
| QTC60ML-ETN-BZ | 2-2 Layers | 24-DC24V            | ● A-Amber | Bracket       |
| QTC60L-ETN-BZ  | 3-3 Layers | 110/220-AC110V-220V | ● G-Green | -LB18 -LW18   |
| QTC60ML-ETN-BZ | 4-4 Layers |                     | ● B-Blue  | -QZ18 -SZ18   |
|                | 5-5 Layers |                     | ○ W-White | -QL18 -SL18   |

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ18     | QL18  | SL18 |      |
|          |       |      |      |
| AI       | ABS   | AI   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



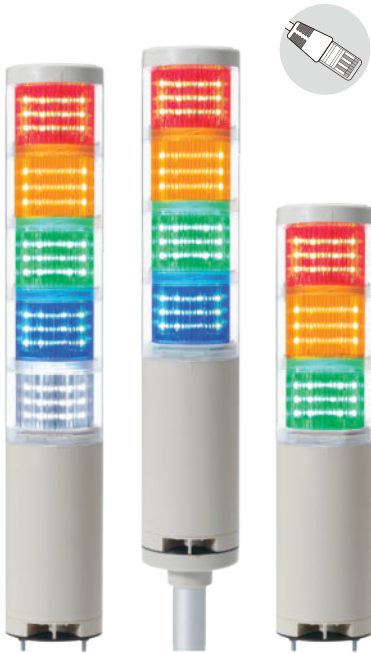
Wall mount bracket TWS45

Wall mount bracket TWA45

# Ø70mm Ethernet LED Tower Lights

## QTC70(M)L-ETN

Remote control through internet or local area network



QTC70(M)L-ETN Series

### Mounting bracket

Standard LB24 LW24 QZ24



Steel Steel ABS ABS

SZ24 QL24 SL24

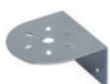


AI ABS AI

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### Customization

- Customized color arrangements
- Customized pole length available
- Wall mount bracket



Wall mount bracket TWS80



Wall mount bracket TWA80

### QTC70(M)L-ETN Ø70mm Ethernet LED Tower Lights

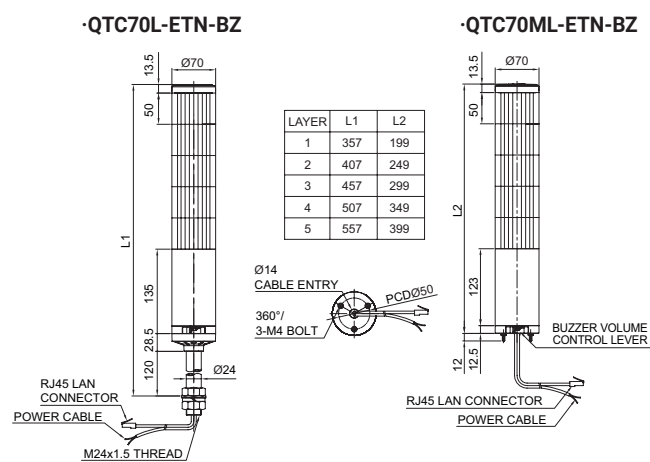
| Model number                                                  | Layers | Voltage                       | Certificates | Color                                                      |
|---------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTC70(M)L-ETN-BZ<br>QTC70(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 1      | DC12V<br>DC24V<br>AC110V-220V | CE           | ● R-Red                                                    |
|                                                               | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                               | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                               | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                               | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 285mA | 300mA | Max.75mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

### Technical Diagram

Units : mm



### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

### Ordering Specifications

|                |   |            |   |                     |   |           |   |                       |
|----------------|---|------------|---|---------------------|---|-----------|---|-----------------------|
| QTC70L-ETN-BZ  | - | 3          | - | 24                  | - | RAG       | - | LW24                  |
| [Model number] |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]             |
| QTC70L-ETN-BZ  |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard Bracket |
| QTC70ML-ETN-BZ |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | -LB24 -LW24           |
| QTC70L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -QZ24 -SZ24           |
| QTC70ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QL24 -SL24           |
|                |   | 5-5 Layers |   |                     |   | ○ W-White |   |                       |



## Ø50mm Ethernet LED Tower Lights

# QTR50(M)L-ETN



Remote control through internet or local area network

### PRODUCT SPECIFICATION

QTR50(M)L-ETN | QTR60(M)L-ETN  
QTR70(M)L-ETN

**Volume** Max. 85dB at 1m  
**Communication speed** 10M/Half Duplex method  
**Protection rating** IP54  
**Compliant with RoHS directive**

- LED tower lamp capable of remote-control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Brower) and TCP/IP protocol
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC ++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- LED signal tower light controlled by PC application program though the network
- Ethernet cable and power cable are provided with the product
- LED Module Standard Operation: 2 layers will operate at the same time
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)



QTR50(M)L-ETN Series

### QTR50(M)L-ETN Ø50mm Ethernet LED Tower Lights

| Model number                                                   | Layers | Voltage                       | Certificates | Color                                                      |
|----------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTR50(M)L-ETN-BZ<br>QTRA50(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 1      | DC12V<br>DC24V<br>AC110V-220V | -            | ● R-Red                                                    |
|                                                                | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                                | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                                | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                                | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

#### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 265mA | 285mA | Max.70mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

#### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

#### Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket



Wall mount bracket  
TWS45



Wall mount bracket  
TWA45

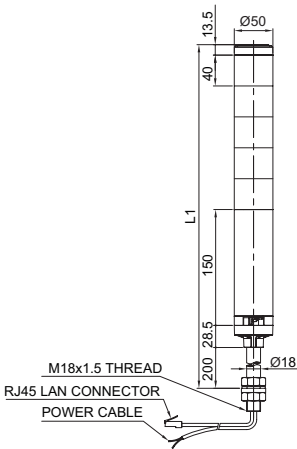
QTR50(M)L-ETN



Technical Diagram

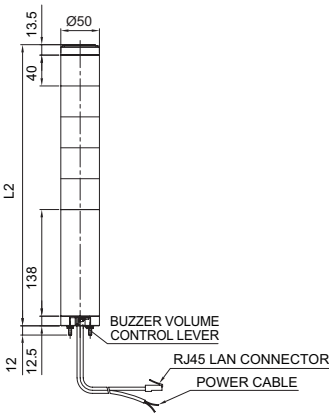
Units : mm

·QTR50L-ETN-BZ



| LAYER | L1  | L2  |
|-------|-----|-----|
| 1     | 432 | 204 |
| 2     | 472 | 244 |
| 3     | 512 | 284 |
| 4     | 552 | 324 |
| 5     | 592 | 364 |

·QTR50ML-ETN-BZ



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

Ordering Specifications

|                 |   |            |   |                     |   |           |   |               |
|-----------------|---|------------|---|---------------------|---|-----------|---|---------------|
| QTR50L-ETN-BZ   | - | 3          | - | 24                  | - | RAG       | - | LW18          |
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]     |
| QTR50L-ETN-BZ   |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard |
| QTR50ML-ETN-BZ  |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Bracket       |
| QTRA50L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18   |
| QTRA50ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18   |
|                 |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18   |

## QTR60(M)L-ETN



 **QTR60(M)L-ETN** Ø60mm Ethernet LED Tower Lights



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## Ø70mm Ethernet LED Tower Lights

# QTR70(M)L-ETN

Remote control through internet or local area network



QTR70(M)L-ETN Series

### QTR70(M)L-ETN Ø70mm Ethernet LED Tower Lights

| Model number                                                   | Layers | Voltage                       | Certificates | Color                                                      |
|----------------------------------------------------------------|--------|-------------------------------|--------------|------------------------------------------------------------|
| QTR70(M)L-ETN-BZ<br>QTRA70(M)L-ETN-BZ<br>(BZ: 5 buzzer sounds) | 1      | DC12V<br>DC24V<br>AC110V-220V | -            | ● R-Red                                                    |
|                                                                | 2      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● G-Green                                       |
|                                                                | 3      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green                          |
|                                                                | 4      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
|                                                                | 5      | DC12V<br>DC24V<br>AC110V-220V |              | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 285mA | 300mA | Max.75mA    |
| Buzzer current                | 215mA | 245mA | Max.55mA    |

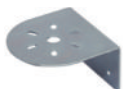
### Mounting bracket

| Standard | LB24  | LW24 | QZ24 |
|----------|-------|------|------|
|          |       |      |      |
| Steel    | Steel | ABS  | ABS  |
| SZ24     | QL24  | SL24 |      |
|          |       |      |      |
| Al       | ABS   | Al   |      |

※ Please refer to [Tower Light Mounting Bracket] on this catalogue for detailed dimensions

### Customization

- Customized color arrangements
- Customized pole length available
- Wall mount bracket



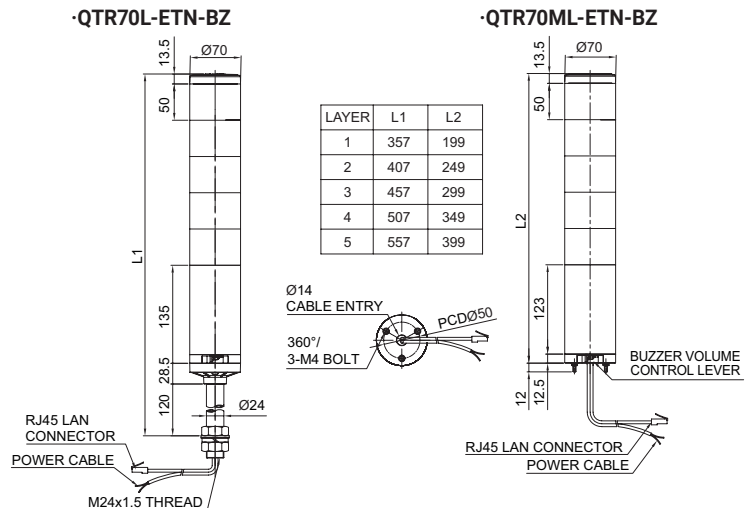
Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Technical Diagram

Units : mm



### Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable: Category 5 cable

### Ordering Specifications

|                 |   |            |   |                     |   |           |   |               |
|-----------------|---|------------|---|---------------------|---|-----------|---|---------------|
| QTR70L-ETN-BZ   | - | 3          | - | 24                  | - | RAG       | - | LW24          |
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]     |
| QTR70L-ETN-BZ   |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard |
| QTR70ML-ETN-BZ  |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Bracket       |
| QTRA70L-ETN-BZ  |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB24 -LW24   |
| QTRA70ML-ETN-BZ |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ24 -SZ24   |
|                 |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL24 -SL24   |

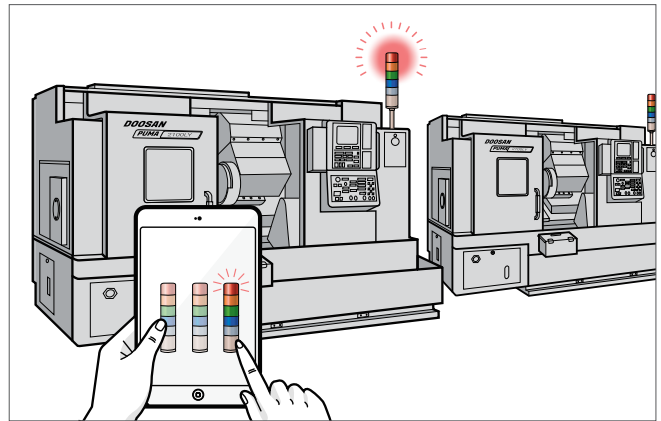
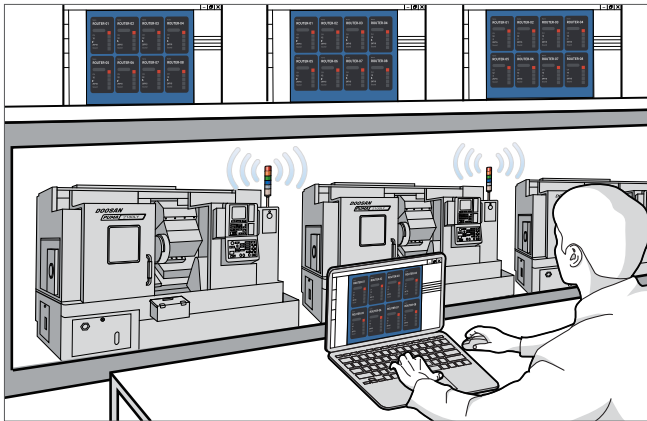
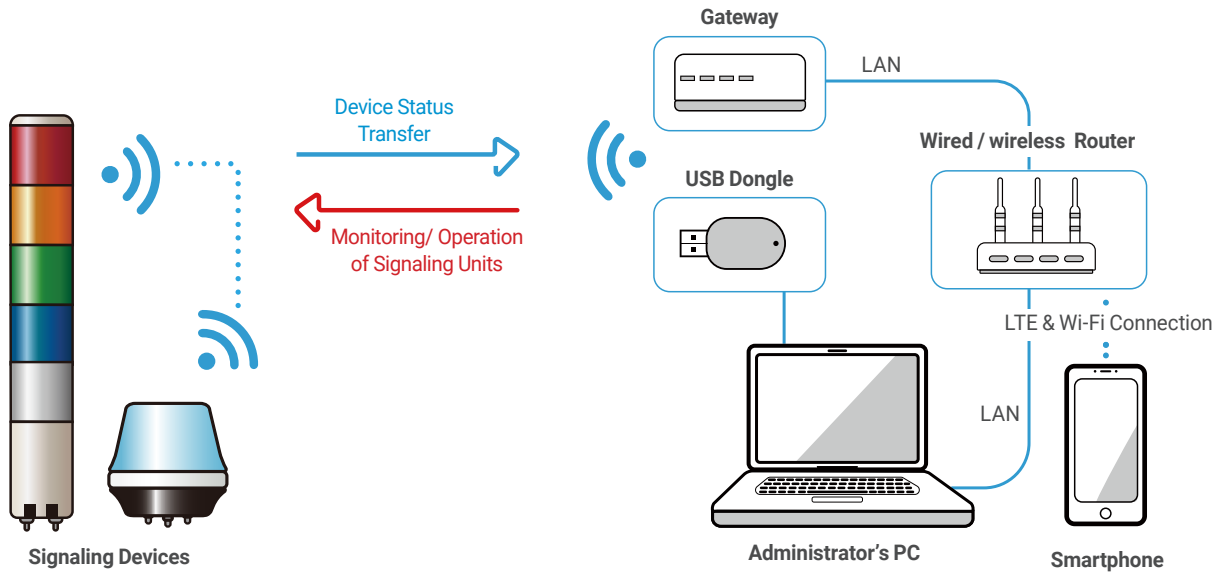
# Wireless Network System



|                        |        |
|------------------------|--------|
| Technical Information  | P. 236 |
| Product Specifications | P. 243 |
| Product Information    | P. 244 |

# Wireless Network System Application

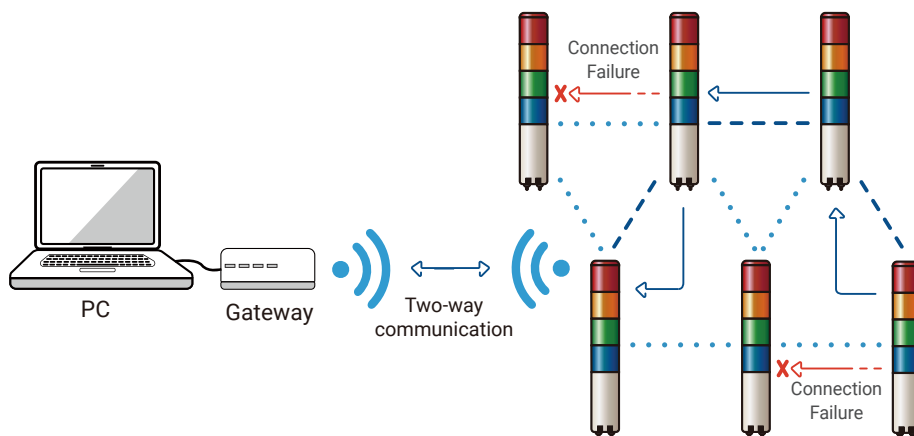
Wireless network system uses wireless network to remotely monitor and control the operation status of a signaling device through a PC or smartphone. By applying wireless communication between production equipment, users can build an advanced production system.



- Uses a Mesh Topology that operates in 2.4 GHz short-range wireless technology which ensures the communication reliability in harsh environments
- Multi-hop function of the signaling device enables stable long-distance communication (with up to 100M between devices)

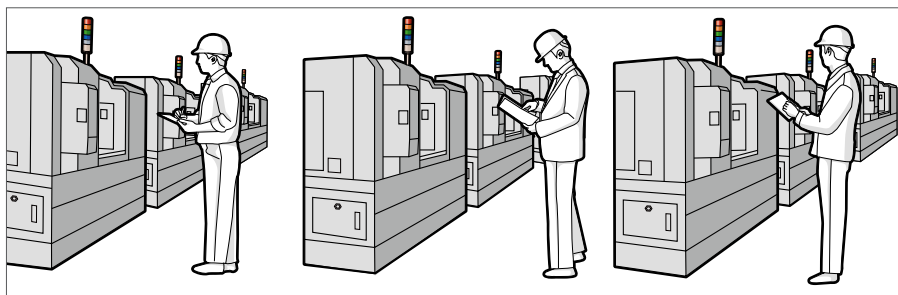
## Routing function that automatically navigates the optimum communication path

- Mesh network selects the strongest signal path for traffic and automatically steers signals around interference to ensure high availability of mesh links.
- Once there's a problem with wireless communication, the signaling device will find a new communication route in order to maintain smooth communication.



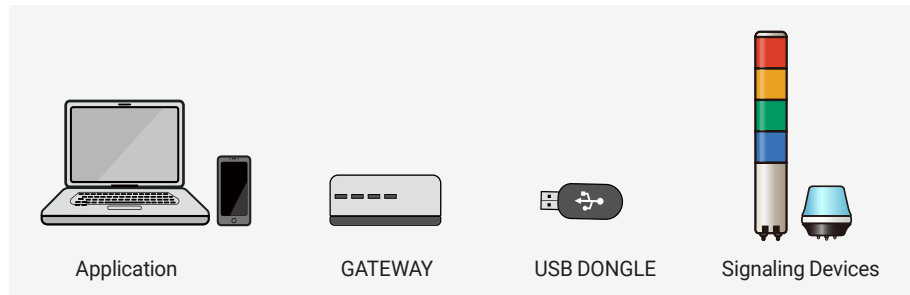
## Building an advanced production network system with a low cost

- Combining a new network system to existing production lines can be easily done by connecting wireless signal devices.
- Cost-effectiveness by requiring no additional cable when change the layout of production lines.





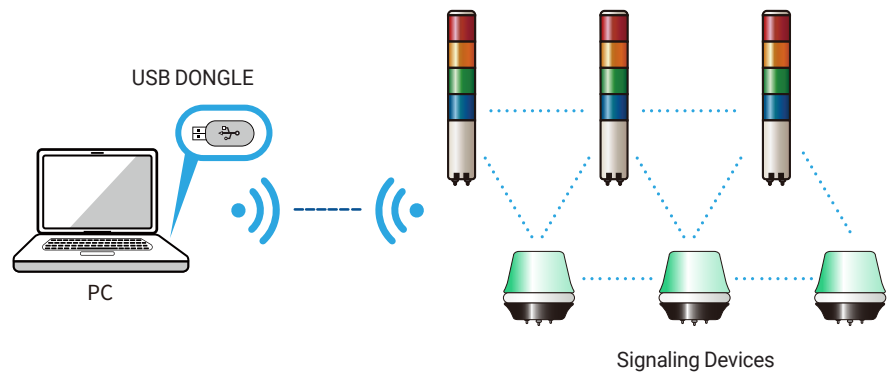
## Components



## 1. Connection Types

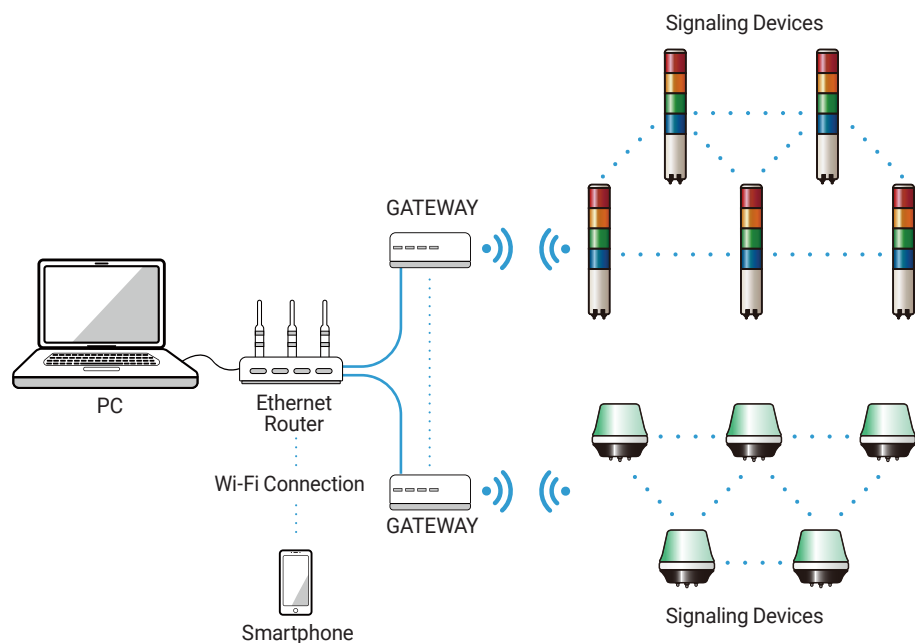
### 1) Connection via USB Dongle

- Easy installation and operation by plugging it to a PC, suitable for a single or small-scaled wireless network connection needs.(controls and monitors up to 32 wireless devices)



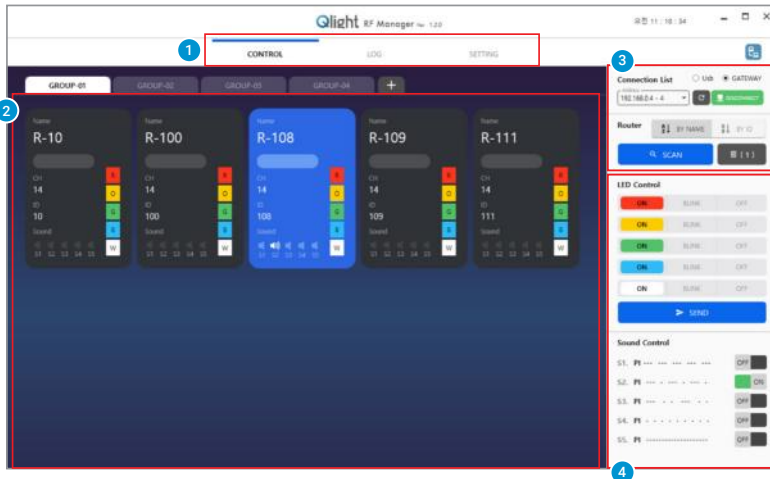
### 2) Connection via GATEWAY

- Connecting multiple gateways allow 768 wireless signaling devices to be connected to the network, suitable for large-scaled production facilities.
- Can monitor or control the status of signaling devices with smartphones.



## 2. Connection Instructions

### • Basic screen description



#### 1) Menu

- Connection: Control wireless devices through USB Dongle and Gateway
- LOG: Save log data and use the data to check various information such as operation rate and productivity.
- SETTING: USB Dongle, Gateway, wireless device settings

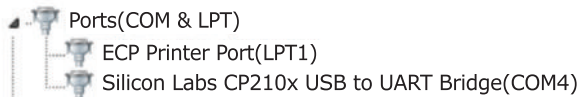
#### 2) Device Viewer: Check and select the connection status of wireless devices

#### 3) Function to connect USB DONGLE and Gateway and scan wireless devices

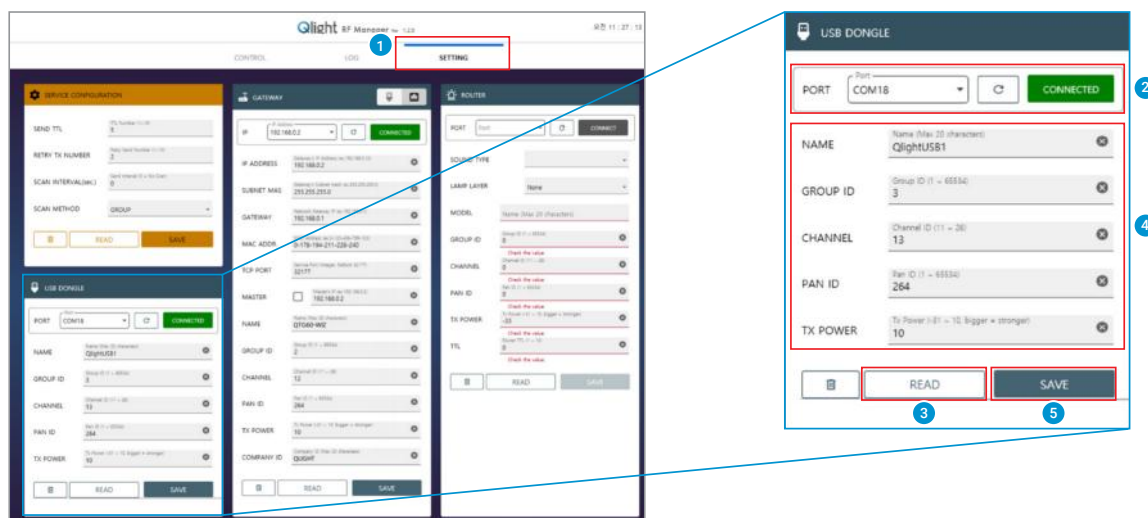
#### 4) Control selected devices through the device viewer window

### 1) USB Dongle

- PC program allows you to configure wireless devices such as gateways, USB dongles and signaling devices, and can also monitor or control the status of the signaling devices.
- Check the COM port after the USB Dongle is connected(RS-232).
- Click Start -> Control Panel -> Device Manager -> Port (COM & LPT)



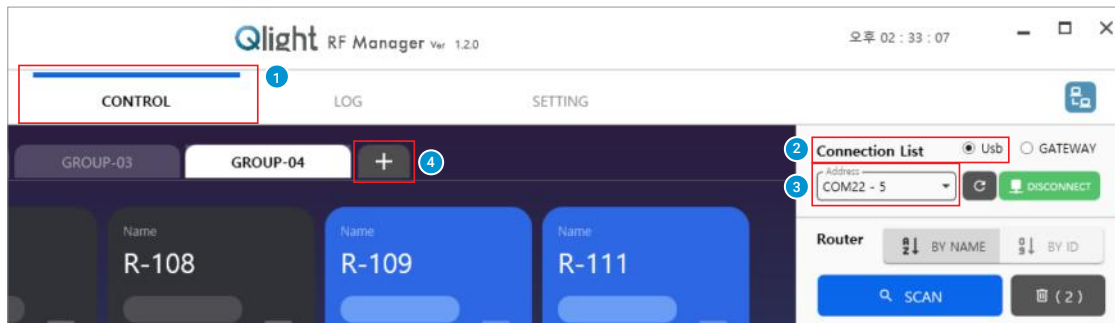
### • USB DONGLE SETTING



- 1) Select the SETTING menu and set up the USB DONGLE.
- 2) Check and select the COM port of your PC and press CONNECT to connect to the USB DONGLE.
- 3) Press the READ button to load the RF information of the currently set USB DONGLE.
- 4) Check and modify the RF information of the USB DONGLE.
- 5) Click the SAVE button to save the modified information.

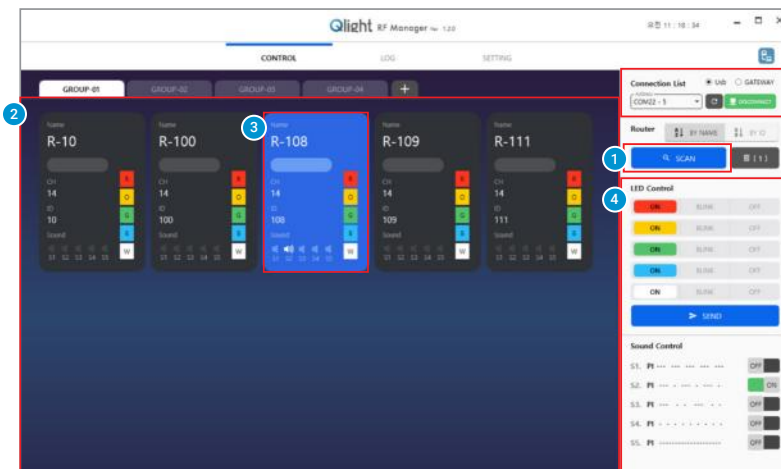
# Wireless Network System Application

## • USB DONGLE CONNECTION



- 1 Select the CONTROL menu.
- 2 Select USB from the CONNECTION LIST.
- 3 Check and select the COM port of your PC and press CONNECT to connect to the USB DONGLE.
- 4 When connecting multiple USB DONGLES, add GROUP.

## • DEVICE MONITORING & CONTROL



- 1 After connecting to the USB DONGLE, press the SCAN button to connect the wireless device.
- 2 The wirelessly connected device will appear on the screen.
- 3 Select the device you need to control.
- 4 Control selected devices.

## 2) Gateway - Setting and Usage

- The PC program allows you to configure wireless devices such as gateways, USB dongles and signaling devices, and can also monitor or control the status of the signaling devices.
- Setting and Usage
- The PC program allows you to configure wireless devices such as gateways, USB dongles and signaling devices, and can also monitor or control the status of the signaling devices.
- With the Gateway linked to the Ethernet Network users can check or control the operation status of devices by smartphone. The control PC uses IIS function to enable access to the smartphone in WINDOW XP or later versions.

### IIS?

What is IIS? IIS stands for Microsoft's Internet Information Services which is a WINDOWS service used for web service. With IIS, services such as FTP, SMTP, NNTP, and HTTP/HTTPS are available.

## • GATEWAY SETTING

The image shows two screenshots from the Qlight RF Manager software. The left screenshot shows the 'SETTING' menu with 'GATEWAY' selected. The right screenshot shows the 'GATEWAY' configuration screen with various fields for IP, Subnet, Gateway, MAC, TCP Port, Master, Name, Group ID, Channel, PAN ID, TX Power, and Company ID. Numbered callouts 1 through 5 indicate the steps for setting and connecting the gateway.

- Select the SETTING menu and set the GATEWAY.
- After setting the IP of the gateway to be connected, click CONNECT to connect to the gateway.
- Press the READ button to load information on the currently set GATEWAY.
- Check and modify GATEWAY's default information.
- Click the SAVE button to save the modified information.

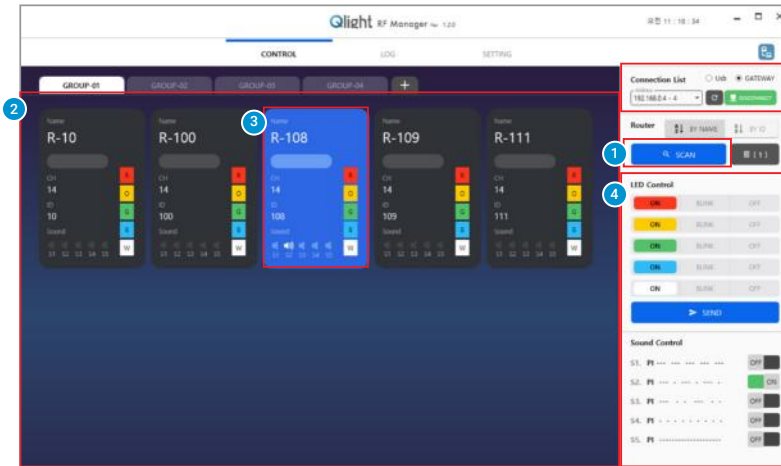
## • GATEWAY CONNECTION

The image shows the 'CONTROL' menu with 'GROUP-04' selected. The 'Connection List' is displayed, showing a list of gateways with their IP addresses. Numbered callouts 1 through 4 indicate the steps for connecting the gateway.

- Select the CONTROL menu.
- Select GATEWAY from CONNECTION LIST.
- Select the IP of the GATEWAY to connect and press CONNECT to connect to the GATEWAY.
- When connecting multiple GATEWAYS, add GROUP.

# Wireless Network System Application

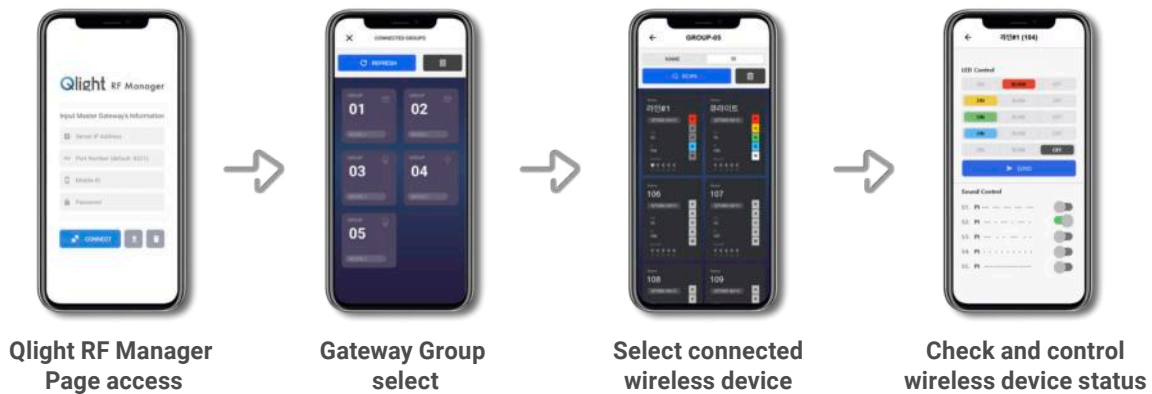
## • GATEWAY CONNECTION



- 1 After connecting to the GATEWAY, press the SCAN button to connect the wireless device.
- 2 The wirelessly connected device will appear on the screen.
- 3 Select the device you need to control.
- 4 Control selected devices.

## How to use your smartphone

- To use a smartphone, you must link the Gateway with a wired/wireless router.
- Access the Qlight RF Manager page on your smartphone using the IP address of the administrator PC on which IIS is set.
- After logging in through the login page, select the connected gateway.
- Select a signal information device connected to the selected gateway to monitor or control the device.
- For detailed settings, please contact the manufacturer.



# Specification List For Wireless Products

## Wireless LED Tower Lights



| Model number             |                         | QTG60ML-WIZ                                         | QTG60L-WIZ                                               | QTG70ML-WIZ                                         | QTG70L-WIZ                                               |
|--------------------------|-------------------------|-----------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------|
| Dimension (mm)           | Voltage                 | DC12V, DC24V<br>AC110V-220V                         | DC12V, DC24V<br>AC110V-220V                              | DC12V, DC24V<br>AC110V-220V                         | DC12V, DC24V<br>AC110V-220V                              |
|                          | Outdia                  | Ø60                                                 | Ø60                                                      | Ø70                                                 | Ø70                                                      |
|                          | Height                  | 199-399                                             | 435-625                                                  | 199-399                                             | 357-557                                                  |
|                          | Depth                   |                                                     |                                                          |                                                     |                                                          |
| Material                 |                         | Lens-PC<br>Housing-ABS                              | Lens-PC<br>Housing-ABS                                   | Lens-PC<br>Housing-ABS                              | Lens, Inner Lens -PC<br>Housing-ABS                      |
| Layers                   |                         | 1-5 Layers                                          | 1-5 Layers                                               | 1-5 Layers                                          | 1-5 Layers                                               |
| Light source & Operation | LED Steady/<br>Flashing | ●                                                   | ●                                                        | ●                                                   | ●                                                        |
|                          | Buzzer sound            | Max. 85dB at 1m                                     | Max. 85dB at 1m                                          | Max. 85dB at 1m                                     | Max. 85dB at 1m                                          |
| Sound & volume           | Signal sounds           |                                                     |                                                          |                                                     |                                                          |
|                          | Layer color change      | Yes                                                 | Yes                                                      | Yes                                                 | Yes                                                      |
| Mount bracket            |                         | Direct mount                                        | Pole mount                                               | Direct mount                                        | Pole mount                                               |
| Bracket                  |                         | TWS45, TWA45                                        | LB18, LW18, QZ18,<br>SZ18, QL18, SL18                    | TWS80, TWA80                                        | LB24, LW24, QZ24,<br>SZ24, QL24, SL24                    |
| Protection rating        |                         | IP54(Buzzer type),<br>IP65(Standard)                | IP54(Buzzer type),<br>IP65(Standard)                     | IP54(Buzzer type),<br>IP65(Standard)                | IP54(Buzzer type),<br>IP65(Standard)                     |
| Usage place              |                         | Indoor/Outdoor Use                                  | Indoor/Outdoor Use                                       | Indoor/Outdoor Use                                  | Indoor/Outdoor Use                                       |
| Certificates             |                         | KC, CE, FCC                                         | KC, CE, FCC                                              | KC, CE, FCC                                         | KC, CE, FCC                                              |
| Customization            |                         | High-volume<br>buzzer module,<br>Wall mount bracket | High-volume<br>buzzer module,<br>Pole length adjustment, | High-volume<br>buzzer module,<br>Wall mount bracket | High-volume<br>buzzer module,<br>Pole length adjustment, |
| Transistor               |                         | NPN                                                 | NPN                                                      | NPN                                                 | NPN                                                      |
| Communication            |                         | Wireless                                            | Wireless                                                 | Wireless                                            | Wireless                                                 |
| Page                     |                         | P244                                                | P245                                                     | P246                                                | P247                                                     |

## Wireless LED Signal Lights



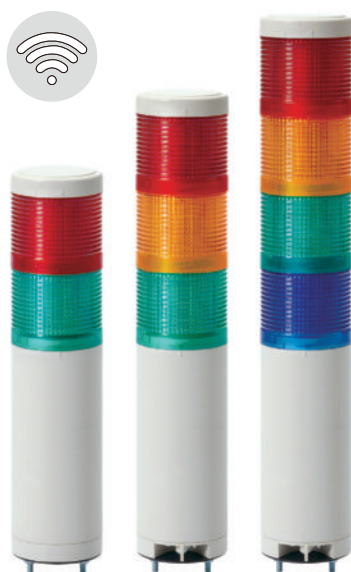
| Model number      |               | QMCL125-WIZ            | WIZ32<br>(USB Dongle) | GW768(GATEWAY)           |
|-------------------|---------------|------------------------|-----------------------|--------------------------|
| Dimension (mm)    | Voltage       | DC12V, DC24V           | USB 5V                | DC12V-24V<br>AC110V-220V |
|                   | Outdia        | Ø116                   | 49x23                 | 151x80                   |
|                   | Height        | 110                    | 10                    | 48                       |
|                   | Depth         |                        |                       |                          |
| Material          |               | Lens-PC<br>Housing-ABS | Cover-ABS             | Housing-ABS              |
| Sound & volume    | Buzzer        | Max. 80dB at 1m        |                       |                          |
|                   | Mount bracket | Direct mount           |                       |                          |
| Protection rating |               | IP65                   |                       |                          |
| Usage place       |               | Indoor/Outdoor Use     | -                     | -                        |
| Certificates      |               | CE, FCC                | KC, CE, FCC           | KC, CE, FCC              |
| Customization     |               | Wall mount bracket     | -                     | -                        |
| Transistor        |               | NPN                    | -                     | -                        |
| Communication     |               | Wireless               | Wireless              | Wireless                 |
| Page              |               | P252                   | P254                  | P255                     |

# Wireless LED Steady/ Flashing Tower Light

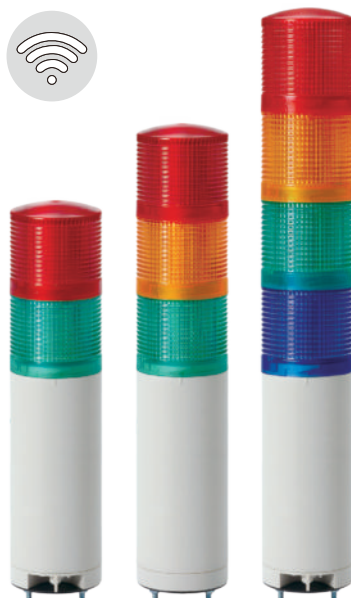
## QTG60ML-WIZ



Can remotely monitor and control the status of tower lights using a PC or smartphone



QTG60ML-WIZ Series



QTGA60ML-WIZ Series

### PRODUCT SPECIFICATION

QTG60(M)L-WIZ

QTG70(M)L-WIZ

**Materials** Lens-PC, Housing-ABS

**Ambient operating temperature** -30°C to +50°C

**Volume** Max. 85dB at 1m

**Protection rating** IP54/IP65

**Compliant with RoHS directive**

- Allows you to build an advanced production network system with a low cost
- Uses a Mesh Topology that operates in 2.4 GHz Short-Range wireless technology which ensures the communication reliability in harsh environments
- Multi-hop function of the signaling device enables a stable long-distance communication(with up to 100M between devices)
- Cost-effective by requiring no additional cable when change the layout of production lines
- Wireless communication protocol : Zigbee(IEEE802.15.4)



### QTG60ML-WIZ Ø60mm Direct Mount, LED Steady/Flashing Type

| Model number                                        | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|-----------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTG60ML-WIZ Steady                                  | 1      | DC12V<br>DC24V<br>AC110V-220V |              | 0.32kg<br>0.32kg<br>0.36kg | ● R-Red                                                    |
| QTG60ML-WIZ-BZ Steady w/built-in buzzer             | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.37kg<br>0.37kg<br>0.41kg | ● R-Red<br>● G-Green                                       |
| QTG60MLF-WIZ Steady/Flashing                        | 3      | DC12V<br>DC24V<br>AC110V-220V | CE           | 0.42kg<br>0.42kg<br>0.46kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTG60MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer  | 4      | DC12V<br>DC24V<br>AC110V-220V | CE<br>FCC    | 0.47kg<br>0.47kg<br>0.51kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA60ML-WIZ Steady                                 | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.52kg<br>0.52kg<br>0.56kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |
| QTGA60ML-WIZ-BZ Steady w/built-in buzzer            |        |                               |              |                            |                                                            |
| QTGA60MLF-WIZ Steady/Flashing                       |        |                               |              |                            |                                                            |
| QTGA60MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer |        |                               |              |                            |                                                            |

※ AC type model has a free-voltage range of 100V-240V

※ KC Certification: DC24V, CE RED compliant: DC24V, AC110V-220V, FCC Complaint: DC24V, AC110V-220V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 130mA | 85mA  | Max.65mA    |
| Buzzer current                | 35mA  | 30mA  | Max.40mA    |

### Customization

- High volume buzzer option can be fitted to the top of the product(Lens should be within 4 layers)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Wall mount bracket TWS45



Wall mount bracket TWA45

### Wiring Instructions

- External power line  
UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line  
UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with External Contact and transistor

### Ordering Specifications

|                  |   |            |   |                     |   |           |
|------------------|---|------------|---|---------------------|---|-----------|
| QTG60ML-WIZ      | - | 3          | - | 110/220             | - | RAG       |
| [Model number]   |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTG60ML-WIZ      |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTG60ML-WIZ-BZ   |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTG60MLF-WIZ     |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTG60MLF-WIZ-BZ  |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTGA60ML-WIZ     |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTGA60ML-WIZ-BZ  |   |            |   |                     |   |           |
| QTGA60MLF-WIZ    |   |            |   |                     |   |           |
| QTGA60MLF-WIZ-BZ |   |            |   |                     |   |           |



# Wireless LED Steady/ Flashing Tower Light

## QTG60L-WIZ



### QTG60L-WIZ Ø60mm Pole mount, LED Steady/Flashing Type

| Model number                                             | Layers | Voltage                       | Certificates                                                                                                                                                               | Weight                     | Color                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------|--------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| QTG60L-WIZ<br>Steady                                     | 1      | DC12V<br>DC24V<br>AC110V-220V | <br><br> | 0.50kg<br>0.50kg<br>0.53kg |  R-Red                                                                                                                                                                                                                                                                                                                                                                                    |
| QTG60L-WIZ-BZ<br>Steady w/built-in buzzer                | 2      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                            | 0.55kg                     |  R-Red                                                                                                                                                                                                                                                                                                                                                                                    |
| QTG60LF-WIZ<br>Steady/Flashing                           |        |                               |                                                                                                                                                                            | 0.55kg<br>0.58kg           |  G-Green                                                                                                                                                                                                                                                                                                                                                                                  |
| QTG60LF-WIZ-BZ<br>Steady/Flashing<br>w/ built-in buzzer  | 3      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                            | 0.60kg<br>0.60kg<br>0.63kg |  R-Red<br> A-Amber<br> G-Green                                                                                                                                                                                          |
| QTGA60L-WIZ<br>Steady                                    | 4      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                            | 0.65kg                     |  R-Red                                                                                                                                                                                                                                                                                                                                                                                    |
| QTGA60L-WIZ-BZ<br>Steady w/built-in buzzer               |        |                               |                                                                                                                                                                            | 0.65kg<br>0.68kg           |  A-Amber<br> G-Green                                                                                                                                                                                                                                                                                     |
| QTGA60LF-WIZ<br>Steady/Flashing                          |        |                               |                                                                                                                                                                            |                            |  B-Blue                                                                                                                                                                                                                                                                                                                                                                                   |
| QTGA60LF-WIZ-BZ<br>Steady/Flashing<br>w/ built-in buzzer | 5      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                            | 0.70kg<br>0.70kg<br>0.73kg |  R-Red<br> A-Amber<br> G-Green<br> B-Blue<br> W-White |

※ AC type model has a free-voltage range of 100V-240V

※ KC Certification: DC24V, CE RED compliant: DC24V, AC110V-220V, FCC Complaint: DC24V, AC110V-220V

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 130mA | 85mA  | Max.65mA    |
| Buzzer current                | 35mA  | 30mA  | Max.40mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

| Standard | LB18  | LW18 | QZ18 | SZ18 | QL18 | SL18 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- Customized pole length available
- High volume buzzer option can be fitted to the top of the product(Lens should be within 4 layers)

### Ordering Specifications

|                 |   |            |   |                     |   |           |   |               |
|-----------------|---|------------|---|---------------------|---|-----------|---|---------------|
| QTG60L-WIZ      | - | 3          | - | 110/220             | - | RAG       | - | LW18          |
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color]   |   | [Bracket]     |
| QTG60L-WIZ      |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |   | None-Standard |
| QTG60L-WIZ-BZ   |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |   | Bracket       |
| QTG60LF-WIZ     |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |   | -LB18 -LW18   |
| QTG60LF-WIZ-BZ  |   | 4-4 Layers |   |                     |   | ● B-Blue  |   | -QZ18 -SZ18   |
| QTGA60L-WIZ     |   | 5-5 Layers |   |                     |   | ○ W-White |   | -QL18 -SL18   |
| QTGA60L-WIZ-BZ  |   |            |   |                     |   |           |   |               |
| QTGA60LF-WIZ    |   |            |   |                     |   |           |   |               |
| QTGA60LF-WIZ-BZ |   |            |   |                     |   |           |   |               |



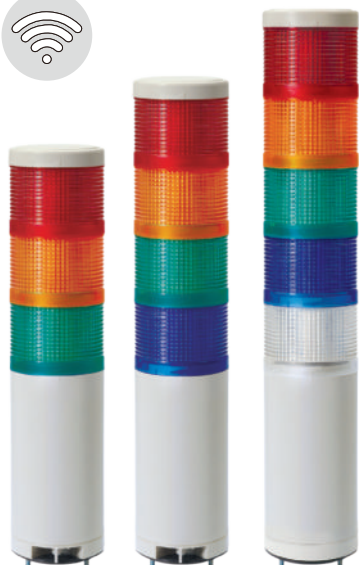
QTG60L-WIZ Series



QTGA60L-WIZ Series

# Wireless LED Steady/ Flashing Tower Light

## QTG70ML-WIZ



QTG70ML-WIZ Series

### QTG70ML-WIZ Ø70mm Direct mount, LED Steady/Flashing Type

| Model number                                       | Layers | Voltage                       | Certificates | Weight                     | Color                                                      |
|----------------------------------------------------|--------|-------------------------------|--------------|----------------------------|------------------------------------------------------------|
| QTG70ML-WIZ Steady                                 | 1      | DC12V<br>DC24V<br>AC110V-220V |              | 0.38kg<br>0.38kg<br>0.41kg | ● R-Red                                                    |
| QTG70ML-WIZ-BZ Steady w/built-in buzzer            | 2      | DC12V<br>DC24V<br>AC110V-220V |              | 0.44kg<br>0.44kg<br>0.47kg | ● R-Red<br>● G-Green                                       |
| QTG70MLF-WIZ Steady/Flashing                       | 3      | DC12V<br>DC24V<br>AC110V-220V | CE           | 0.50kg<br>0.50kg<br>0.53kg | ● R-Red<br>● A-Amber<br>● G-Green                          |
| QTG70MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer | 4      | DC12V<br>DC24V<br>AC110V-220V | CE<br>FCC    | 0.56kg<br>0.56kg<br>0.59kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue              |
| QTGA70ML-WIZ Steady                                | 5      | DC12V<br>DC24V<br>AC110V-220V |              | 0.62kg<br>0.62kg<br>0.65kg | ● R-Red<br>● A-Amber<br>● G-Green<br>● B-Blue<br>○ W-White |

※ AC type model has a free-voltage range of 100V-240V

※ KC Certification: DC24V, CE RED compliant: DC24V, AC110V-220V, FCC Complaint: DC24V, AC110V-220V

### Light source/buzzer current(based on 1 layer)

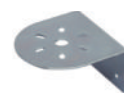
| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 130mA | 85mA  | Max.65mA    |
| Buzzer current                | 35mA  | 30mA  | Max.40mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- High volume buzzer option can be fitted to the top of the product(Lens should be within 4 layers)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Wall mount bracket TWS80



Wall mount bracket TWA80

### Ordering Specifications

|                  |   |            |   |                     |   |           |
|------------------|---|------------|---|---------------------|---|-----------|
| QTG70ML-WIZ      | - | 3          | - | 110/220             | - | RAG       |
| [Model number]   |   | [Layers]   |   | [Voltage]           |   | [Color]   |
| QTG70ML-WIZ      |   | 1-1 Layer  |   | 12-DC12V            |   | ● R-Red   |
| QTG70ML-WIZ-BZ   |   | 2-2 Layers |   | 24-DC24V            |   | ● A-Amber |
| QTG70MLF-WIZ     |   | 3-3 Layers |   | 110/220-AC110V-220V |   | ● G-Green |
| QTG70MLF-WIZ-BZ  |   | 4-4 Layers |   |                     |   | ● B-Blue  |
| QTGA70ML-WIZ     |   | 5-5 Layers |   |                     |   | ○ W-White |
| QTGA70ML-WIZ-BZ  |   |            |   |                     |   |           |
| QTGA70MLF-WIZ    |   |            |   |                     |   |           |
| QTGA70MLF-WIZ-BZ |   |            |   |                     |   |           |

# Wireless LED Steady/ Flashing Tower Light

## QTG70L-WIZ

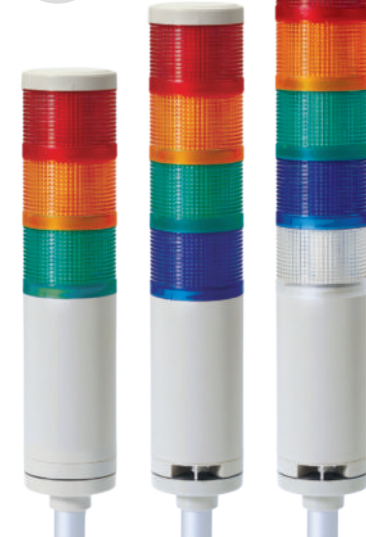


### QTG70L-WIZ Ø70mm Pole Mount, LED Steady/Flashing Type

| Model number                                             | Layers | Voltage                       | Certificates                                                                                                                                                                                                                                                | Weight                     | Color                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------|--------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| QTG70L-WIZ<br>Steady                                     | 1      | DC12V<br>DC24V<br>AC110V-220V | <br><br> | 0.60kg<br>0.60kg<br>0.63kg |  R-Red                                                                                                                                                                                                                                                                                                                                                                                    |
| QTG70L-WIZ-BZ<br>Steady w/built-in buzzer                | 2      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                                                                                                             | 0.66kg<br>0.66kg<br>0.69kg |  R-Red<br> G-Green                                                                                                                                                                                                                                                                                       |
| QTG70LF-WIZ<br>Steady/Flashing                           |        |                               |                                                                                                                                                                                                                                                             | 0.72kg<br>0.72kg<br>0.75kg |  R-Red<br> A-Amber<br> G-Green                                                                                                                                                                                          |
| QTG70LF-WIZ-BZ<br>Steady/Flashing<br>w/ built-in buzzer  | 3      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                                                                                                             | 0.78kg<br>0.78kg<br>0.81kg |  R-Red<br> A-Amber<br> G-Green<br> B-Blue                                                                                              |
| QTGA70L-WIZ<br>Steady                                    | 4      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                                                                                                             | 0.84kg<br>0.84kg<br>0.87kg |  R-Red<br> A-Amber<br> G-Green<br> B-Blue<br> W-White |
| QTGA70L-WIZ-BZ<br>Steady w/built-in buzzer               |        |                               |                                                                                                                                                                                                                                                             | 0.84kg<br>0.84kg<br>0.87kg |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| QTGA70LF-WIZ<br>Steady/Flashing                          | 5      | DC12V<br>DC24V<br>AC110V-220V |                                                                                                                                                                                                                                                             |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| QTGA70LF-WIZ-BZ<br>Steady/Flashing<br>w/ built-in buzzer |        |                               |                                                                                                                                                                                                                                                             |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

※ AC type model has a free-voltage range of 100V-240V

※ KC Certification: DC24V, CE RED compliant: DC24V, AC110V-220V, FCC Complaint: DC24V, AC110V-220V



QTG70L-WIZ Series

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V | AC110V-220V |
|-------------------------------|-------|-------|-------------|
| Light source current(1 layer) | 130mA | 85mA  | Max.65mA    |
| Buzzer current                | 35mA  | 30mA  | Max.40mA    |

### Wiring Instructions

- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting Bracket

| Standard | LB24  | LW24 | QZ24 | SZ24 | QL24 | SL24 |
|----------|-------|------|------|------|------|------|
|          |       |      |      |      |      |      |
| Steel    | Steel | ABS  | ABS  | Al   | ABS  | Al   |

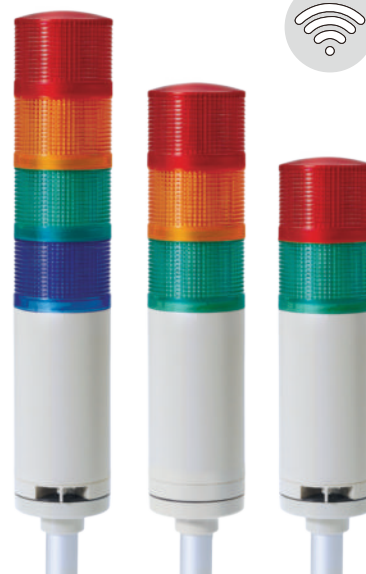
※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions

### Customization

- Customized pole length available
- High volume buzzer option can be fitted to the top of the product (Lens should be within 4 layers)

### Ordering Specifications

| QTG70L-WIZ      | - | 3          | - | 110/220             | - | RAG     | - | LW24          |
|-----------------|---|------------|---|---------------------|---|---------|---|---------------|
| [Model number]  |   | [Layers]   |   | [Voltage]           |   | [Color] |   | [Bracket]     |
| QTG70L-WIZ      |   | 1-1 Layer  |   | 12-DC12V            |   | R-Red   |   | None-Standard |
| QTG70L-WIZ-BZ   |   | 2-2 Layers |   | 24-DC24V            |   | A-Amber |   | Bracket       |
| QTG70LF-WIZ     |   | 3-3 Layers |   | 110/220-AC110V-220V |   | G-Green |   | -LB24 -LW24   |
| QTG70LF-WIZ-BZ  |   | 4-4 Layers |   |                     |   | B-Blue  |   | -QZ24 -SZ24   |
| QTGA70L-WIZ     |   | 5-5 Layers |   |                     |   | W-White |   | -QL24 -SL24   |
| QTGA70L-WIZ-BZ  |   |            |   |                     |   |         |   |               |
| QTGA70LF-WIZ    |   |            |   |                     |   |         |   |               |
| QTGA70LF-WIZ-BZ |   |            |   |                     |   |         |   |               |



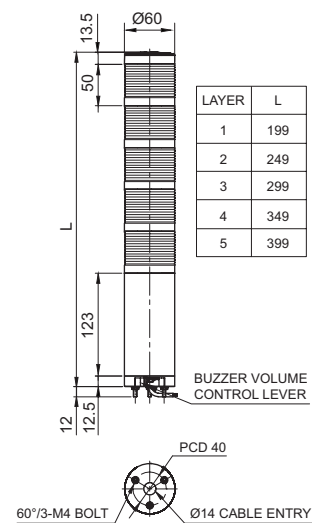
QTGA70L-WIZ Series

QTG-WIZ Series

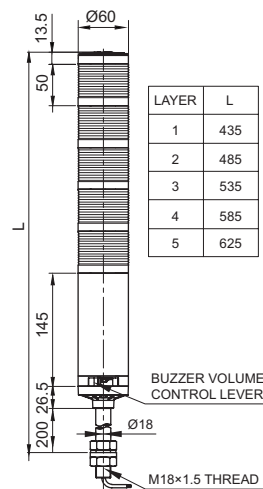
Technical Diagram

Units : mm

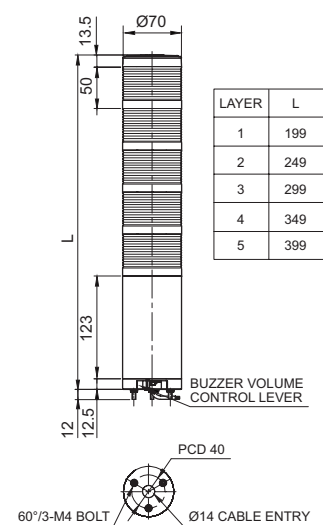
·QTG60ML(F)-WIZ Series



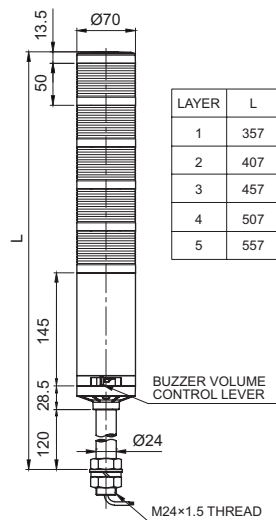
·QTG60L(F)-WIZ Series



·QTG70ML(F)-WIZ Series



·QTG70L(F)-WIZ Series



## Wiring Instructions

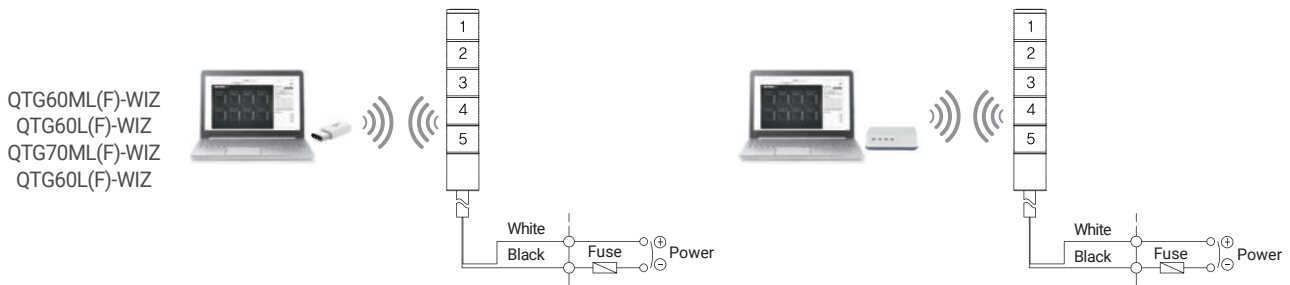
- Please wire the product as followings when you control via wireless network

### Connection by USB

AC/DC Steady/  
Flashing

Connection via USB Dongle

Connection via Gateway

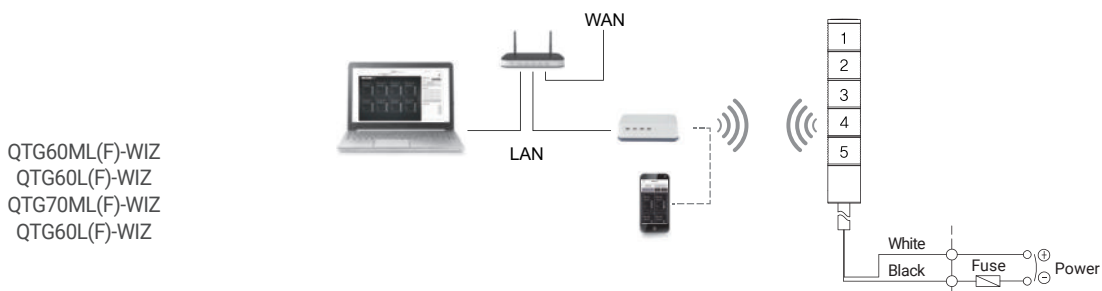


Suitable for single or small-scaled network. Can connect up to 32 devices

### Connection by Ethernet

AC/DC Steady/  
Flashing

Connection via Gateway and Ethernet Router



Suitable for large-scaled network. One gateway unit is a single group, can connect up to 24 groups, 768 devices (each group can connect to 32 devices)

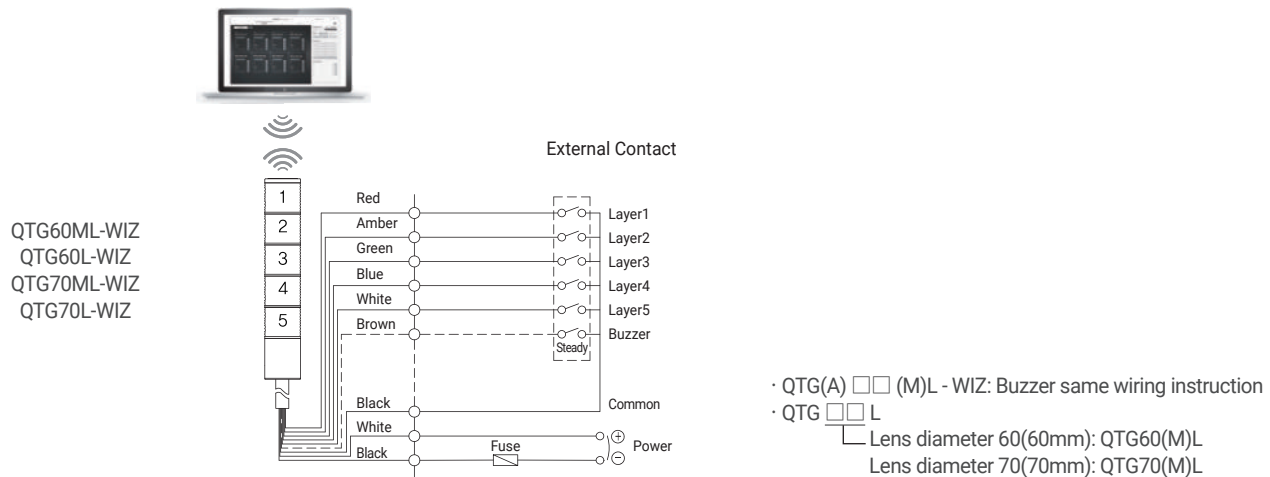
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm

### Wiring Instructions

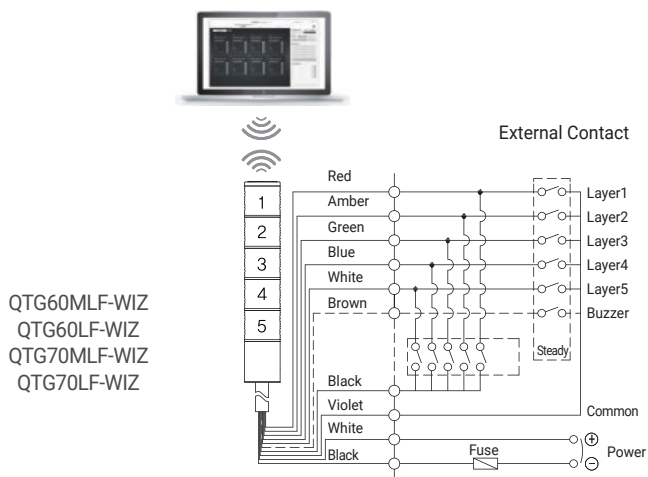
- In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.
- You can monitor status of tower light and control them via wireless network.

#### External Contact

##### AC/DC Steady

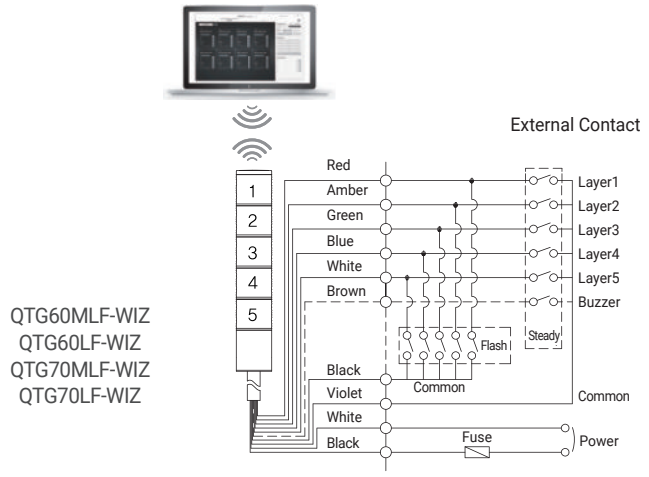


##### DC Steady/ Flashing



- QTG(A) □□ (M)L - WIZ: Buzzer same wiring instruction
- QTG □□ L  
    □ Lens diameter 60(60mm): QTG60(M)L  
    □ Lens diameter 70(70mm): QTG70(M)L

##### AC Steady/ Flashing



- QTG(A) □□ (M)L - WIZ: Buzzer same wiring instruction
- QTG □□ L  
    □ Lens diameter 60(60mm): QTG60(M)L  
    □ Lens diameter 70(70mm): QTG70(M)L

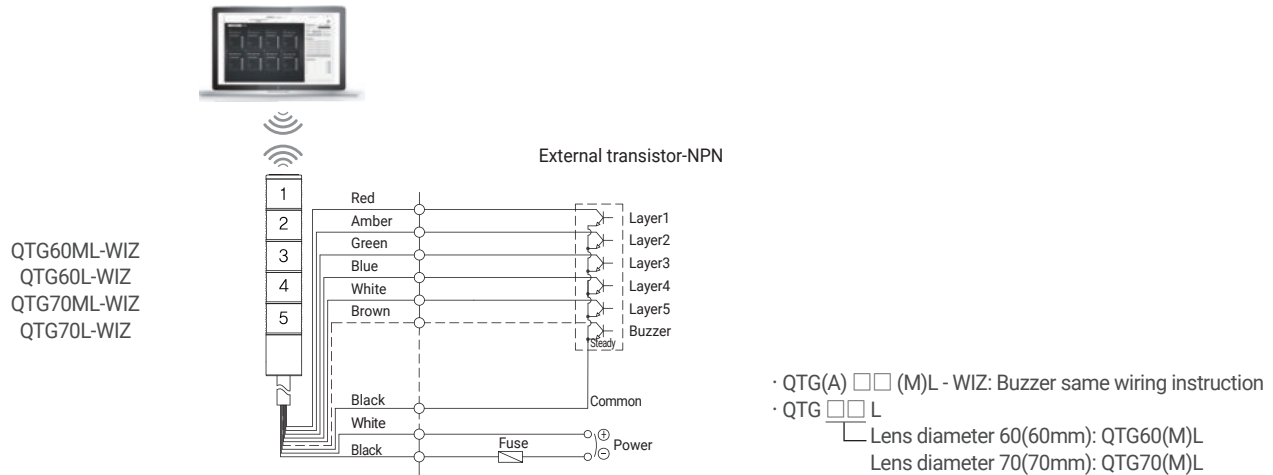
- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm

## Wiring Instructions

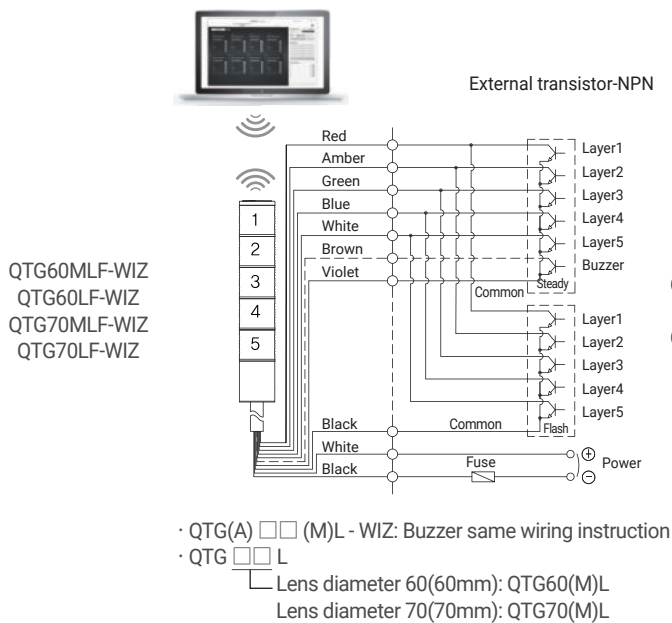
· Wiring to transistor, use the NPN transistor. Please wire properly based on wiring instructions below.

### External Transistor

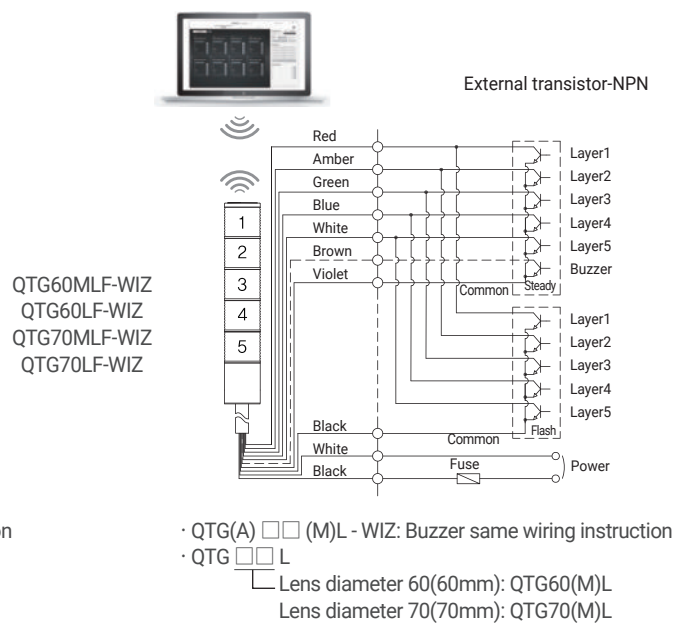
AC/DC Steady



DC  
Steady/Flashing



AC  
Steady/Flashing



- DC steady type cable specification: External power line/External signal line - UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line - UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line - UL1007 AWG22(0.3sq) 400mm



# Wireless Multiple Color LED Steady Signal Light

## QMCL125-WIZ

Can remotely monitor and control the status of light units using a PC or smartphone



QMCL125-WIZ

### PRODUCT SPECIFICATION

QMCL125-WIZ  
QMCL125-WIZ-BZ

**Materials** Lens-PC, Housing-ABS  
**Ambient operating temperature** -30°C to +50°C  
**Volume** Max. 80dB at 1m  
**Protection rating** IP65  
**Compliant with RoHS directive**

- Allows you to build an advanced production network system with a low cost
- Uses a Mesh Topology that operates in 2.4 GHz Short-Range wireless technology which ensures the communication reliability in harsh environments
- Multi-hop function of the signaling device enables a stable long-distance communication(with up to 100M between devices)
- Cost-effective by requiring no additional cable when change the layout of production lines
- Wireless communication protocol : Zigbee(IEEE802.15.4)
- Can generate 7 color light signals in one light unit
- Milky translucent color when off, the soft LED illuminates designated colors when on

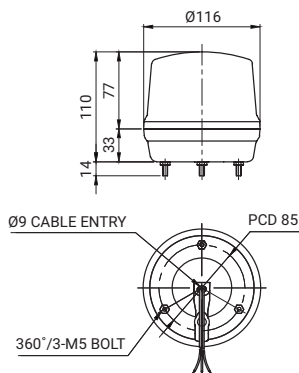
### Wiring Instructions

- External signal line : Signal line 4P (R,G,B,K) threading, signal line standard UL1007 AWG22(0.3sq) 400mm
- Please refer to Wiring Instructions diagram to properly configure color options

### Technical Diagram

Units : mm

#### QMCL125-WIZ



### QMCL125-WIZ Ø125mm Wireless Multiple Color LED Steady Signal Lights

| Model number   | Voltage | Certificates | Weight | Color   |
|----------------|---------|--------------|--------|---------|
| QMCL125-WIZ    | DC12V   | CE           | 0.34kg | 7 Color |
| QMCL125-WIZ-BZ | DC24V   | FC           |        |         |

### Light source/buzzer current(based on 1 layer)

| Voltage                       | DC12V | DC24V |
|-------------------------------|-------|-------|
| Light source current(1 layer) | 300mA | 185mA |
| Buzzer current                | 70mA  | 40mA  |

### Customization

- Wall Mounting bracket options :  
Bracket structure allows for threading through the bracket hole or into the wall mount



Wall mount bracket SWP125



Wall mount bracket SWM125

### Ordering Specifications

|                |   |                     |   |           |
|----------------|---|---------------------|---|-----------|
| QMCL125-WIZ    | - | BZ                  | - | 24        |
| [Model number] |   | [Buzzer]            |   | [Voltage] |
| QMCL125-WIZ    |   | None - No buzzer    |   | 12-DC12V  |
| QMCL125-WIZ-BZ |   | BZ- Built-in buzzer |   | 24-DC24V  |

### Signal Color Options





## Wiring Instructions

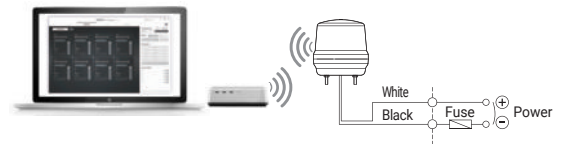
· Please refer to Wiring Instructions diagram to properly configure wireless network option

### Connection by USB

Connection via USB Dongle



Connection via Gateway

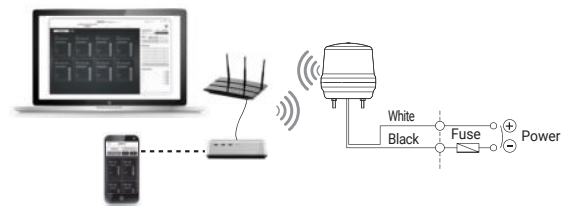


### Connection by Ethernet

Ethernet connection via Gateway



Connection via Gateway and Ethernet Router



· Please refer to below wiring Instructions diagram to properly configure External Contact and transistor options

### External Contact



· Wiring Configuration for Signal Color

| No. | Color  | wiring                  |
|-----|--------|-------------------------|
| 1   | Red    | 1(RED)                  |
| 2   | Green  | 2(GREEN)                |
| 3   | Blue   | 3(BLUE)                 |
| 4   | Amber  | 1(RED)+2(GREEN)         |
| 5   | Cyan   | 2(GREEN)+3(BLUE)        |
| 6   | Purple | 1(RED)+3(BLUE)          |
| 7   | White  | 1(RED)+2(GREEN)+3(BLUE) |

### External Transistor



· Wiring Configuration for Signal Color

| No. | Color  | wiring                  |
|-----|--------|-------------------------|
| 1   | Red    | 1(RED)                  |
| 2   | Green  | 2(GREEN)                |
| 3   | Blue   | 3(BLUE)                 |
| 4   | Amber  | 1(RED)+2(GREEN)         |
| 5   | Cyan   | 2(GREEN)+3(BLUE)        |
| 6   | Purple | 1(RED)+3(BLUE)          |
| 7   | White  | 1(RED)+2(GREEN)+3(BLUE) |

# WIZ32



A device that receives data wirelessly in connection with a wireless signal information device



WIZ32(USB Dongle)

## PRODUCT SPECIFICATION

WIZ32(USB Dongle)

Materials ABS  
Ambient operating temperature -25°C to +50°C  
Compliant with RoHS directive

- A device that receives data from a wireless signal information device, suitable for a small single wireless network.
- Controlling of wireless signal information devices through two-way communication
- Up to 32 of wireless signal information devices can be connected
- Separate power supply is not required, and only USB Dongle(RS232) is connected to PC.
- Wireless communication standard: IEEE 802.15.4 Standard
- Data rate: 250Kbps

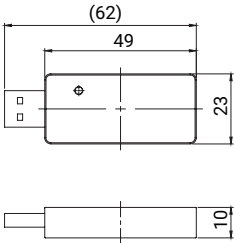
### WIZ32(USB Dongle) Wireless network system receiving device

| Model number | Voltage | Interface | Wireless standard      | Radio frequency/ number of channels | Certificates                                                                                     | Weight |
|--------------|---------|-----------|------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------|--------|
| WIZ32        | USB 5V  | USB2.0    | IEEE 802.15.4 Standard | 2405MHz-2480MHz(16ch)               | <br>CE<br>FC | 0.01kg |

### Technical Diagram

Units : mm

· WIZ32



GW768



PRODUCT SPECIFICATION

GW768(GATEWAY)

Materials ABS  
Ambient operating temperature -25°C to +50°C  
Compliant with RoHS directive



GW768(GATEWAY)

- A device that receives data from a wireless signal information device, suitable for a small single wireless network.
- Controlling of wireless signal information devices through two-way communication
- Up to 32ea of wireless signal information devices can be connected per gateway
- Up to 24ea of device can be connected via LAN using Ethernet communication (Maximum 768ea of wireless signal information devices can be connected)
- Information transmission to administrators and controlling real-time using a mobile app
- Wireless communication standard: IEEE 802.15.4 Standard
- Data rate: 250Kbps

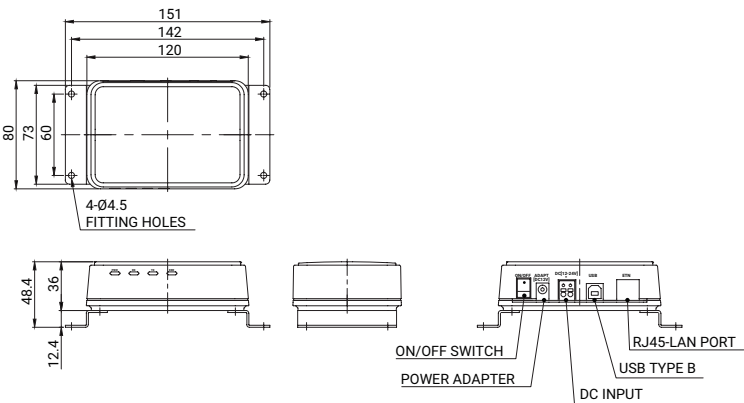
GW768(GATEWAY) Wireless network system receiving device

| Model number | Voltage    | Current    | Interface        | Wireless standard      | Radio frequency/ number of channels | Certificates | Weight |
|--------------|------------|------------|------------------|------------------------|-------------------------------------|--------------|--------|
| GW768        | DC12-24V   | Max. 510mA | USB2.0 /Ethernet | IEEE 802.15.4 Standard | 2405MHz-2480MHz(16ch)               |              | 0.25kg |
|              | AC110-220V | Max. 115mA |                  |                        |                                     |              |        |

※ KC compliant: DC12V

Technical Diagram

Units : mm



Ordering Specifications

|                |   |                                        |
|----------------|---|----------------------------------------|
| GW768          | - | 12/24                                  |
| [Model number] |   | [Voltage]                              |
| GW768          |   | 12/24-DC12V-24V<br>110/220-AC110V-220V |

# Global Networks

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Heavy industry/Ship building/Automotive/Steel/Machinery/Petrochemical/Power plants/Electronics/Semiconductor/Emergency Vehicles

**SAMSUNG**

**HYUNDAI**

**KIA**

**POSCO**

**COUPANG**

**SK hynix**

**LG Chem**

**SK innovation**

**HYUNDAI STEEL**

**KSOE**

**SAMSUNG HEAVY INDUSTRIES**

**HYUNDAI CONSTRUCTION EQUIPMENT**

**DOOSAN**

**ExxonMobil**

**gm**

**Q.M.B.K.**

**FOXCONN**

**HUAWEI**

**Honeywell**

**L'ORÉAL PARIS**

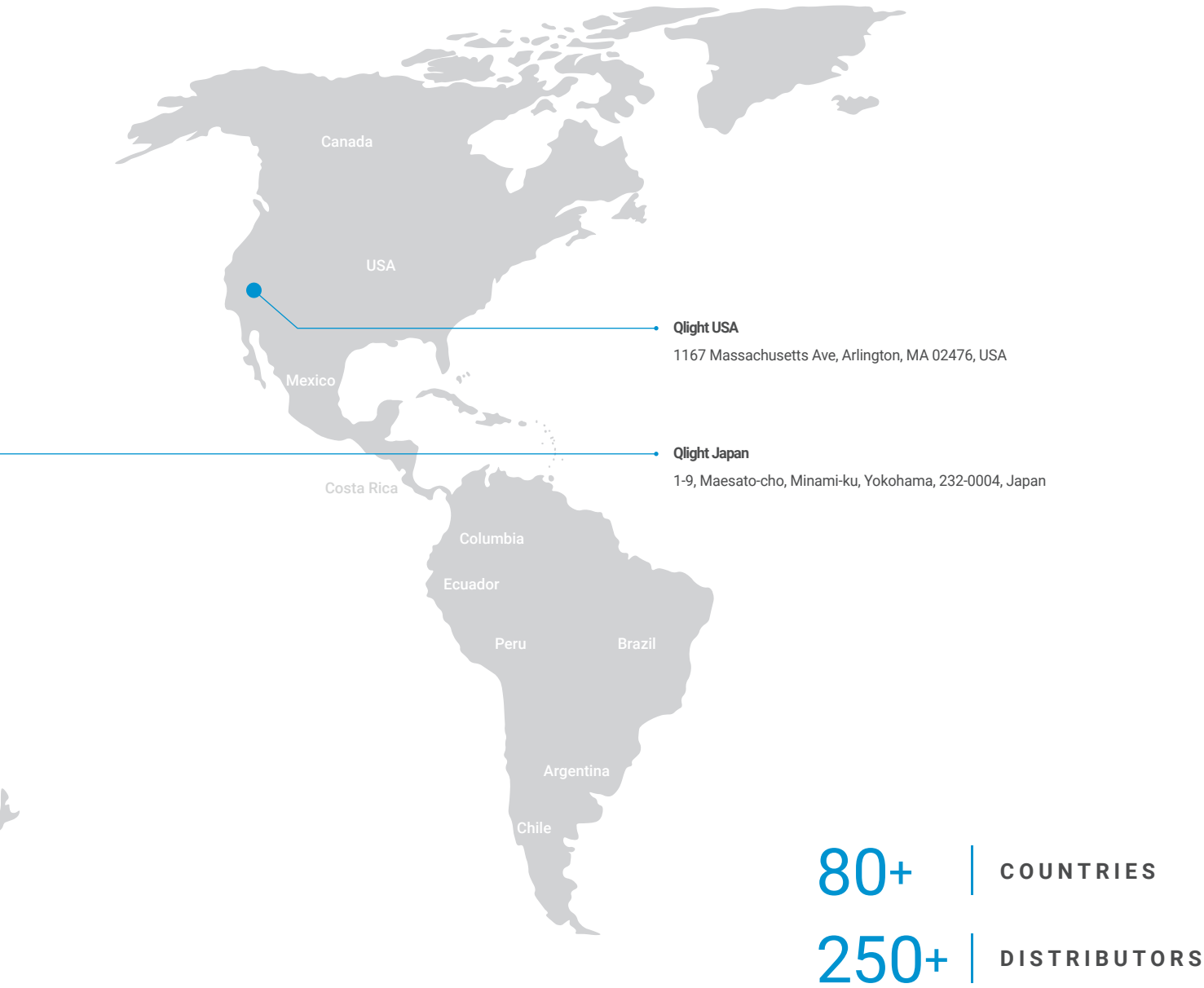
**ISUZU**

**ADNOC**

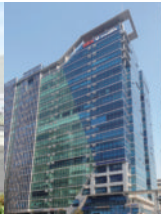
**KONECRANES**

**Kulicke & Soffa**

Qlight products have been exported all over the world in recognition of excellent technical capabilities and exceptional quality. Qlight products are going to be distributed a lot more countries in the future.



Gimhae Production Headquarters



Seoul Global Headquarters



Busan Business Center



Qlight China Factory

## Technical Certification

Qlight products are designed to meet strict quality and technical standards. Thus, the Qlight brand is widely recognized for its high quality and technical innovations from leading institutions around the world.



**ISO**  
International Organization for  
Standardization



**IECEX**  
International Explosion Proof  
Certification(IECEX)



**ATEX**  
The European Regulatory  
Framework of Manufacture, Installation  
and Use of Equipment in Explosive  
Atmospheres



**NEPSI**  
National Center for Explosion Protection  
and Safety of Instrumentation



**NRTL**  
Certified by designated U.S. laboratory



**KCs**  
Korea safety Certification



**TIIS**  
Technology Institution of  
Industrial Safety



**CCS**  
China Classification Society



**TS**  
Industrial Safety Technology Institute  
of Taiwan



**FCC**  
Federal Communications Commission



**S-mark**  
Safety Certification



**KC**  
Korea Certification Mark



**CCC**  
China Compulsory Certificate



**CCCF**  
China Certification Center for  
Security & Protection



**UL**  
Underwriters Laboratories



**CE**  
European Commission



**ICAO**  
International Civil Aviation Organization



**RoHS2**  
Restriction of Hazardous Substances  
Directive



# Qlight Catalog Introduction

Qlight produces a wide variety of product categories which offers the customer the ability to select the suitable device for their application needs and environments. There are signal tower lights, Signal Beacons and Sounders, Heavy-Duty and Explosion Proof Signalings, Warning light bars, Aviation Obstruction Lights, Smart Factory Product, Industrial LED lights, and Performance Line - E Series



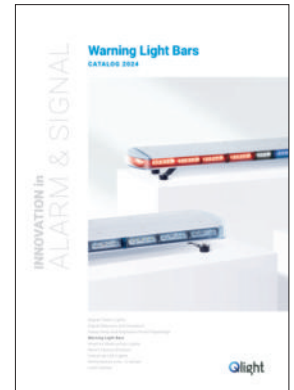
Signal Tower Lights



Signal Beacons and Sounders



Heavy-Duty and Explosion  
Proof Signalings



Warning Light Bars



Aviation Obstruction Lights



Smart Factory Product



Industrial LED Lights



Performance Line - E Series

**You could download and find the latest Catalog on the Qlight website.**

\* The latest product information could be accurately checked on the Qlight website ([www.qlight.com](http://www.qlight.com)). Please refer to the user manual attached with the product before installation and use.



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