

Innovation in alarm & signal

CATALOGUE 2018.02
Signal Tower Lights



Company Introduction



Qlight Gives You a Brighter Future!

Qlight has been a world-leading provider of visual and audible status indicating systems and solutions for the last three decades. We pride ourselves in developing products which help our customer's improve productivity, safety, and quality control in the industrial automation and commercial industries. Our strong dedication to innovative products, quality assurance, well-established supply chain, customizable manufacturing and strong customer relationships have helped us earn the top market share in Korea and China. These core values have also been fundamental to our continued growth into new markets. Qlight's products are certified by the International Quality Management System (ISO14001), IECEX, ATEX, UL, NEPSI, CE, Lloyd, KIMM, and KOSHA which display our dedication to strin-

gent quality control and product development based on safety-pursuing industry standards.

Our assembly lines in Busan, South Korea and Shanghai, China presently provide a variety of more than 450 of products to more than 40 countries, based on sales offices in South Korea (Seoul, Busan) China (Shanghai, Shenzhen, Shenyang, Tianzhen, Tianjin, Wenzhou), and the U.S. (Silicon Valley). The Qlight brand reflects 30 years of research and development, certification, and manufacturing experience.

We will continue to establish ourselves as an industry-leading provider by pushing the boundaries of technology in order to enhance our customer's efficiency and safety in every industry and region of the world.



Qlight Global Networks

| Country | Company name | Address | Phone |
|---------|-------------------------------------|---|------------------|
| Korea | Qlight Co., Ltd. | HQ A-412, 579, Gyeongin-ro, Guro-gu, Seoul, Korea | +82-80-328-2222 |
| | | Factory 185-25, Mukbang-Ro, Sangdong-Myeon, Gimhae-si, Gyeongsangnamdo, Korea | +82-80-328-1111 |
| USA | Qlight USA, Inc. | #341, 3003 North First St., San Jose, CA 95134 USA | +1-408-519-5740 |
| China | SHANGHAI Qlight Electronics Co.,Ltd | #19, Nanda Road, Baoshan Area, Shanghai, China | +86-21-6651-7100 |

Qlight Clients Heavy industry / Ship building / Automotive / Steel / Machinery / Petrochemical / Power plants / Electronics / Semiconductor / Emergency Vehicles



Company History

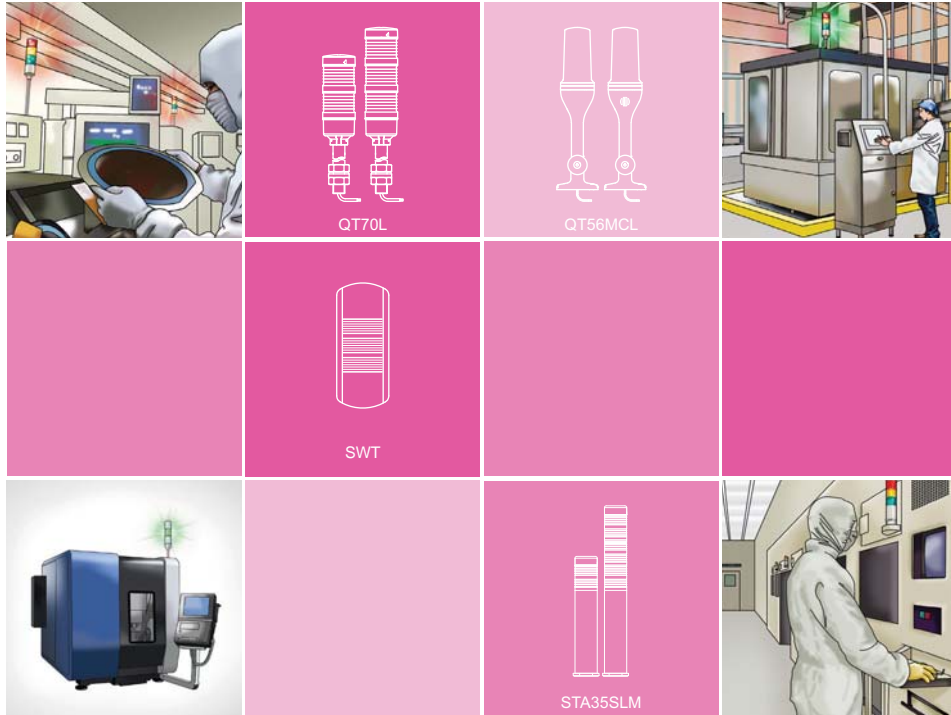
Qlight has been striving to accomplish our mission to provide visual and audible status indicating systems and solutions to enhance our customer's work safety and efficiency for the last three decades.



- 2017** 08 ISO 14001 : 2015 certificate aquired
02 Obtained ICAO certification for SAOL1
- 2016** 11 Obtained the patent for "multi-functional modular signal tower light"
(Patent # : 10-1676863)
09 Obtained the patent for "Emergency Vehicle Lightbar" (Patent # : 10-1662283)
07 Obtained UL certificate for LED signal lights Q series
07 Obtained the patent for "Bar style LED work lights" (Patent # : 10-1598123)
- 2015** 09 The second headquarter factory built
06 Limit switch models (3 items including SW2TS) aquired certificates from RMRS
03 LED work lights (QML150/250, QMFL 500/600) UL listed
- 2014** 10 Established the Qlight USA, Inc. in San Jose, CA.
Horn which that emits light patented (Patent # : 10-1452447)
Fan/ tilt type bracket patented (Patent # : 10-1452445)
09 LED strobe light with multi-lens patented (Patent # : 10-1444391)
08 Explosion proof product family including SNE, SNES, SESA, SEA, SPNA aquired
IECEX certificates
06 Selected as a promising export company by Small & Medium Business Admin., Korea
01 Non-sparking explosion proof tower lights including ST45ML and STB45ML
aquired KGS and NEPSI certificates
- 2013** 01 Portable warning lights for agricultural machine applications patented
(Patent # : 10-1226959)
- 2012** 12 Explosion proof warning lights (SNE, SNES) aquired CCS certificates
LED work light with cylindrical lens attached patented (Patent # : 10-1219020)
09 Explosion proof warning lights (SESA, SEA, SPNA) and heavy-duty warning lights
(SH1, SED, SEWN30) certified by CCS
01 LED warning light with LED reflector patented (Patent # : 10-1108102)
11 SNE, SNES certified by NEPSI, SNE, SNES, SESA, SEA, SPNA certified by KOSHA
08 KCC (Korea Communications Commission) certificate aquired
07 Light equipment applying prism system patented (Patent # : 10-1051056)
- 2010** 05 QEB certified by KIMM
LED warning light, bulb revolving warning light patented (Patent # : 10-0961472)
03 Research and development center established
- 2009** 12 SSEL certified by KIMM
LED tower lights compliant with the RoHS directive
04 Motor drive system patented (Patent # : 20-0439536)
03 LED revolving type lens patent aquired (patent # : 10-0808669)
- 2007** 11 Explosion proof electric horn (SPNA) aquired NEPSI certificates
05 Tower light models including ST45, ST56, ST80) UL listed
- 2005** 07 Heavy-duty products for vessel applications aquired Lloyd's (UK's Maritime Clas-
sification Society) certificates
04 ABS certificates aquired for 18 products including SH1
- 2004** 06 ISO 9001:2000 certificates aquired
02 Established Shanghai Qlight Electronic Co.,Ltd. in China
- 2000** 07 Established Qlight Limited
- 1993** 11 Nominated for developing domestic explosion proof warning lights by Korean
Ministry of Science & Technology
- 1988** 03 Developed limit switches for vessel applications
- 1986** 07 Established Qlight

Signal Tower Lights

INNOVATION IN ALARM & SIGNAL



| | | |
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| Products specifications | | 9 |

References for Signal Tower Lights



| Model number(series) | STA25SLM | STA35SL | STA35SLM | STA45SLM | STA45SLMP | QTA56L |
|--------------------------|---|------------------------|-----------------------|---|---|--------------------------------------|
| Voltage | AC/DC12V AC/DC24V AC110V, AC220V | DC12V DC24V | DC12V DC24V | DC12V DC24V | DC12V DC24V | DC24V |
| Dimension (mm) | Diameter | Ø25 | Ø35 | Ø35 | Ø45 | 52 |
| | Height | 368-488 | 85-265 | 205-385 | 198-378 | 398-568 |
| | Depth | | | | | 435 |
| Materials | Lens-AS Housing-Al | Lens-AS Housing-ABS | Lens-AS Housing-Al | Lens-Acryl Inner lens-AS Housing-Al | Lens-Acryl Inner lens-AS Housing-Al | Lens-PC Housing-Al |
| Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 3 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | | |
| | LED Steady | • | • | • | • | • |
| | LED Steady/Flashing | | | | | |
| | LED Strobe | | | | | |
| | LED Simulated revolving | | | | | |
| Sound & Volume | 1 buzzer sound | | | | Max 90dB at 1m | Max 90dB at 1m |
| | Layer color change | No | No | No | No | No |
| Mount bracket | Direct mount | Direct mount | Direct mount | Direct mount | Pole mount | Direct mount |
| Bracket | STAWB25 | STAWB25 | STAWB25 | STAWB45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | - |
| Protection rating | IP44 | IP44 | IP44 | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) |
| Certificates | - | - | - | CE, UL | CE, UL | - |
| Customization | Same lens color with LED, Wall mount bracket | Wall mount bracket | Wall mount bracket | Wall mount bracket | Pole length adjustment | - |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type |
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| Model number(series) | SWT | SWTE | QWT | ST45MB | ST45B | ST56MB | ST56B |
|--------------------------|--|--|---------------------------------------|--|--|--|--|
| Voltage | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V-AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V |
| Dimension (mm) | Diameter | Ø90(Half) | Ø70 | Ø45 | Ø45 | Ø56 | Ø56 |
| | Height | 216 | 216 | 122-286 | 116-362 | 330-576 | 157-502 |
| | Depth | 46 | 46 | 76 | - | - | - |
| Materials | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS |
| Layers | 2-3 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | | | |
| | LED Steady | | | | | | |
| | LED Steady/Flashing | • | • | • | | | |
| | LED Strobe | | | | | | |
| | LED Simulated revolving | | | | | | |
| Sound & Volume | 1 buzzer sound | Max 90dB at 1m | Max 90dB at 1m | Max 85dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m |
| | Layer color change | No | No | Yes | Yes | Yes | Yes |
| Mount bracket | Wall mount | Wall mount | Wall mount | Direct mount | Pole mount | Direct mount | Pole mount |
| Bracket | - | - | - | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 |
| Protection rating | IP55 | IP55 | IP54 | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) |
| Certificates | CE, UL | CE, UL | CE, UL | CE | CE | CE | CE |
| Customization | Color combination except for standard, 2 buzzer sounds, Transparent inner lens | Color combination except for standard, 2 buzzer sounds, Transparent inner lens | Color combination except for standard | Wall mount bracket, 2 Buzzer sounds | Pole length adjustment, 2 Buzzer sounds | Wall mount bracket, 2 buzzer sounds | Pole length adjustment, 2 buzzer sounds |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | - | - | - | - |
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References for Signal Tower Lights



| Model number(series) | ST80MB | ST80B | ST45ML | ST45L | ST56MEL | ST56EL |
|--------------------------|--|---|--|--|--|--|
| Voltage | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V |
| Dimension (mm) | Diameter | Ø80 | Ø80 | Ø45 | Ø45 | Ø56 |
| | Height | 180-460 | 317-597 | 106-358 | 320-572 | 127-352 |
| | Depth | - | - | - | - | - |
| Materials | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS |
| Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | • | • | | | |
| | LED Steady | | | | | |
| | LED Steady/Flashing | | | • | • | • |
| | LED Strobe | | | | | |
| Sound & Volume | LED Simulated revolving | | | | | |
| | 1 buzzer sound | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m |
| 5 signal sounds | - | - | 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 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 |
| Protection rating | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) |
| Certificates | - | - | CE, UL | CE, UL | UL | UL |
| Customization | Wall mount bracket, 2 buzzer sounds | Pole length adjustment, 2 buzzer sounds | 2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed |
| Transistor | - | - | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type |
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| Model number(series) | ST56ML | ST56L | ST80MEL | ST80EL | ST80ML | ST80L |
|--------------------------|--|--|--|--|--|--|
| Voltage | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V | AC/DC12V AC/DC24V AC110V, AC220V |
| Dimension (mm) | Diameter | Ø56 | Ø56 | Ø80 | Ø80 | Ø80 |
| | Height | 157-502 | 371-716 | 150-310 | 287-447 | 180-460 |
| | Depth | - | - | - | - | - |
| Materials | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS |
| Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | | |
| | LED Steady | | | | | |
| | LED Steady/Flashing | • | • | • | • | • |
| | LED Strobe | | | | | |
| Sound & Volume | LED Simulated revolving | | | | | |
| | 1 buzzer sound | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m |
| 5 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, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 |
| Protection rating | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) |
| Certificates | CE, UL | CE, UL | UL | UL | CE, UL | CE, UL |
| Customization | 2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed | 2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type |
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References for Signal Tower Lights

Multiple Color LED Signal Tower Lights



| Model number(series) | STC45ML | STC45L | STC56ML | STC56L | QT56MCL | |
|--------------------------|--|---|--|--|--------------------------------------|-----------------------|
| Voltage | AC/DC12V, AC/DC24V AC110V, AC220V | AC/DC12V, AC/DC24V AC110V, AC220V | AC/DC12V, AC/DC24V AC110V, AC220V | AC/DC12V, AC/DC24V AC110V, AC220V | DC24V | |
| Dimension (mm) | Diameter | Ø45 | Ø45 | Ø56 | Ø56 | |
| | Height | 106-198 | 320-412 | 157-287 | 371-501 | 276 |
| | Depth | | | | | |
| | Materials | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-PC Housing-AI |
| Layers | 2-3 Colors | 2-3 Colors | 2-3 Colors | 2-3 Colors | 7 Colors | |
| Light source & Operation | Bulb Steady/Flashing | | | | | |
| | LED Steady | | | | | |
| | LED Steady/Flashing | • | • | • | • | |
| | LED Strobe | | | | | |
| Sound & Volume | LED Simulated revolving | | | | | |
| | 1 buzzer sound 5 signal sounds | 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 | Pole mount | |
| Bracket | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | - | |
| Protection rating | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | IP23(Buzzer type), IP44(Standard) | |
| Certificates | CE | CE | CE | CE | - | |
| Customization | 2 buzzer sounds, Wall mount bracket | 2 buzzer sounds, Pole length adjustment | 2 Buzzer sounds, Lens length 40mm, Color combination except for standard, Wall mount Bracket | 2 Buzzer sounds, Lens length 40mm, Color combination except for standard, Pole length adjustment | - | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
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| Model number(series) | STG40ML | STG40L | STG50ML | STG50L | |
|--------------------------|--|---|--|---|------------|
| Voltage | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | |
| Dimension (mm) | Diameter | Ø40 | Ø40 | Ø50 | |
| | Height | 111-339 | 339-567 | 106-314 | 334-542 |
| | Depth | | | | |
| Materials | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | |
| | Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | |
| | LED Steady | | | | |
| | LED Steady/Flashing | • | • | • | |
| | LED Strobe | | | | |
| Sound & Volume | LED Simulated revolving | | | | |
| | 1 buzzer sound 5 signal sounds | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | |
| Layer color change | Yes | Yes | Yes | Yes | |
| Mount bracket | Direct mount | Pole mount | Direct mount | Pole mount | |
| Bracket | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | |
| Certificates | - | - | CE | CE | |
| Customization | Wall mount bracket, 2 buzzer sounds | 2 buzzer sounds, Pole length adjustment | Wall mount bracket, 2 buzzer sounds | 2 buzzer sounds, Pole length adjustment | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
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References for Signal Tower Lights



| Model number(series) | QTG50ML | QTG50L | QTG60ML | QTG60L | QTG70ML | QTG70L | |
|--------------------------|--|--|--|--|--|--|------------------------|
| Voltage | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø60 | Ø60 | Ø70 | |
| | Height | 116-364 | 344-592 | 126-399 | 352-635 | 126-399 | 274-557 |
| | Depth | | | | | | |
| | Materials | 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 | Bulb Steady/Flashing | | | | | | |
| | LED Steady | | | | | | |
| | LED Steady/Flashing | • | • | • | • | • | |
| | LED Strobe | | | | | | |
| LED Simulated revolving | | | | | | | |
| 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 | |
| | 5 signal sounds | | | | | | |
| 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, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | |
| Certificates | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | |
| Customization | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
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| Model number(series) | QTC50ML | QTC50L | QTC60ML | QTC60L | QTC70ML | QTC70L | |
|--------------------------|--|--|--|--|--|--|-------------------------------------|
| Voltage | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø60 | Ø60 | Ø70 | |
| | Height | 116-364 | 344-592 | 126-399 | 352-635 | 126-399 | 274-557 |
| | Depth | | | | | | |
| | Materials | 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 | Bulb Steady/Flashing | | | | | | |
| | LED Steady | | | | | | |
| | LED Steady/Flashing | • | • | • | • | • | |
| | LED Strobe | | | | | | |
| LED Simulated revolving | | | | | | | |
| 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 | |
| | 5 signal sounds | | | | | | |
| 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, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | |
| Certificates | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | |
| Customization | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
| Page | P72 | P73 | P74 | P75 | P76 | P77 | |

References for Signal Tower Lights



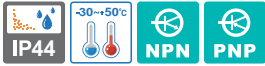
| Model number(series) | QTR50ML | QTR50L | QTR60ML | QTR60L | QTR70ML | QTR70L | |
|--------------------------|--|--|--|--|--|--|------------------------|
| Voltage | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø60 | Ø60 | Ø70 | |
| | Height | 116-364 | 344-592 | 126-399 | 352-635 | 126-399 | 274-557 |
| | Depth | | | | | | |
| | Materials | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS |
| Light source & Operation | Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | |
| | Bulb Steady/Flashing | | | | | | |
| | LED Steady | | | | | | |
| | LED Steady/Flashing | • | • | • | • | • | |
| | LED Strobe | | | | | | |
| Sound & Volume | LED Simulated revolving | | | | | | |
| | 1 buzzer sound | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | |
| | 5 signal sounds | | | | | | |
| 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, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | |
| Certificates | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | CE, UL | |
| Customization | 2 buzzer sounds, Wall mount bracket, Strong buzzer | 2 buzzer sounds, Pole length adjustment, Strong buzzer | 2 buzzer sounds, Wall mount bracket, Strong buzzer | 2 buzzer sounds, Pole length adjustment, Strong buzzer | 2 buzzer sounds, Wall mount bracket, Strong buzzer | 2 buzzer sounds, Pole length adjustment, Strong buzzer | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
| Page | P80 | P81 | P82 | P83 | P84 | P85 | |



| Model number(series) | QT50ML | QT50L | QT70ML | QT70L | |
|--------------------------|---|---|---|---|------------------------|
| Voltage | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø70 | |
| | Height | 83-247 | 297-461 | 98-322 | 237-461 |
| | Depth | | | | |
| | Materials | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS | Lens-PC Housing-ABS |
| Light source & Operation | Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| | Bulb Steady/Flashing | | | | |
| | LED Steady | | | | |
| | LED Steady/Flashing | • | • | • | • |
| | LED Strobe | • | • | • | • |
| Sound & Volume | LED Simulated revolving | • | • | • | |
| | 1 buzzer sound | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m |
| | 5 signal sounds | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m |
| Layer color change | Yes | Yes | Yes | Yes | |
| Mount bracket | Direct mount | Pole mount | Direct mount | Pole mount | |
| Bracket | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | |
| Certificates | CE | CE | CE | CE | |
| Customization | Beige color, Wall mount bracket, LED strobe, LED simulated revolving | Beige color, Pole length adjustment, LED strobe, LED simulated revolving | Beige color, Wall mount bracket, LED strobe, LED simulated revolving | Beige color, Pole length adjustment, LED strobe, LED simulated revolving | |
| Transistor | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | NPN/ PNP type | |
| Page | P101-103 | P98-100 | P111-113 | P108-110 | |

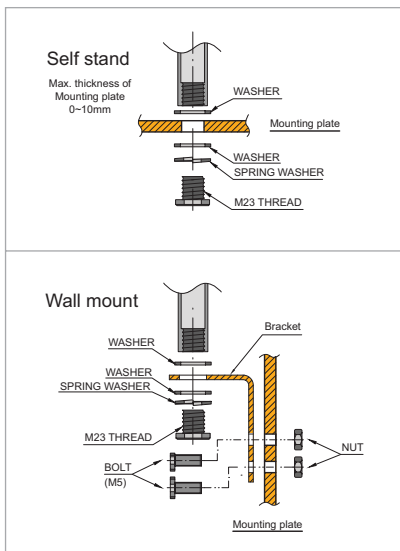
STA25SLM

Ø25mm Slim LED Tower Lights

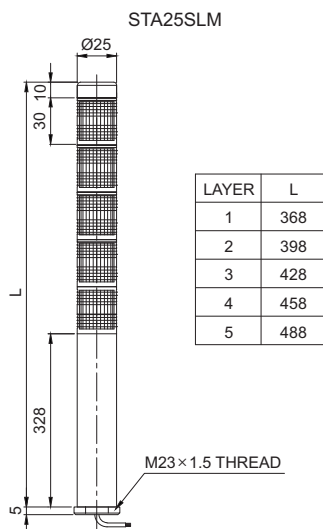


STA25SLM

Mounting Instructions



Technical Diagram (Units : mm)



STA25SLM Ø25mm Direct Mount, LED Steady

- Ø25mm 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)
- Materials : Lens-AS, Housing-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP44

Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-----------------|-------|--|--------------------------------------|--------------|--------|--|
| STA25SLM Steady | 1 | AC/DC12V AC/DC24V AC110V AC220V | 0.080A 0.040A 0.020A 0.020A | - | 0.19kg | ● R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V AC220V | 0.160A 0.080A 0.040A 0.040A | - | 0.21kg | ● R-Red ● G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V AC220V | 0.240A 0.120A 0.060A 0.060A | - | 0.23kg | ● R-Red ● A-Amber ● G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V AC220V | 0.320A 0.160A 0.080A 0.080A | - | 0.24kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V AC220V | 0.400A 0.200A 0.100A 0.100A | - | 0.26kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

Wiring Instructions

- External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 14 for detailed wiring instructions.



- LED color lenses matching the signal available
- Wall mount bracket options : Used for mounting on the vertical surface

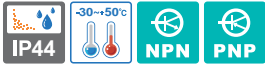


Ordering Specification

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

STA35SL

Ø35mm Slim LED Tower Lights



STA35SL

STA35SL Ø35mm Direct Mount LED Steady Tower Lights

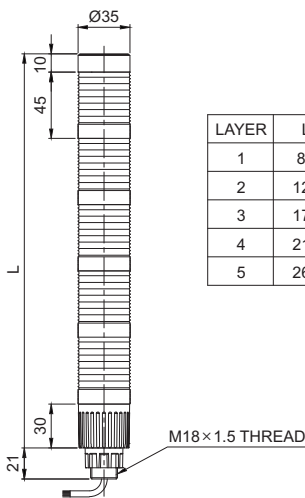
- Ø35mm direct mount tower lights
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation.
- Steady mode only (can operate flashing mode with external control) with fixed user selected color arrangement
- Easy mounting with the bolts/ screws located at the bottom of the product
- Materials : Lens-AS, Housing-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP44

Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|----------------|-------|----------------|------------------|--------------|--------|--|
| STA35SL Steady | 1 | DC12V DC24V | 0.160A 0.080A | - | 0.60kg | • R-Red |
| | 2 | DC12V DC24V | 0.320A 0.160A | | 0.85kg | • R-Red • G-Green |
| | 3 | DC12V DC24V | 0.480A 0.240A | | 1.05kg | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V | 0.640A 0.320A | | 1.30kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V | 0.800A 0.400A | | 1.53kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

Technical Diagram (Units : mm)

STA35SL



Wiring Instructions

- External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 14 for detailed wiring instructions.

Customization

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



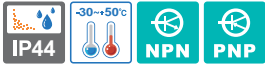
Wall Mount Bracket
STAWB25

Ordering Specification

| STA35SL | 3 | 220 | RAG |
|----------------|--|--------------------------|--|
| [Model number] | [Layer] | [Voltage] | [Color] |
| • STA35SL | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | • 12-DC12V • 24-DC24V | • R-Red • A-Amber • G-Green • B-Blue • W-White |

STA35SLM

Ø35mm Slim LED Tower Lights



STA35SLM

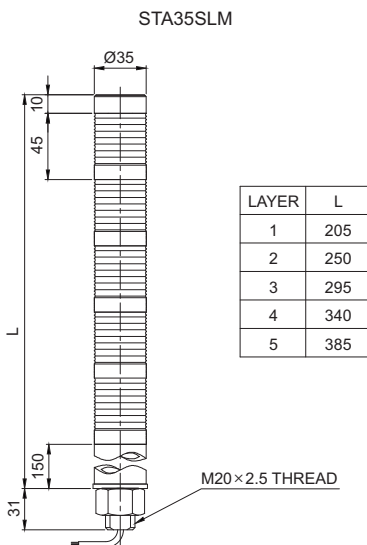
STA35SLM Ø35mm Direct Mount LED Steady Tower Lights

- 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 (can operate flashing mode with external control) with fixed user selected color arrangement
- Easy mounting with the bolts/ screws located at the bottom of the product
- Materials : Lens-AS, Housing-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP44

Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--------------------|-------|----------------|------------------|--------------|--------|--|
| STA35SLM Steady | 1 | DC12V DC24V | 0.160A 0.080A | - | 2.85kg | ● R-Red |
| | 2 | DC12V DC24V | 0.320A 0.160A | | 3.04kg | ● R-Red ● G-Green |
| | 3 | DC12V DC24V | 0.480A 0.240A | | 3.17kg | ● R-Red ● A-Amber ● G-Green |
| | 4 | DC12V DC24V | 0.640A 0.320A | | 3.43kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | 5 | DC12V DC24V | 0.800A 0.400A | | 3.58kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

Technical Diagram (Units : mm)



Wiring Instructions

- External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 14 for detailed wiring instructions.

Customization

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



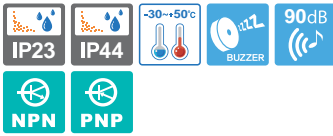
Wall Mount Bracket
STAWB25

Ordering Specification

| | | | | | | |
|-----------------|---|--|---|--------------------------|---|--|
| STA35SLM | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| • STA35SLM | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V | | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

STA45SLM

Ø45mm Slim LED Tower Light



STA45SLM series



Customization

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



Common Specifications(STA45SLM/ STA45SLMP)

- 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(can operate flashing mode with external control) with fixed user selected color arrangement
- Easy mounting with the bolts/screws located at the bottom of the product
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Materials : Lens-Acrylic, Filter lens -AS, Housing-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant, UL Listed



STA45SLM Ø45mm Direct Mount, LED Steady

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------------|------------------|--------------------------------------|--------|--|
| STA45SLM Steady STA45SLM-BZ Steady /w built-in buzzer | 1 | DC12V DC24V | 0.160A 0.080A | DC24V only DC24V only | 0.50kg | • R-Red |
| | 2 | DC12V DC24V | 0.320A 0.160A | | 0.54kg | • R-Red • G-Green |
| | 3 | DC12V DC24V | 0.480A 0.240A | | 0.58kg | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V | 0.640A 0.320A | | 0.63kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V | 0.800A 0.400A | | 0.68kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

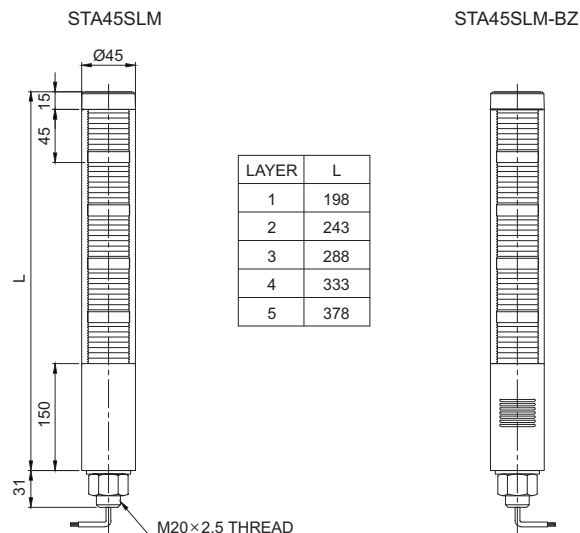
Signal/ Audible Line Current(per each layer)

| Voltage settings | DC12V | DC24V |
|----------------------|--------|--------|
| Signal line current | 0.160A | 0.080A |
| Audible line current | 0.016A | 0.031A |



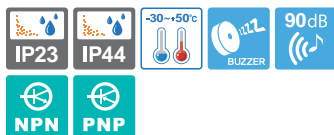
Technical Diagram

(Units : mm)



STA45SLMP

Ø45mm Slim LED Tower Lights



STA45SLMP series

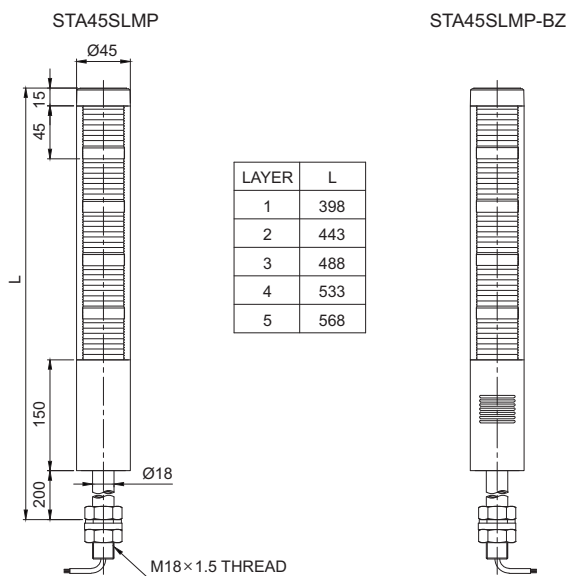
STA45SLMP Ø45mm Pole Mount, LED Steady

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|----------------|------------------|--|--------|--|
| STA45SLMP Steady STA45SLMP-BZ Steady/ w built-in buzzer | 1 | DC12V DC24V | 0.160A 0.080A | CE DC24V only UL DC24V only | 0.56kg | • R-Red |
| | 2 | DC12V DC24V | 0.320A 0.160A | | 0.60kg | • R-Red • G-Green |
| | 3 | DC12V DC24V | 0.480A 0.240A | | 0.64kg | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V | 0.640A 0.320A | | 0.69kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V | 0.800A 0.400A | | 0.74kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |



Technical Diagram

(Units : mm)



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | Al | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



Customization

- Customized pole length available



Wiring Instructions

- External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 14 for detailed wiring instructions.



Ordering Specification

| | | | | | | | | |
|--|---|--|---|--|---|--|---|---|
| STA45SLMP | - | 3 | - | 220 | - | RAG | - | QZ18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • STA45SLM • STA45SLM-BZ • STA45SLMP • STA45SLMP-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

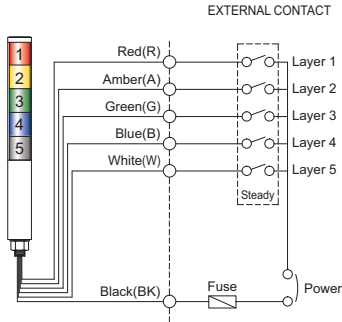


Wiring Instructions

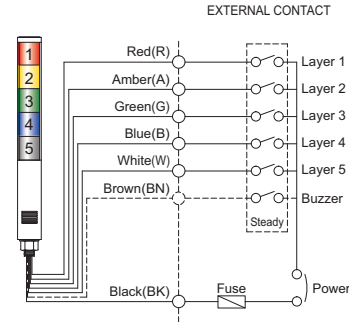
- STA25SLM, STA35SL, STA35SLM and STA45SLM can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.

External Contact

STA25SLM-DC/AC
STA35SL/ STA35SLM-DC



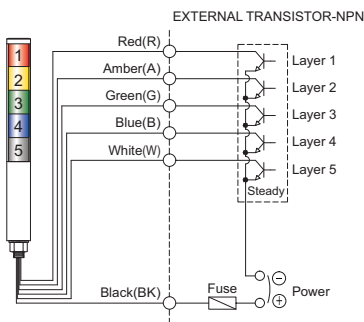
STA45SLM/ STA45SLMP-DC



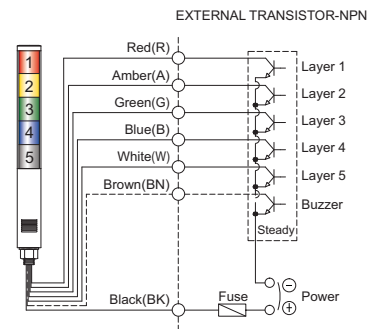
Transistor

NPN-Transistor

STA25SLM-DC
STA35SL/ STA35SLM-DC

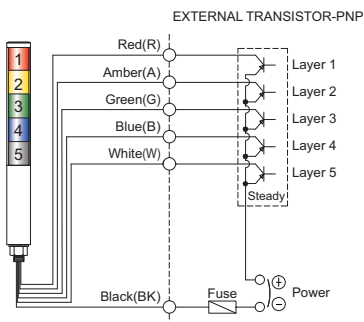


STA45SLM/ STA45SLMP-DC

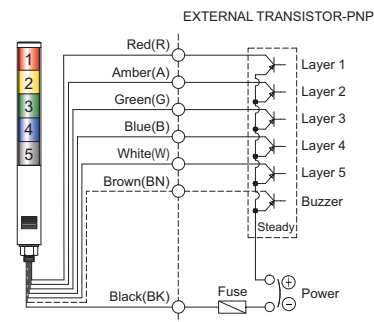


PNP-Transistor

STA25SLM-DC
STA35SL/ STA35SLM-DC



STA45SLM/ STA45SLMP-DC



Wiring Instructions

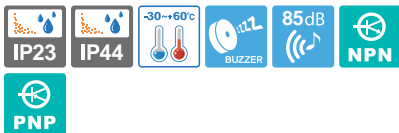
- External power line and signal line standard :
UL1007 AWG22(0.3sq) 400mm

Transistor Rating

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

QTA56L

LED Steady Tower Lights



QTA56L LED Steady
QTA56L-BZ Built-in Buzzer LED Steady



QT56HEX

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



QTA56L LED Steady

- 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
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Materials : Lens-PC, Housing-Al, Mounting bracket-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23

| Model number | Layers | Voltage | Current | Certificates | Weight | Color |
|---|--------|---------|------------|--------------|--------|---|
| QTA56L Steady | 3 | DC24V | Max 0.126A | - | 0.71kg | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green |
| QTA56L-BZ Steady /w built-in buzzer | | | Max 0.155A | | 0.72kg | |

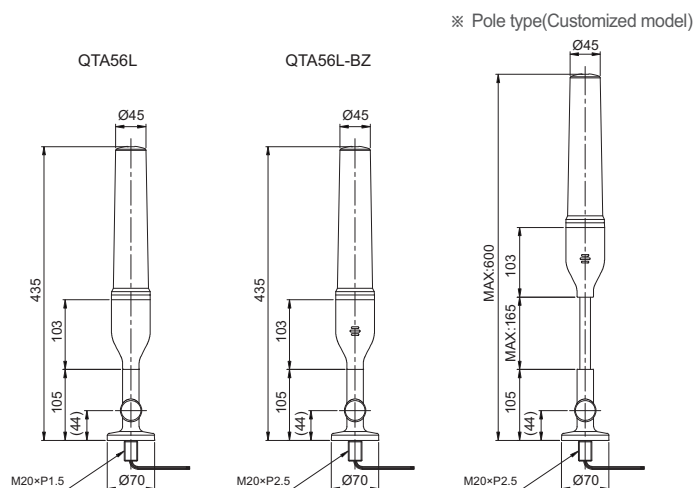
Signal/ Audible line current(Per each layer)

| Voltage | DC24V |
|----------------------|--------|
| Signal line current | 0.042A |
| Audible line current | 0.029A |



Technical Diagram

(Units : mm)



Wiring Instructions

- External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 16 for detailed wiring instructions.



Customization

- Pole type



Ordering Specification

| | | | | | | |
|-------------------------|---|--------------|---|------------|---|---|
| QTA56L | - | 3 | - | 24 | - | RAG |
| [Model number] | | [Layers] | | [Voltage] | | [Color] |
| • QTA56L • QTA56L-BZ | | • 3-3 Layers | | • 24-DC24V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green |

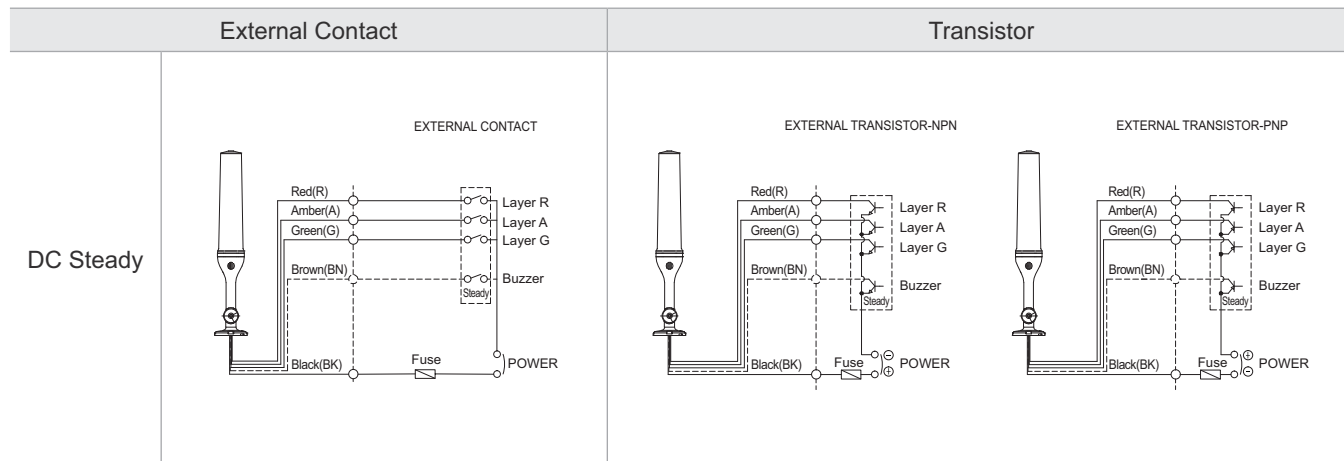
QTA56L

LED Steady Tower Lights



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 power line and signal line standard : UL1007 AWG22(0.3sq) 400mm

SWT series

Wall Mount Semicircular LED Signal Towers

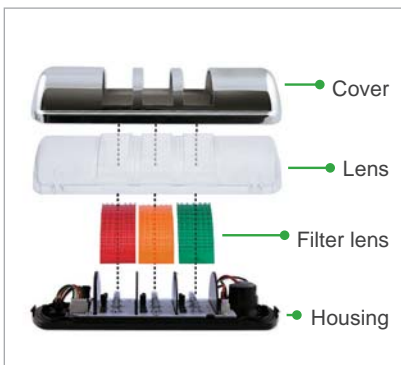


SWT series



SWTE series

• SWT Lens Configuration



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

SWT/ SWTE

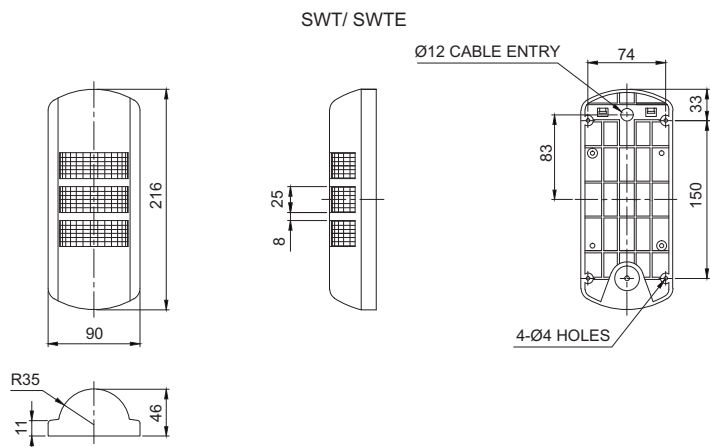
- Wall mount model that minimizes the chance of damage from moving obstacles or personnel
- Clear light signals emitted by adding separate color diffusion lenses beneath the outer transparent lens
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Can be used outdoors with tightly sealed structure
- Standard color arrangements : 2 Colors : ● Red-R ● Green-G
3 Colors : ● Red-R ● Amber-A ● Green-G
- Flashing rate : 60-80 flashes/min
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Materials : Lens-PC, Cover-ABS, Housing-ABS, Filter lens-PC
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP55
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|------------------|--------|-----------------------------------|
| SWT(E)L Steady | 2 | AC/DC12V | 0.095A | CE DC only | 0.27kg | ● R-Red ● G-Green |
| SWT(E)L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.063A | | 0.27kg | |
| | | AC110V | 0.048A | | 0.42kg | |
| | | AC220V | 0.024A | | 0.42kg | |
| SWT(E)LF Steady/Flashing | 3 | AC/DC12V | 0.130A | UL DC24V only | 0.30kg | ● R-Red ● A-Amber ● G-Green |
| SWT(E)LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.085A | | 0.30kg | |
| | | AC110V | 0.051A | | 0.45kg | |
| | | AC220V | 0.025A | | 0.45kg | |



Technical Diagram

(Units : mm)



Customization

- Available in customized color arrangements
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Transparent filter lenses available



Ordering Specification

| SWTL | - | 3 | - | 220 | - | RAG |
|--|---|--|---|--|---|---|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • SWTL • SWTLF • SWTL-BZ • SWTLF-BZ • SWTEL • SWTELF • SWTEL-BZ • SWTELF-BZ | | <ul style="list-style-type: none"> • 2-2Layers • 3-3Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green |

SWT series

Wall Mount Semicircular LED Signal Towers



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 |
|------------------------|------------------------|------------------------|
| DC Steady | <p>SWTL-DC</p> | <p>SWTL-DC</p> |
| DC Steady/ Flashing | <p>SWTLF-DC</p> | <p>SWTLF-DC</p> |
| AC Steady | <p>SWTL-AC</p> | <p>SWTL-AC</p> |
| AC Steady/ Flashing | <p>SWTLF-AC</p> | <p>SWTLF-AC</p> |

- DC steady type : External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type : External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
Signal line standard : UL1007 AWG22(0.3sq) 400mm

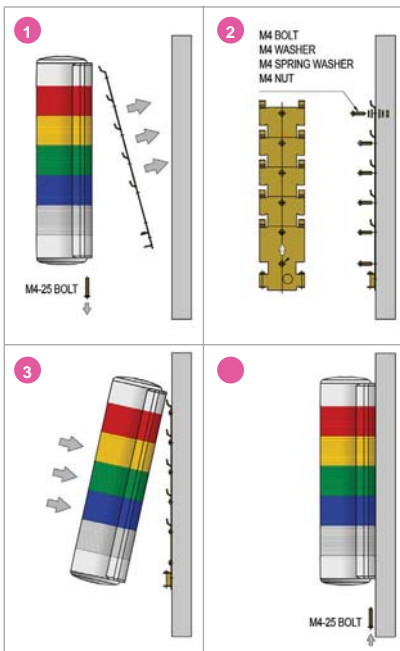
QWT series

Wall Mount LED Steady/Flashing Signal Towers



QWT series

Mounting Instructions



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



Customization

- Available in customized color arrangements

QWT Wall Mount, LED Steady/Flashing

- 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
- Flashing rate : 60-80 flashes/min
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Materials : Lens-PC, Housing-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------------------------------|--------------------------------|---------------------------|----------------------------|--|
| QWTL Steady QWTL-BZ Steady /w built-in buzzer QWTLF Steady/Flashing QWTLF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V AC/DC24V AC110V-220V | 0.065A 0.050A Max 0.025A | DC only DC24V only | 0.34kg 0.34kg 0.36kg | • R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V-220V | 0.130A 0.100A Max 0.050A | | 0.41kg 0.41kg 0.43kg | • R-Red • G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V-220V | 0.195A 0.150A Max 0.075A | | 0.48kg 0.48kg 0.50kg | • R-Red • A-Amber • G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V-220V | 0.260A 0.200A Max 0.100A | | 0.55kg 0.55kg 0.57kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V-220V | 0.325A 0.250A Max 0.125A | | 0.62kg 0.62kg 0.64kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

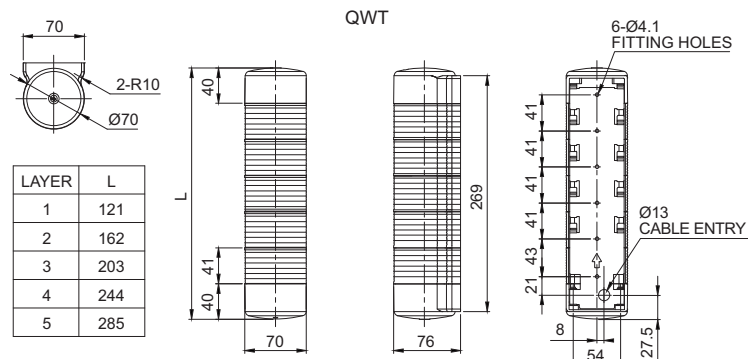
※ AC type model has a free-voltage range of 100V-240V.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.065A | 0.050A | Max 0.025A |
| Audible line current | 0.034A | 0.078A | Max 0.016A |



(Units : mm)



Ordering Specification

| | | | | | | |
|--|---|--|---|---|---|--|
| QWTL | - | 3 | - | 110/220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QWTL • QWTL-BZ • QWTLF • QWTLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |



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 |
|------------------------|--|---|
| DC Steady | <p>QWTL-DC EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Fuse Power</p> | <p>QWTL-DC EXTERNAL TRANSISTOR-NPN EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Fuse Power</p> |
| DC Steady/ Flashing | <p>QWTLF-DC EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common White(W) Fuse Power</p> | <p>QWTLF-DC EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common White(W) Fuse Power</p> |
| AC Steady | <p>QWTL-AC EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common White(W) Fuse Power</p> | <p>QWTL-AC EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common White(W) Fuse Power</p> |
| AC Steady/ Flashing | <p>QWTLF-AC EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common Gray(GR) Common White(W) Fuse Power</p> | <p>QWTLF-AC EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5 Brown(BN) Buzzer Black(BK) Common Gray(GR) Common White(W) Fuse Power</p> |

- DC steady type : External power line and signal line standard : UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type : External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
Signal line standard : UL1007 AWG22(0.3sq) 400mm

ST45MB

Ø45mm Bulb Steady/Flashing Tower Lights



ST45MB
ST45MB-BZ
ST45MBF
ST45MBF-BZ



ST45MB series



Common Specifications(ST45MB/ ST45B/ ST56MB/ ST56B/ ST80MB/ ST80B)

- Bulb steady/flashing tower lights
- A variety of length selections from 45mm, 56mm, and 80mm to fit your sophisticated application needs
- Can select from a variety of mount bracket for the pole mount type
- Adopted a light bulb with excellent durability and longevity
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Flashing rate : 60-80 flashes/min
- Available in customized color arrangements
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -25°C to +50°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant



ST45MB Ø45mm Direct Mount, Bulb Steady/Flashing

| Model number | Layer | Voltage | Current | Bulb | | | Certificates | Weight | Color |
|---|-------|----------|---------|--------|-----------|-----------|---------------|--------|--|
| | | | | Spec | Standard | Parts no# | | | |
| ST45MB | 1 | AC/DC12V | 0.398A | 12V5W | G14 9S | 1 | CE DC only | 0.22kg | • R-Red |
| | | AC/DC24V | 0.212A | 24V5W | G14 9S | 2 | | 0.22kg | |
| | | AC110V | 0.048A | 110V5W | T16x28 9S | 3 | | 0.22kg | |
| | | AC220V | 0.023A | 220V5W | T16x28 9S | 4 | | 0.22kg | |
| ST45MB Steady | 2 | AC/DC12V | 0.797A | 12V5W | G14 9S | 1 | CE DC only | 0.26kg | • R-Red • G-Green |
| | | AC/DC24V | 0.424A | 24V5W | G14 9S | 2 | | 0.26kg | |
| | | AC110V | 0.097A | 110V5W | T16x28 9S | 3 | | 0.26kg | |
| | | AC220V | 0.046A | 220V5W | T16x28 9S | 4 | | 0.26kg | |
| ST45MB-BZ Steady /w built-in buzzer | 3 | AC/DC12V | 1.196A | 12V5W | G14 9S | 1 | CE DC only | 0.31kg | • R-Red • A-Amber • G-Green |
| | | AC/DC24V | 0.636A | 24V5W | G14 9S | 2 | | 0.31kg | |
| | | AC110V | 0.146A | 110V5W | T16x28 9S | 3 | | 0.31kg | |
| | | AC220V | 0.070A | 220V5W | T16x28 9S | 4 | | 0.31kg | |
| ST45MBF Steady/Flashing | 4 | AC/DC12V | 1.595A | 12V5W | G14 9S | 1 | CE DC only | 0.37kg | • R-Red • A-Amber • G-Green • B-Blue |
| | | AC/DC24V | 0.848A | 24V5W | G14 9S | 2 | | 0.37kg | |
| | | AC110V | 0.195A | 110V5W | T16x28 9S | 3 | | 0.37kg | |
| | | AC220V | 0.093A | 220V5W | T16x28 9S | 4 | | 0.37kg | |
| ST45MBF-BZ Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 1.994A | 12V5W | G14 9S | 1 | CE DC only | 0.42kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| | | AC/DC24V | 1.061A | 24V5W | G14 9S | 2 | | 0.42kg | |
| | | AC110V | 0.244A | 110V5W | T16x28 9S | 3 | | 0.42kg | |
| | | AC220V | 0.116A | 220V5W | T16x28 9S | 4 | | 0.42kg | |

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.398A | 0.212A | 0.048A | 0.023A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |



Customization

- 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

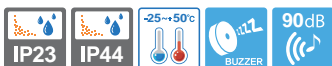


Ordering Specification

| ST45MB | - | 3 | - | 24 | - | RAG |
|----------------|---|-------------|---|--------------|---|-----------|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| • ST45MB | | • 1-1Layer | | • 12-DC12V | | • R-Red |
| • ST45MB-BZ | | • 2-2Layers | | • 24-DC24V | | • A-Amber |
| • ST45MBF | | • 3-3Layers | | • 110-AC110V | | • G-Green |
| • ST45MBF-BZ | | • 4-4Layers | | • 220-AC220V | | • B-Blue |
| | | • 5-5Layers | | | | • W-White |

ST45B

Ø45mm Bulb Steady/Flashing Tower Lights



- ST45B** Steady
- ST45B-BZ** Built-in Buzzer Steady
- ST45BF** Steady/Flashing
- ST45BF-BZ** Built-in Buzzer Steady/Flashing

ST45B Ø45mm Pole Mount, Bulb Steady/Flashing

※



ST45B series

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



| Mounting Bracket | | | | | | | |
|------------------|-------|------|------|------|------|------|-------|
| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Customization

- Customized pole length available
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available

Ordering Specification

| ST45B | - | 3 | - | 24 | - | RAG | - | LW18 |
|--|---|--|---|--|---|--|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST45B • ST45B-BZ • ST45BF • ST45BF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

ST45MB/ST45B

Ø45mm Bulb Steady/Flashing Tower Lights

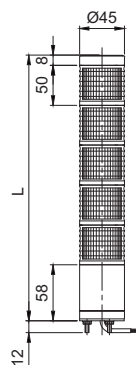


Technical Diagram

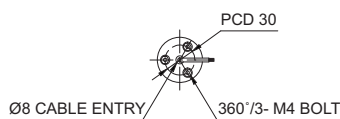
(Units : mm)

ST45MB : AC/DC
ST45MB-BZ : DC
ST45MBF : DC

ST45MB-BZ : AC
ST45MBF : AC
ST45MBF-BZ : AC



| LAYER | L |
|-------|-----|
| 1 | 116 |
| 2 | 166 |
| 3 | 216 |
| 4 | 266 |
| 5 | 316 |

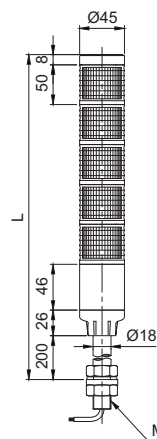


| LAYER | L |
|-------|-----|
| 1 | 162 |
| 2 | 212 |
| 3 | 262 |
| 4 | 312 |
| 5 | 362 |



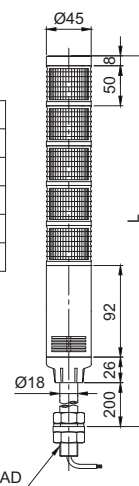
ST45B : AC/DC
ST45B-BZ : AC/DC
ST45BF : AC/DC

ST45BF-BZ : AC/DC



| LAYER | L |
|-------|-----|
| 1 | 330 |
| 2 | 380 |
| 3 | 430 |
| 4 | 480 |
| 5 | 530 |

| LAYER | L |
|-------|-----|
| 1 | 376 |
| 2 | 426 |
| 3 | 476 |
| 4 | 526 |
| 5 | 576 |



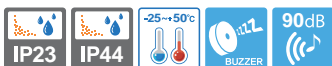
Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm

※ Please refer to page 30 for detailed wiring instructions.

ST56MB

Ø56mm Bulb Steady/Flashing Tower Lights



- ST56MB** Steady
- ST56MB-BZ** Built-in Buzzer Steady
- ST56MBF** Steady/Flashing
- ST56MBF-BZ** Built-in Buzzer Steady/Flashing



ST56MB series

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



ST56MB Ø56mm Direct Mount, Bulb Steady/Flashing

| Model number | Layer | Voltage | Current | Bulb | | | Certificates | Weight | Color |
|--|----------|----------|---------|------------|------------|-----------|--|--------|---|
| | | | | Spec | Standard | Parts no# | | | |
| ST56MB Steady ST56MB-BZ Steady /w built-in buzzer ST56MBF Steady/ Flashing ST56MBF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V | 0.925A | 12V10W | T16x35 15S | 9 | CE DC only | 0.30kg | ● R-Red |
| | | AC/DC24V | 0.514A | 24V10W | T16x35 15S | 10 | | 0.30kg | |
| | | AC110V | 0.095A | 110V10W | T16x35 15S | 12 | | 0.30kg | |
| | | AC220V | 0.046A | 220V10W | T16x35 15S | 13 | | 0.30kg | |
| | 2 | AC/DC12V | 1.851A | 12V10W | T16x35 15S | 9 | | 0.39kg | ● R-Red ● G-Green |
| | | AC/DC24V | 1.028A | 24V10W | T16x35 15S | 10 | | 0.39kg | |
| | | AC110V | 0.191A | 110V10W | T16x35 15S | 12 | | 0.39kg | |
| | | AC220V | 0.093A | 220V10W | T16x35 15S | 13 | | 0.39kg | |
| | 3 | AC/DC12V | 2.776A | 12V10W | T16x35 15S | 9 | | 0.46kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 1.543A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.286A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.140A | 220V10W | T16x35 15S | 13 | | | |
| | 4 | AC/DC12V | 3.702A | 12V10W | T16x35 15S | 9 | | 0.54kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 2.057A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.382A | 110V10W | T16x35 15S | 12 | | | |
| AC220V | | 0.186A | 220V10W | T16x35 15S | 13 | | | | |
| 5 | AC/DC12V | 4.627A | 12V10W | T16x35 15S | 9 | 0.62kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 2.572A | 24V10W | T16x35 15S | 10 | | | | |
| | AC110V | 0.477A | 110V10W | T16x35 15S | 12 | | | | |
| | AC220V | 0.233A | 220V10W | T16x35 15S | 13 | | | | |

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal Line Current | 0.925A | 0.541A | 0.095A | 0.046A |
| Audible Line Current | 0.016A | 0.031A | 0.027A | 0.030A |

Customization

- 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

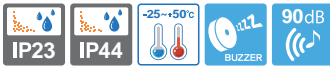
Wall Mount Bracket TWA45

Ordering Specification

| | | | | | | |
|--|---|--|---|--|---|--|
| ST56MB | - | 3 | - | 24 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST56MB • ST56MB-BZ • ST56MBF • ST56MBF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

ST56B

Ø56mm Bulb Steady/Flashing Tower Lights



- ST56B** Steady
- ST56B-BZ** Built-in Buzzer Steady
- ST56BF** Steady/Flashing
- ST56BF-BZ** Built-in Buzzer Steady/Flashing



ST56B series

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



ST56B Ø56mm Pole Mount, Bulb Steady/Flashing

| Model number | Layer | Voltage | Current | Bulb | | | Certificates | Weight | Color |
|---|----------|----------|---------|------------|------------|--------------------------------------|--|--------------------------------------|-----------------------------------|
| | | | | Spec | Standard | Parts no# | | | |
| ST56B Steady ST56B-BZ Steady /w built-in buzzer ST56BF Steady/ Flashing ST56BF-BZ Steady/ Flashing /w built-in buzzer | 1 | AC/DC12V | 0.925A | 12V10W | T16x35 15S | 9 | CE DC only | 0.45kg | ● R-Red |
| | | AC/DC24V | 0.514A | 24V10W | T16x35 15S | 10 | | 0.45kg | |
| | | AC110V | 0.095A | 110V10W | T16x35 15S | 12 | | 0.45kg | |
| | | AC220V | 0.046A | 220V10W | T16x35 15S | 13 | | 0.45kg | |
| | 2 | AC/DC12V | 1.851A | 12V10W | T16x35 15S | 9 | | 0.53kg | ● R-Red ● G-Green |
| | | AC/DC24V | 1.028A | 24V10W | T16x35 15S | 10 | | 0.53kg | |
| | | AC110V | 0.191A | 110V10W | T16x35 15S | 12 | | 0.53kg | |
| | | AC220V | 0.093A | 220V10W | T16x35 15S | 13 | | 0.53kg | |
| | 3 | AC/DC12V | 2.776A | 12V10W | T16x35 15S | 9 | | 0.61kg 0.61kg 0.61kg 0.61kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 1.543A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.286A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.140A | 220V10W | T16x35 15S | 13 | | | |
| 4 | AC/DC12V | 3.702A | 12V10W | T16x35 15S | 9 | 0.69kg 0.69kg 0.69kg 0.69kg | ● R-Red ● A-Amber ● G-Green ● B-Blue | | |
| | AC/DC24V | 2.057A | 24V10W | T16x35 15S | 10 | | | | |
| | AC110V | 0.382A | 110V10W | T16x35 15S | 12 | | | | |
| | AC220V | 0.186A | 220V10W | T16x35 15S | 13 | | | | |
| 5 | AC/DC12V | 4.627A | 12V10W | T16x35 15S | 9 | 0.77kg 0.77kg 0.77kg 0.77kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 2.572A | 24V10W | T16x35 15S | 10 | | | | |
| | AC110V | 0.477A | 110V10W | T16x35 15S | 12 | | | | |
| | AC220V | 0.233A | 220V10W | T16x35 15S | 13 | | | | |

※ Please refer to page 24 ST56MB type for signal/ audible line current.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Customization

- Customized pole length available
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available



| | | | | | | | | |
|--|---|--|---|--|---|--|---|--|
| ST56B | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST56B • ST56B-BZ • ST56BF • ST56BF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

ST56MB/ ST56B

Ø56mm Bulb Steady/Flashing Tower Lights

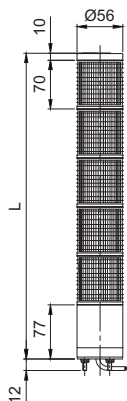


Technical Diagram

(Units : mm)

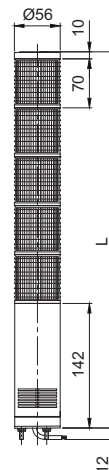


ST56MB : AC/DC
ST56MB-BZ : DC
ST56MBF : DC

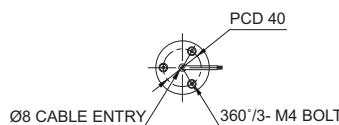


| LAYER | L |
|-------|-----|
| 1 | 157 |
| 2 | 227 |
| 3 | 297 |
| 4 | 367 |
| 5 | 437 |

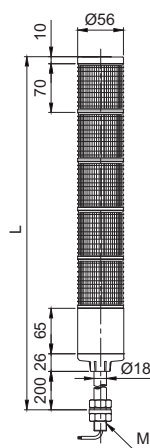
ST56MB-BZ : AC
ST56MBF : AC
ST56MBF-BZ : AC



| LAYER | L |
|-------|-----|
| 1 | 222 |
| 2 | 292 |
| 3 | 362 |
| 4 | 432 |
| 5 | 502 |

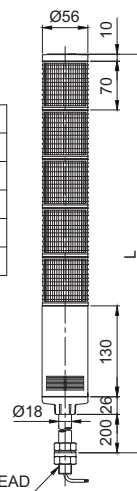


ST56B : AC/DC
ST56B-BZ : AC/DC
ST56BF : AC/DC



| LAYER | L |
|-------|-----|
| 1 | 371 |
| 2 | 441 |
| 3 | 511 |
| 4 | 581 |
| 5 | 651 |

ST56BF-BZ : AC/DC



| LAYER | L |
|-------|-----|
| 1 | 436 |
| 2 | 506 |
| 3 | 576 |
| 4 | 646 |
| 5 | 716 |



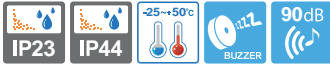
Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm

※ Please refer to page 30 for detailed wiring instructions.

ST80MB

Ø80mm Bulb Steady/Flashing Tower Lights



- ST80MB** Steady
- ST80MB-BZ** Built-in Buzzer Steady
- ST80MBF** Steady/Flashing
- ST80MBF-BZ** Built-in Buzzer Steady/Flashing



ST80MB series

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



ST80MB Ø80mm Direct mount, Bulb Steady/Flashing

| Model number | Layer | Voltage | Current | Bulb | | | Certificates | Weight | Color |
|--|----------|----------|---------|------------|------------|-----------|--|--------|-----------------------------------|
| | | | | Spec | Standard | Parts no# | | | |
| ST80MB Steady ST80MB-BZ Steady /w built-in buzzer ST80MBF Steady/ Flashing ST80MBF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V | 0.925A | 12V10W | T16x35 15S | 9 | - | 0.42kg | ● R-Red |
| | | AC/DC24V | 0.514A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.095A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.046A | 220V10W | T16x35 15S | 13 | | | |
| | 2 | AC/DC12V | 1.851A | 12V10W | T16x35 15S | 9 | | 0.56kg | ● R-Red ● G-Green |
| | | AC/DC24V | 1.028A | 24V10W | T16x35 15S | 10 | | 0.56kg | |
| | | AC110V | 0.191A | 110V10W | T16x35 15S | 12 | | 0.56kg | |
| | | AC220V | 0.093A | 220V10W | T16x35 15S | 13 | | 0.56kg | |
| | 3 | AC/DC12V | 2.776A | 12V10W | T16x35 15S | 9 | | 0.68kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 1.543A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.286A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.140A | 220V10W | T16x35 15S | 13 | | | |
| 4 | AC/DC12V | 3.702A | 12V10W | T16x35 15S | 9 | 0.84kg | ● R-Red ● A-Amber ● G-Green ● B-Blue | | |
| | AC/DC24V | 2.057A | 24V10W | T16x35 15S | 10 | | | | |
| | AC110V | 0.382A | 110V10W | T16x35 15S | 12 | | | | |
| | AC220V | 0.186A | 220V10W | T16x35 15S | 13 | | | | |
| 5 | AC/DC12V | 4.627A | 12V10W | T16x35 15S | 9 | 0.98kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 2.572A | 24V10W | T16x35 15S | 10 | | | | |
| | AC110V | 0.477A | 110V10W | T16x35 15S | 12 | | | | |
| | AC220V | 0.233A | 220V10W | T16x35 15S | 13 | | | | |

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.925A | 0.514A | 0.095A | 0.046A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

Customization

- 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

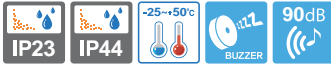


Ordering Specification

| ST80MB | - | 3 | - | 24 | - | RAG |
|----------------|---|-------------|---|--------------|---|-----------|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| • ST80MB | | • 1-1Layer | | • 12-DC12V | | ● R-Red |
| • ST80MB-BZ | | • 2-2Layers | | • 24-DC24V | | ● A-Amber |
| • ST80MBF | | • 3-3Layers | | • 110-AC110V | | ● G-Green |
| • ST80MBF-BZ | | • 4-4Layers | | • 220-AC220V | | ● B-Blue |
| | | • 5-5Layers | | | | ● W-White |

ST80B

Ø80mm Bulb Steady/Flashing Tower Lights



- ST80B** Steady
- ST80B-BZ** Built-in Buzzer Steady
- ST80BF** Steady/Flashing
- ST80BF-BZ** Built-in Buzzer Steady/Flashing



ST80B series

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



ST80B Ø80mm Pole Mount, Bulb Steady/Flashing

| Model number | Layer | Voltage | Current | Bulb | | | Certificates | Weight | Color |
|--|-------|----------|---------|---------|------------|-----------|--------------|--------------------------------------|--|
| | | | | Spec | Standard | Parts no# | | | |
| ST80B Steady ST80B-BZ Steady /w built-in buzzer ST80BF Steady/ Flashing ST80BF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V | 0.925A | 12V10W | T16x35 15S | 9 | - | 0.61kg 0.61kg 0.61kg 0.61kg | ● R-Red |
| | | AC/DC24V | 0.514A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.095A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.046A | 220V10W | T16x35 15S | 13 | | | |
| | 2 | AC/DC12V | 1.851A | 12V10W | T16x35 15S | 9 | | 0.75kg 0.75kg 0.75kg 0.75kg | ● R-Red ● G-Green |
| | | AC/DC24V | 1.028A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.191A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.093A | 220V10W | T16x35 15S | 13 | | | |
| | 3 | AC/DC12V | 2.776A | 12V10W | T16x35 15S | 9 | | 0.88kg 0.88kg 0.88kg 0.88kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 1.543A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.286A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.140A | 220V10W | T16x35 15S | 13 | | | |
| | 4 | AC/DC12V | 3.702A | 12V10W | T16x35 15S | 9 | | 1.04kg 1.04kg 1.04kg 1.04kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 2.057A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.382A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.186A | 220V10W | T16x35 15S | 13 | | | |
| | 5 | AC/DC12V | 4.627A | 12V10W | T16x35 15S | 9 | | 1.18kg 1.18kg 1.18kg 1.18kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 2.572A | 24V10W | T16x35 15S | 10 | | | |
| | | AC110V | 0.477A | 110V10W | T16x35 15S | 12 | | | |
| | | AC220V | 0.233A | 220V10W | T16x35 15S | 13 | | | |

※ Please refer to page 27 ST80MB type for signal/ audible line current.

Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Customization

- Customized pole length available
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available

Ordering Specification

| | | | | | | | | |
|--|---|--|---|--|---|--|---|---|
| ST80B | - | 3 | - | 24 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST80B • ST80B-BZ • ST80BF • ST80BF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • -LB24 • -LW24 • -QZ24 • -SZ24 • -QL24 • -SL24 • -QLA24 |

ST80MB/ST80B

Ø80mm Bulb Steady/Flashing Tower Lights

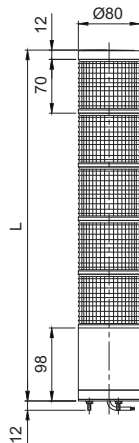


Technical Diagram

(Units : mm)



ST80MB : AC/DC
ST80MBF : AC/DC



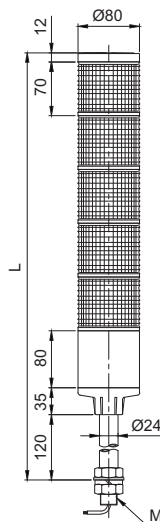
| LAYER | L |
|-------|-----|
| 1 | 180 |
| 2 | 250 |
| 3 | 320 |
| 4 | 390 |
| 5 | 460 |



ST80MB-BZ : AC/DC
ST80MBF-BZ : AC/DC



ST80B : AC/DC
ST80BF : AC/DC



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

ST80B-BZ : AC/DC
ST80BF-BZ : AC/DC



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 30 for detailed wiring instructions.

ST45B/ ST56B/ ST80B series

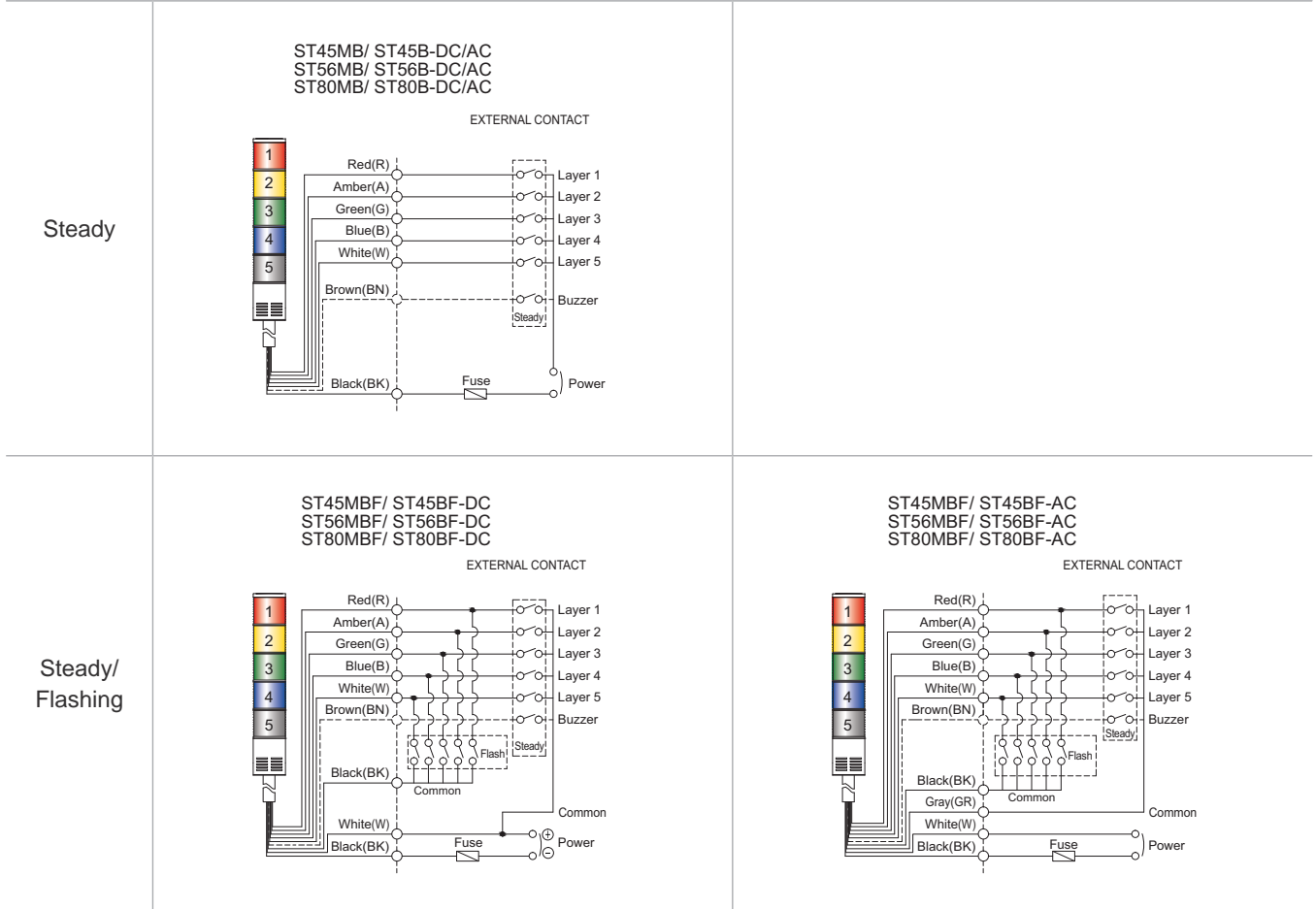
Bulb Steady/Flashing Tower Lights



Wiring Instructions

- Please wire by following below instructions for ST45MB/ ST45B, ST56MB/ ST56B and ST80MB/ ST80B series.
- Bulb tower lights do not allow transistor wiring. Please use external contact.

External contact



- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm



STC45ML

Ø45mm Multiple Color LED Steady/Flashing Tower Lights

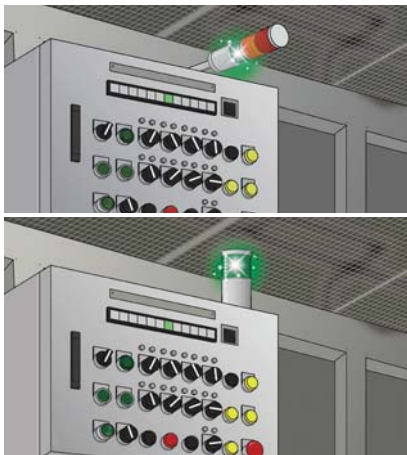


- STC45ML** LED Steady
- STC45ML-BZ** Built-in Buzzer LED Steady
- STC45MLF** LED Steady/Flashing
- STC45MLF-BZ** Built-in Buzzer LED Steady/Flashing



STC45ML series

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



Multiple color 1 layer LED tower lights

Can deliver two to three signals with one layer. Suitable for application condition with height limit.



Wiring Instructions

- External power line standard :
UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard :
UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 35 for detailed Wiring Instructions.



Common Specifications(STC45/ STC56/ STC80)

- 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
- Built-in buzzer type available (Volume : Max 90dB at 1m)
- Customized 2 buzzer sound type available
- Flashing rate : 60-80 flashes/min
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant
- Compliant with RoHS directive



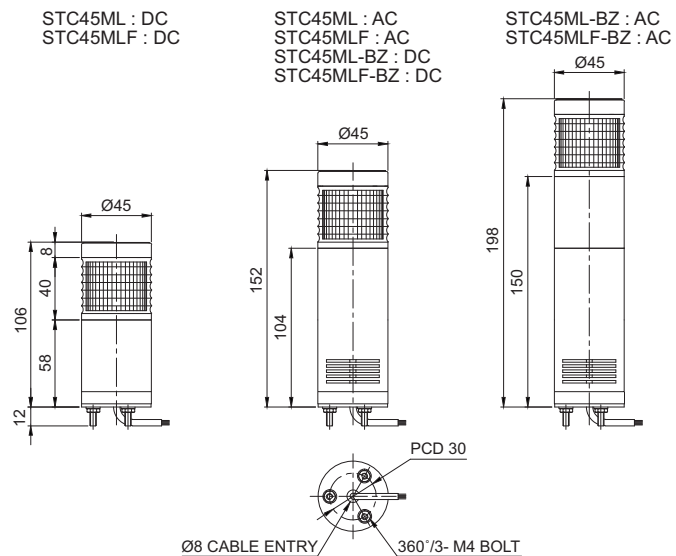
STC45ML Ø45mm Direct Mount, Multiple Color LED Steady/Flashing

| Model number | Layers | Voltage | Current | Certificates | Weight | Color |
|--------------|--------|----------|---------|--------------|--------|-----------------------------------|
| STC45ML | 2 | AC/DC12V | 0.111A | CE | 0.19kg | • R-Red • G-Green |
| STC45ML-BZ | | AC/DC24V | 0.100A | | 0.19kg | |
| STC45MLF | 3 | AC110V | 0.028A | - | 0.32kg | • R-Red • A-Amber • G-Green |
| STC45MLF-BZ | | AC220V | 0.014A | | 0.32kg | |



Technical Diagram

(Units : mm)



Customization

- Customized color arrangement available
- 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

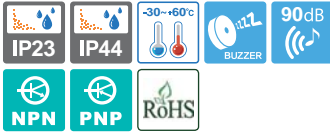


Ordering Specification

| | | | | | | |
|----------------|---|--------------|---|--------------|---|------------|
| STC45ML | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layers] | | [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 | | |

STC45L

Ø45mm Multiple Color LED Steady/Flashing Tower Lights



- STC45L** LED Steady
- STC45L-BZ** Built-in Buzzer LED Steady
- STC45LF** LED Steady/Flashing
- STC45LF-BZ** Built-in Buzzer LED Steady/Flashing

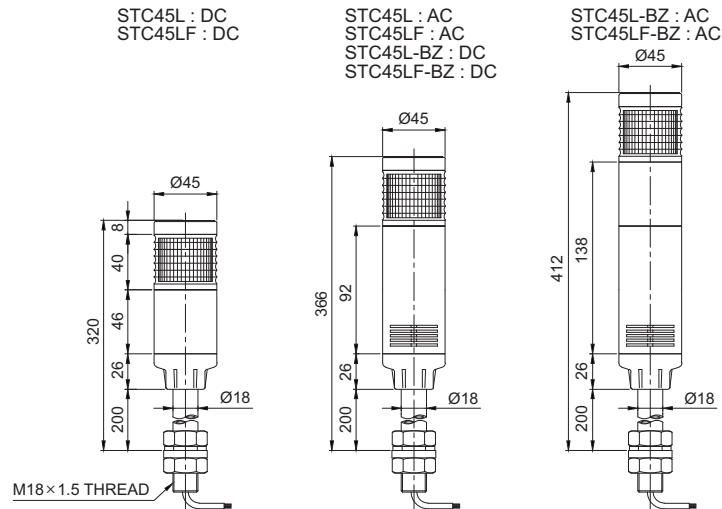
STC45L Ø45mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number | Layers | Voltage | Current | Certificates | Weight | Color |
|-----------------------|--------|----------|---------|--------------|--------|-----------------------------------|
| STC45L STC45L-BZ | 2 | AC/DC12V | 0.111A | CE | 0.33kg | • R-Red • G-Green |
| | | AC/DC24V | 0.100A | | 0.33kg | |
| STC45LF STC45LF-BZ | 3 | AC110V | 0.028A | - | 0.47kg | • R-Red • A-Amber • G-Green |
| | | AC220V | 0.014A | | 0.47kg | |

Technical Diagram (Units : mm)



STC45L series



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



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 35 for detailed wiring instructions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized color arrangement available
- Customized pole length available

Ordering Specification

| | | | | | | | | |
|--|---|--|---|--|---|---|---|--|
| STC45L | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layers] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • STC45L • STC45L-BZ • STC45LF • STC45LF-BZ | | <ul style="list-style-type: none"> • 2-2 Colors • 3-3 Colors | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

STC56ML

Ø56mm Multiple Color LED Steady/Flashing Tower Lights



- STC56ML** LED Steady
- STC56ML-BZ** Built-in Buzzer LED Steady
- STC56MLF** LED Steady/Flashing
- STC56MLF-BZ** Built-in Buzzer LED Steady/Flashing

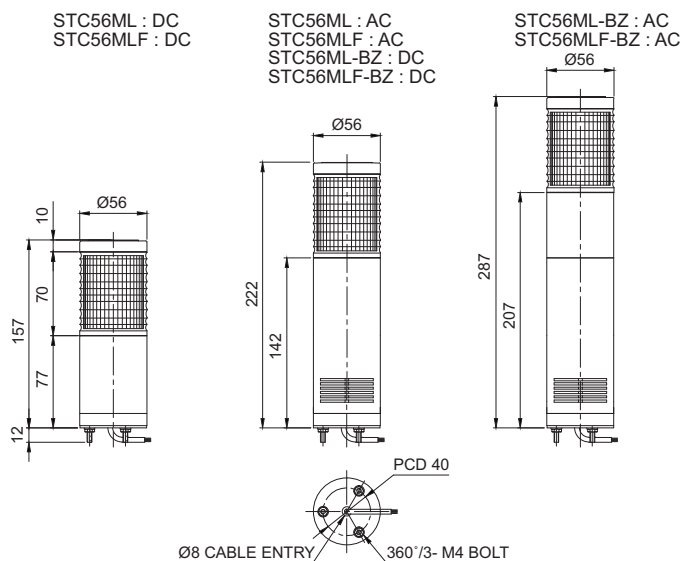
STC56ML Ø56mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number | Layers | Voltage | Current | Certificates | Weight | Color |
|--------------|--------|----------|---------|--------------|--------|-----------------------------------|
| STC56ML | 2 | AC/DC12V | 0.277A | CE | 0.29kg | • R-Red • G-Green |
| STC56ML-BZ | | AC/DC24V | 0.188A | | 0.29kg | |
| STC56MLF | 3 | AC110V | 0.057A | - | 0.49kg | • R-Red • A-Amber • G-Green |
| STC56MLF-BZ | | AC220V | 0.028A | | 0.49kg | |

Technical Diagram (Units : mm)



STC56ML series



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



40mm lens height

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 35 for detailed wiring instructions.

Customization

- Customized color arrangement available
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- 40mm lens height (Model number : STC56MEL)
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

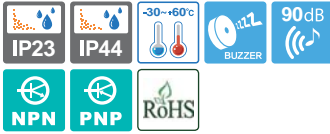


Ordering Specification

| | | | | | | |
|--|---|--|---|--|---|---|
| STC56ML | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layers] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • STC56ML • STC56ML-BZ • STC56MLF • STC56MLF-BZ | | <ul style="list-style-type: none"> • 2-2 Colors • 3-3 Colors | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green |

STC56L

Ø56mm Multiple Color LED Steady/Flashing Tower Lights



- STC56L** LED Steady
- STC56L-BZ** Built-in Buzzer LED Steady
- STC56LF** LED Steady/Flashing
- STC56LF-BZ** Built-in Buzzer LED Steady/Flashing



STC56L series

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



40mm lens height

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

Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB18 | LW18 | QZ18 |
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

STC56L Ø56mm Pole Mount, Multiple Color LED Steady/Flashing

| Model number | Layers | Voltage | Current | Certificates | Weight | Color |
|-----------------------|--------|----------|---------|--------------|--------|-----------|
| STC56L STC56L-BZ | 2 | AC/DC12V | 0.277A | CE | 0.43kg | ● R-Red |
| | | AC/DC24V | 0.188A | | 0.43kg | ● G-Green |
| STC56LF STC56LF-BZ | 3 | AC110V | 0.057A | - | 0.62kg | ● R-Red |
| | | AC220V | 0.028A | | 0.62kg | ● A-Amber |

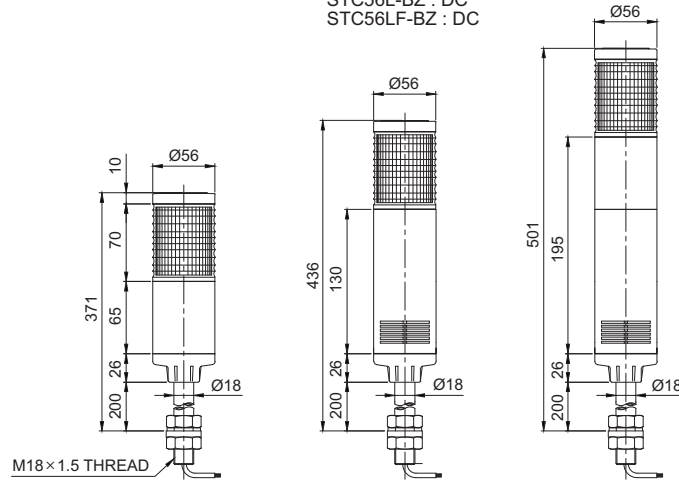


(Units : mm)

STC56L : DC
STC56LF : DC

STC56L : AC
STC56LF : AC
STC56L-BZ : DC
STC56LF-BZ : DC

STC56L-BZ : AC
STC56LF-BZ : AC



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm

※ Please refer to page 35 for detailed wiring instructions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized color arrangement available
- Customized pole length available
- 40mm lens height (Model number : STC56EL)

Ordering Specification

| | | | | | | | | |
|--|---|--|---|--|---|---|---|---|
| STC56L | - | 3 | - | 220 | - | RAG | - | LW18 |
| [Model number] | | [Layers] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • STC56L • STC56L-BZ • STC56LF • STC56LF-BZ | | <ul style="list-style-type: none"> • 2-2 Colors • 3-3 Colors | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green | | <ul style="list-style-type: none"> • None • Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

STC series

Multiple Color LED Steady/Flashing Tower Lights



Wiring Instructions

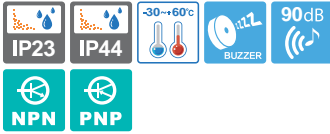
- STC series can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.
- Product can be wired regardless of polarity.

| | External Contact | Transistor |
|--------------------|---|---|
| DC Steady | <p>STC45ML/ STC45L-DC STC56ML/ STC56L/ STC56MEL/ STC56EL-DC</p> <p>EXTERNAL CONTACT</p> | <p>STC45ML/ STC45L-DC STC56ML/ STC56L/ STC56MEL/ STC56EL-DC</p> <p>EXTERNAL TRANSISTOR-NPN EXTERNAL TRANSISTOR-PNP</p> |
| DC Steady/Flashing | <p>STC45MLF/ STC45LF-DC STC56MLF/ STC56LF/ STC56MELF/ STC56ELF-DC</p> <p>EXTERNAL CONTACT</p> | <p>STC45MLF/ STC45LF-DC STC56MLF/ STC56LF/ STC56MELF/ STC56ELF-DC</p> <p>EXTERNAL TRANSISTOR-PNP</p> |
| AC Steady | <p>STC45ML/ STC45L-AC STC56ML/ STC56L/ STC56MEL/ STC56EL-AC</p> <p>EXTERNAL CONTACT</p> | |
| AC Steady/Flashing | <p>STC45MLF/ STC45LF-AC STC56MLF/ STC56LF/ STC56MELF/ STC56ELF-AC</p> <p>EXTERNAL CONTACT</p> | <p>STC45MLF/ STC45LF-AC STC56MLF/ STC56LF/ STC56MELF/ STC56ELF-AC</p> <p>EXTERNAL TRANSISTOR-PNP</p> |

- DC steady type : External power line and signal line standard UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type : External power line standard UL1015 AWG18(0.75sq)×2C 400mm
Signal line standard : UL1007 AWG22(0.3sq) 400mm

QT56MCL

LED Steady Tower Lights



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

QT56MCL LED Steady

QT56MCL-BZ Built-in Buzzer LED Steady



QT56MCL series

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



QT56MCL Multiple Color LED Steady

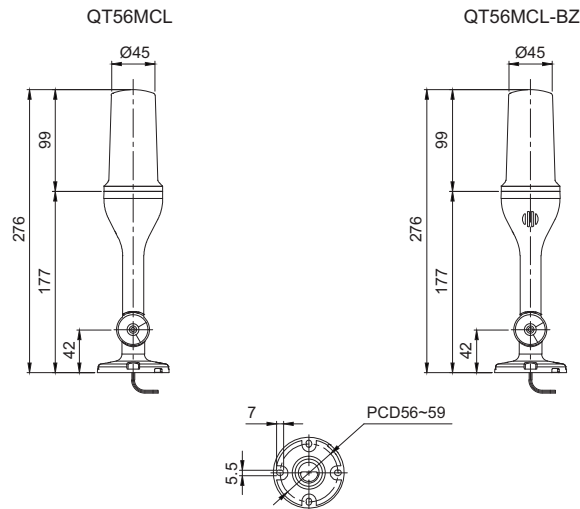
- Helps reduce the costs of installation by reducing the space needed to emit seven color signals in a single warning light
- Elegant design with hexagon shaped metal housing
- Aluminum housing provides excellent durability
- Soft LED illuminates designated colors when on
- When off, milky translucent color lens provides a comfortable and stable viewing condition for workers in close proximity
- Folding type mount bracket can be utilized in various environments
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Materials : Lens-PC, Housing-AI, Mounting bracket-AI
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in Buzzer type-IP23

| Model number | Voltage | Current | Certificates | Weight | Color |
|--------------------------------------|---------|-----------|--------------|--------|----------|
| QT56MCL Steady | DC24V | Max 0.08A | - | 0.45kg | 7 Colors |
| QT56MCL-BZ Steady /w built-in buzzer | | | | 0.48kg | |

Signal/ Audible line current(Per each layer)

| | |
|----------------------|--------|
| Voltage | DC24V |
| Signal line current | 0.060A |
| Audible line current | 0.020A |

Technical Diagram



Wiring Instructions

- External signal line standard : Signal line 4P(R,G,B,K) threading, signal line standard UL1007 AWG22(0.3sq) 400mm
 - Product can be wired regardless of polarity
 - Please refer to Wiring Instructions diagram to properly configure color options
- ※ Please refer to page 37 for detailed wiring instructions.

Ordering Specification

| | | |
|---|---|--|
| QT56MCL | - | 24 |
| [Model number] | | [Voltage] |
| <ul style="list-style-type: none"> • QT56MCL • QT56MCL-BZ | | <ul style="list-style-type: none"> • 24-DC24V |

QT56MCL

LED Steady Tower Lights

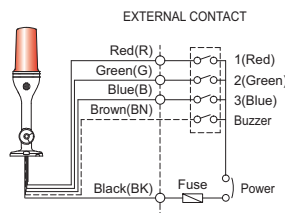


Wiring Instructions

- QT56MCL can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.
- Product can be wired regardless of polarity.

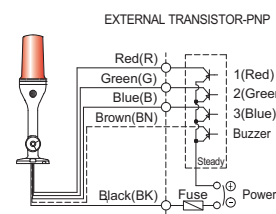
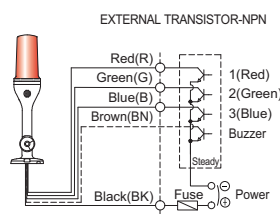


QT56MCL



< 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 signal line standard : Signal line 4P(R,G,B,K) threading, signal line standard UL1007 AWG22(0.3sq) 400mm

Signal Color Options



[Red]



[Green]



[Blue]



[Amber]



[Cyan]



[Purple]



[White]

- 7 Color modes available via wiring

You can configure seven color signals by combining the 4 signal wires (red, green, blue, black) attached to the tower light.

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights

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



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 length |
|--------------|---------------|-------------|
| 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 patterns |
|------|-----------------------------------|---------------------------------|--|
| BZ | 1 buzzer sound 2 buzzer sounds | | Customized 2 tone Buzzer available |
| WS | 5 Warning sounds | Ch1 Ch2 Ch3 Ch4 Ch5 | Fire.A-ANG Emergency Ambulance Machinery Fault High Expansion |
| WM | 5 Melodies | Ch1 Ch2 Ch3 Ch4 Ch5 | Sweet Home For Elise Cuckoo's Waltz Piano Sonata Turkish March |
| WA | 5 Alarms | Ch1 Ch2 Ch3 Ch4 Ch5 | Beep Intermittent Door Chime Phone Ring PI.PI.PI Short 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
- QLA type offers an easy to use angle adjustment button on the side for angle intervals of 45 to 90 degrees. No additional tools necessary



Mounting Bracket Options

• Wall Mount Brackets

| TWS45 TWS80 | TWA45 TWA80 |
|----------------|----------------|
| | |
| Steel | PC |

• Pole Mount Brackets

| Standard | LB18 LB24 | LW18 LW24 | QZ18 QZ24 | SZ18 SZ24 | QL18 QL24 | SL18 SL24 | QLA18 QLA24 |
|----------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights

Interchangeable Lens Concept

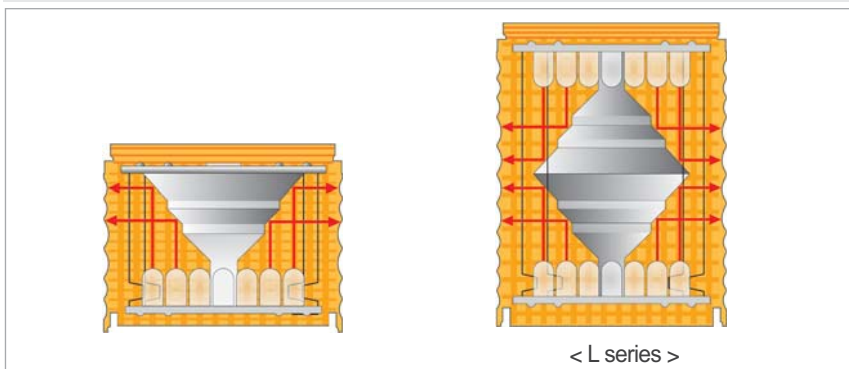
ST45L/ ST56L/ ST80L series product allows for the lens arrangement to be adjusted after removing the bolt that secures the cover. If additional lenses are required for this product please reach out to us. ST45L/ ST56L/ ST80L series can be stacked up to 5 layers.



Common Specifications(ST45(M)L/ ST56(M)EL/ ST56(M)L/ ST80(M)EL/ ST80(M)L)







- 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 buzzer available (Volume : Max 90dB at 1m)
- Built-in alarm available (Volume : Max 85dB at 1m/ Speaker output type)
(Can select from 5 warning sounds, 5 alarms, 5 melodies to fit your application needs)
- Flashing rate : 60-80 flashes/min
- Customized color arrangement available (LED light distribution system and lens is integrated into a combined structure)
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature: -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive

Reflection System



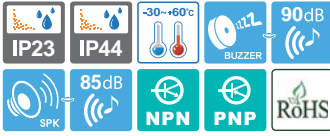
- Qlight's special light distribution system with multi-tiered reflector provides linear and balanced light transmission to the lens for strong LED illumination throughout the product
- The special light diffusion structure inside the product creates the brightest signal light at the center of the lens

References

| Mount type | Sound | Buzzer and sound patterns | Lens dimension | | | | |
|---|---|---------------------------|----------------|----------------|----------------|----------------|----------------|
| | | | Ø45mm H40mm | Ø56mm H40mm | Ø56mm H70mm | Ø80mm H40mm | Ø80mm H70mm |
|  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 |
|  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

Ø45mm LED Steady/Flashing Tower Lights

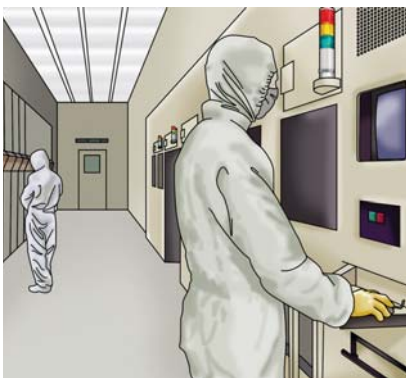


ST45ML series



Substitute model numbers for discontinued model

Built-in signal sound type, ST45ML-WS, ST45ML-WM, ST45ML-WA are substituted for old model number ST45WML. All specifications such as diameter and functions are all the same.



ST45ML Ø45mm Direct Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|----------------------------------|--------|--|
| ST45ML ST45ML-BZ ST45ML-WS ST45ML-WM ST45ML-WA ST45MLF ST45MLF-BZ ST45MLF-WS ST45MLF-WM ST45MLF-WA | 1 | AC/DC12V | 0.040A | DC24V only DC24V only | 0.19kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.19kg | |
| | | AC110V | 0.024A | | 0.25kg | |
| | | AC220V | 0.012A | | 0.25kg | |
| | 2 | AC/DC12V | 0.080A | | 0.21kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.21kg | |
| | | AC110V | 0.026A | | 0.29kg | |
| | 3 | AC/DC12V | 0.120A | | 0.25kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.25kg | |
| | | AC110V | 0.028A | | 0.34kg | |
| | 4 | AC/DC12V | 0.160A | | 0.30kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.30kg | |
| | | AC110V | 0.031A | | 0.38kg | |
| | 5 | AC/DC12V | 0.200A | | 0.34kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.200A | | 0.34kg | |
| AC110V | | 0.033A | 0.42kg | | | |
| | | AC220V | 0.016A | 0.42kg | | |

- ST45ML Steady
- ST45ML-BZ Built-in buzzer, Steady
- ST45ML-WS Built-in 5 Warning sounds, Steady
- ST45ML-WM Built-in 5 Melodies, Steady
- ST45ML-WA Built-in 5 Alarms, Steady
- ST45MLF Steady/ flashing
- ST45MLF-BZ Built-in buzzer, Steady/ flashing
- ST45MLF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST45MLF-WM Built-in 5 Melodies, Steady/ flashing
- ST45MLF-WA Built-in 5 Alarms, Steady/ flashing

※ Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.040A | 0.040A | 0.024A | 0.012A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

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 TWS45

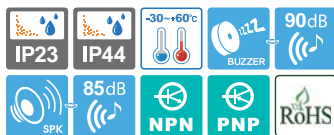
Wall Mount Bracket TWA45

Ordering Specification

| ST45ML | - | 3 | - | 24 | - | RAG |
|---|---|--|---|--|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST45ML • ST45ML-BZ • ST45ML-WS • ST45ML-WM • ST45ML-WA • ST45MLF • ST45MLF-BZ • ST45MLF-WS • ST45MLF-WM • ST45MLF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

ST45L

Ø45mm LED Steady/Flashing Tower Lights



ST45L Ø45mm Pole Mount, LED Steady/Flashing



ST45L series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST45L-WS, ST45L-WM, ST45L-WA are substituted for old model number ST45WL.

All specifications such as diameter and functions are all the same.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|--------------------------------------|--------|--|
| ST45L ST45L-BZ ST45L-WS ST45L-WM ST45L-WA ST45LF ST45LF-BZ ST45LF-WS ST45LF-WM ST45LF-WA | 1 | AC/DC12V | 0.040A | CE DC24V only UL DC24V only | 0.35kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.35kg | |
| | | AC110V | 0.024A | | 0.45kg | |
| | | AC220V | 0.012A | | 0.45kg | |
| | 2 | AC/DC12V | 0.080A | | 0.39kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.39kg | |
| | | AC110V | 0.026A | | 0.49kg | |
| | 3 | AC/DC12V | 0.120A | | 0.44kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.44kg | |
| | | AC110V | 0.028A | | 0.54kg | |
| | 4 | AC/DC12V | 0.160A | | 0.48kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.48kg | |
| | | AC110V | 0.031A | | 0.58kg | |
| | 5 | AC/DC12V | 0.200A | | 0.52kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.200A | | 0.52kg | |
| AC110V | | 0.033A | 0.62kg | | | |
| | | AC220V | 0.016A | 0.62kg | | |

- ST45L Steady
- ST45L-BZ Built-in buzzer, Steady
- ST45L-WS Built-in 5 Warning sounds, Steady
- ST45L-WM Built-in 5 Melodies, Steady
- ST45L-WA Built-in 5 Alarms, Steady
- ST45LF Steady/ flashing
- ST45LF-BZ Built-in buzzer, Steady/ flashing
- ST45LF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST45LF-WM Built-in 5 Melodies, Steady/ flashing
- ST45LF-WA Built-in 5 Alarms, Steady/ flashing

※ Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.040A | 0.040A | 0.024A | 0.012A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |



- 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 Specification

| | | | | | | | | |
|---|---|--|---|--|---|--|---|--|
| ST45L | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • ST45L • ST45L-BZ • ST45L-WS • ST45L-WM • ST45L-WA | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None • Standard • Bracket • LB18 • LW18 • QZ18 • SZ18 • QL18 • SL18 • QLA18 |

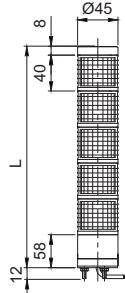
ST45ML/ST45L



Technical Diagram

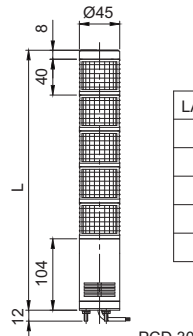
(Units : mm)

ST45ML : AC/DC
ST45ML-BZ : AC
ST45MLF : DC

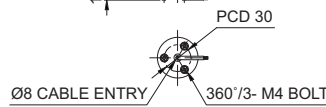


| LAYER | L |
|-------|-----|
| 1 | 106 |
| 2 | 146 |
| 3 | 186 |
| 4 | 226 |
| 5 | 266 |

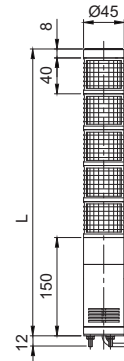
ST45ML-BZ : AC
ST45MLF : AC
ST45MLF-BZ : DC



| LAYER | L |
|-------|-----|
| 1 | 152 |
| 2 | 192 |
| 3 | 232 |
| 4 | 272 |
| 5 | 312 |

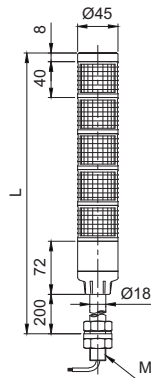


ST45MLF-BZ : AC



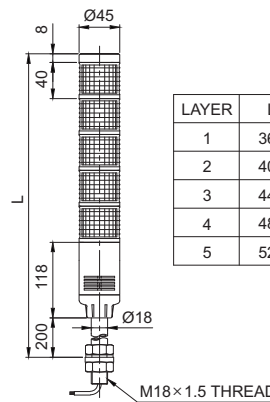
| LAYER | L |
|-------|-----|
| 1 | 198 |
| 2 | 238 |
| 3 | 278 |
| 4 | 318 |
| 5 | 358 |

ST45L : AC/DC
ST45L-BZ : DC
ST45LF : DC



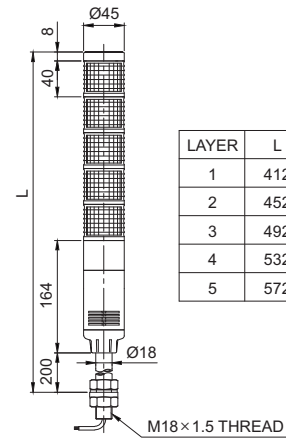
| LAYER | L |
|-------|-----|
| 1 | 320 |
| 2 | 360 |
| 3 | 400 |
| 4 | 440 |
| 5 | 480 |

ST45L-BZ : AC
ST45LF : AC
ST45LF-BZ : DC



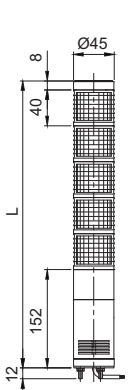
| LAYER | L |
|-------|-----|
| 1 | 366 |
| 2 | 406 |
| 3 | 446 |
| 4 | 486 |
| 5 | 526 |

ST45LF-BZ : AC



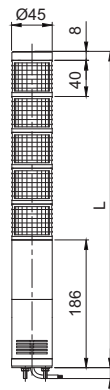
| LAYER | L |
|-------|-----|
| 1 | 412 |
| 2 | 452 |
| 3 | 492 |
| 4 | 532 |
| 5 | 572 |

ST45ML-W□ : DC
ST45MLF-W□ : DC

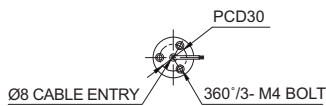


| LAYER | L |
|-------|-----|
| 1 | 200 |
| 2 | 240 |
| 3 | 280 |
| 4 | 320 |
| 5 | 360 |

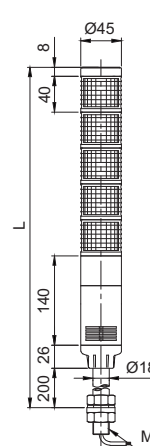
ST45ML-W□ : AC
ST45MLF-W□ : AC



| LAYER | L |
|-------|-----|
| 1 | 234 |
| 2 | 274 |
| 3 | 314 |
| 4 | 354 |
| 5 | 394 |

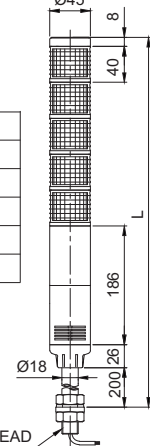


ST45L-W□ : DC
ST45LF-W□ : DC



| LAYER | L |
|-------|-----|
| 1 | 414 |
| 2 | 454 |
| 3 | 494 |
| 4 | 534 |
| 5 | 574 |

ST45L-W□ : AC
ST45LF-W□ : AC



| LAYER | L |
|-------|-----|
| 1 | 460 |
| 2 | 500 |
| 3 | 540 |
| 4 | 580 |
| 5 | 620 |



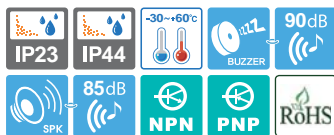
Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and external contact

※ Please refer to page 55-56 for detailed wiring instructions.

ST56MEL

Ø56mm LED Steady/Flashing Tower Lights



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



ST56MEL Ø56mm Direct Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|------------------|--------|--|
| ST56MEL ST56MEL-BZ ST56MEL-WS ST56MEL-WM ST56MEL-WA ST56MELF ST56MELF-BZ ST56MELF-WS ST56MELF-WM ST56MELF-WA | 1 | AC/DC12V | 0.060A | UL DC24V only | 0.26kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.26kg | |
| | | AC110V | 0.044A | | 0.42kg | |
| | | AC220V | 0.022A | | 0.42kg | |
| | 2 | AC/DC12V | 0.120A | | 0.32kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.32kg | |
| | | AC110V | 0.048A | | 0.48kg | |
| | 3 | AC/DC12V | 0.180A | | 0.37kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.37kg | |
| | | AC110V | 0.053A | | 0.54kg | |
| | 4 | AC/DC12V | 0.240A | | 0.43kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.43kg | |
| | | AC110V | 0.057A | | 0.59kg | |
| | | AC220V | 0.028A | | 0.59kg | |
| | 5 | AC/DC12V | 0.300A | | 0.49kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| AC/DC24V | | 0.200A | 0.49kg | | | |
| AC110V | | 0.062A | 0.65kg | | | |
| AC220V | | 0.031A | 0.65kg | | | |

- Steady
- Built-in buzzer, Steady
- Built-in 5 Warning sounds, Steady
- Built-in 5 Melodies, Steady
- Built-in 5 Alarms, Steady
- Steady/ flashing
- Built-in buzzer, Steady/ flashing
- Built-in 5 Warning sounds, Steady/ flashing
- Built-in 5 Melodies, Steady/ flashing
- Built-in 5 Alarms, Steady/ flashing

* Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.060A | 0.040A | 0.044A | 0.022A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

Substitute model numbers for discontinued model

Built-in signal sound type, ST56MEL-WS, ST56MEL-WM, ST56MEL-WA are substituted for old model number ST56WMEL. All specifications such as diameter and functions are all the same.

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

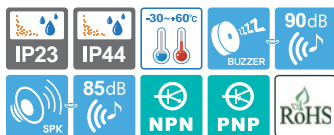


Ordering Specification

| ST56MEL | - | 3 | - | 24 | - | RAG |
|---|---|--|---|--|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST56MEL • ST56MEL-BZ • ST56MEL-WS • ST56MEL-WM • ST56MEL-WA • ST56MELF • ST56MELF-BZ • ST56MELF-WS • ST56MELF-WM • ST56MELF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

ST56EL

Ø56mm LED Steady/Flashing Tower Lights



ST56EL series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST56EL-WS, ST56EL-WM, ST56EL-WA are substituted for old model number ST56WEL.

All specifications such as diameter and functions are all the same.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

ST56EL Ø56mm Pole Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|----------|----------|---------|--|--------|---|
| ST56EL ST56EL-BZ ST56EL-WS ST56EL-WM ST56EL-WA ST56ELF ST56ELF-BZ ST56ELF-WS ST56ELF-WM ST56ELF-WA | 1 | AC/DC12V | 0.060A | UL DC24V only | 0.41kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.41kg | |
| | | AC110V | 0.044A | | 0.57kg | |
| | | AC220V | 0.022A | | 0.57kg | |
| | 2 | AC/DC12V | 0.120A | | 0.47kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.47kg | |
| | | AC110V | 0.048A | | 0.62kg | |
| | 3 | AC/DC12V | 0.180A | | 0.52kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.52kg | |
| | | AC110V | 0.053A | | 0.68kg | |
| | | AC220V | 0.026A | | 0.68kg | |
| | 4 | AC/DC12V | 0.240A | | 0.58kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.58kg | |
| | | AC110V | 0.057A | | 0.74kg | |
| | | AC220V | 0.028A | | 0.74kg | |
| 5 | AC/DC12V | 0.300A | 0.63kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 0.200A | 0.63kg | | | |
| | AC110V | 0.062A | 0.75kg | | | |
| | AC220V | 0.031A | 0.75kg | | | |

| | |
|-------------------|---|
| ST56EL | Steady |
| ST56EL-BZ | Built-in buzzer, Steady |
| ST56EL-WS | Built-in 5 Warning sounds, Steady |
| ST56EL-WM | Built-in 5 Melodies, Steady |
| ST56EL-WA | Built-in 5 Alarms, Steady |
| ST56ELF | Steady/ flashing |
| ST56ELF-BZ | Built-in buzzer, Steady/ flashing |
| ST56ELF-WS | Built-in 5 Warning sounds, Steady/ flashing |
| ST56ELF-WM | Built-in 5 Melodies, Steady/ flashing |
| ST56ELF-WA | Built-in 5 Alarms, Steady/ flashing |

* Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.060A | 0.040A | 0.044A | 0.022A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

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 Specification

| ST56EL | 3 | 220 | RAG | LW18 |
|---|--|--|--|--|
| [Model number] | [Layer] | [Voltage] | [Color] | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST56EL • ST56EL-BZ • ST56EL-WS • ST56EL-WM • ST56EL-WA • ST56ELF • ST56ELF-BZ • ST56ELF-WS • ST56ELF-WM • ST56ELF-WA | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

ST56MEL/ST56EL

Ø56mm LED Steady/Flashing Tower Lights



Technical Diagram

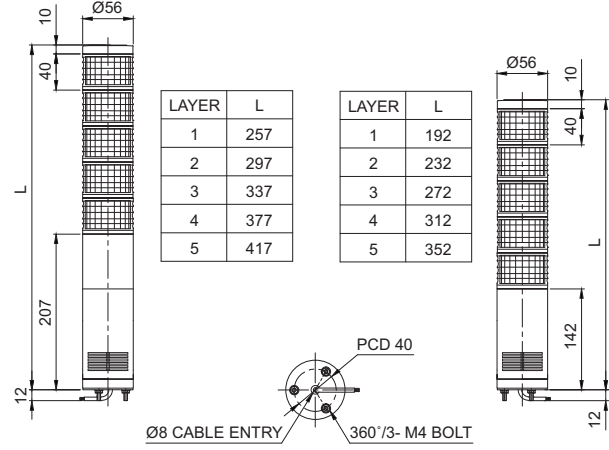
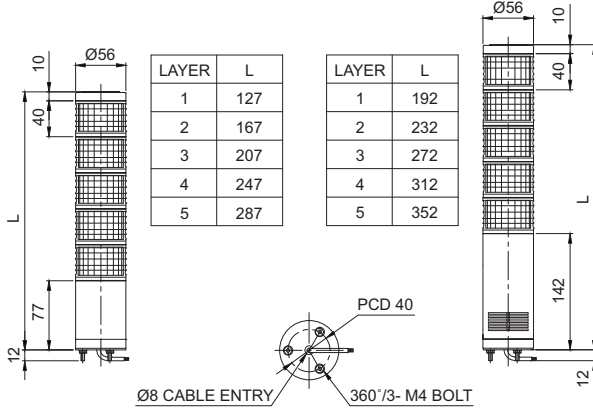
(Units : mm)

ST56MEL : AC/DC
ST56MEL-BZ : DC
ST56MELF : DC

ST56MEL-BZ : AC
ST56MELF-BZ : AC/DC
ST56MELF : AC

ST56MEL-W□ : AC
ST56MELF-W□ : AC

ST56MEL-W□ : DC
ST56MELF-W□ : DC

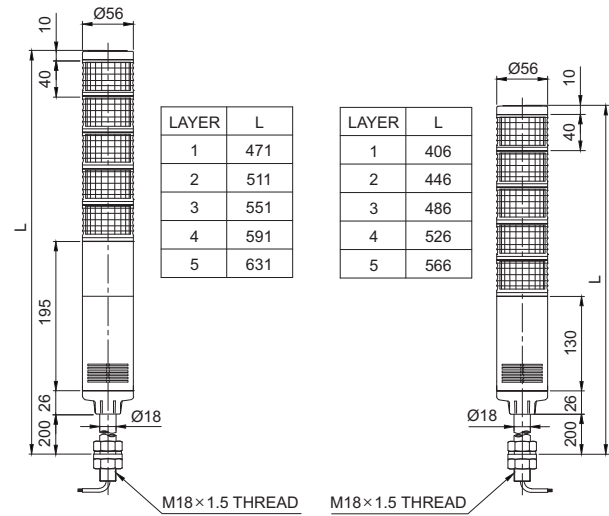
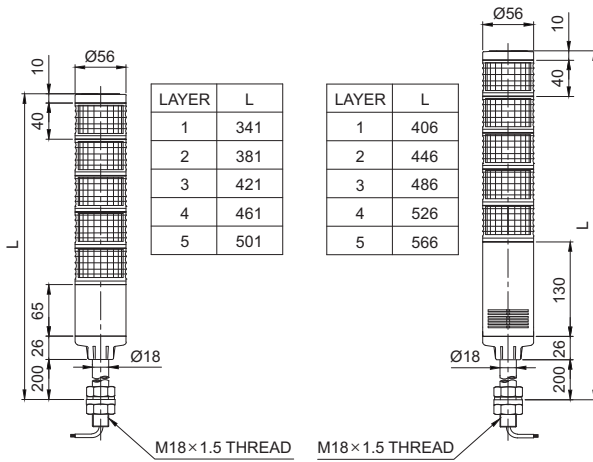


ST56EL : AC/DC
ST56EL-BZ : DC
ST56ELF : DC

ST56EL-BZ : AC
ST56ELF-BZ : AC/DC
ST56ELF : AC

ST56EL-W□ : AC
ST56ELF-W□ : AC

ST56EL-W□ : DC
ST56ELF-W□ : DC



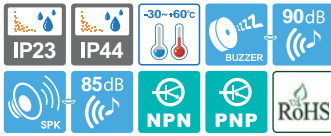
Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and external contact

※ Please refer to page 55-56 for detailed wiring instructions.

ST56ML

Ø56mm LED Steady/Flashing Tower Lights



ST56ML series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST56ML-WS, ST56ML-WM, ST56ML-WA are substituted for old model number ST56WML. All specifications such as diameter and functions are all the same.

ST56ML Ø56mm Direct Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|---|-------|----------|---------|----------------|--------|-----------------------------------|--|
| ST56ML ST56ML-BZ ST56ML-WS ST56ML-WM ST56ML-WA ST56MLF ST56MLF-BZ ST56MLF-WS ST56MLF-WM ST56MLF-WA | 1 | AC/DC12V | 0.120A | DC24V only | 0.22kg | ● R-Red | |
| | | AC/DC24V | 0.080A | | 0.22kg | | |
| | | AC110V | 0.048A | | 0.45kg | | |
| | | AC220V | 0.024A | | 0.45kg | | |
| | 2 | AC/DC12V | 0.240A | | 0.30kg | ● R-Red ● G-Green | |
| | | AC/DC24V | 0.160A | | 0.30kg | | |
| | | AC110V | 0.057A | | 0.53kg | | |
| | 3 | AC/DC12V | 0.360A | | 0.38kg | ● R-Red ● A-Amber ● G-Green | |
| | | AC/DC24V | 0.240A | | 0.38kg | | |
| | | AC110V | 0.066A | | 0.61kg | | |
| | 4 | AC/DC12V | 0.480A | | 0.46kg | DC24V only | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.320A | | 0.46kg | | |
| | | AC110V | 0.075A | | 0.70kg | | |
| | | AC220V | 0.037A | | 0.70kg | | |
| | 5 | AC/DC12V | 0.600A | | 0.54kg | DC24V only | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| AC/DC24V | | 0.400A | 0.54kg | | | | |
| AC110V | | 0.082A | 0.78kg | | | | |
| AC220V | | 0.041A | 0.78kg | | | | |

- ST56ML Steady
- ST56ML-BZ Built-in buzzer, Steady
- ST56ML-WS Built-in 5 Warning sounds, Steady
- ST56ML-WM Built-in 5 Melodies, Steady
- ST56ML-WA Built-in 5 Alarms, Steady
- ST56MLF Steady/ flashing
- ST56MLF-BZ Built-in buzzer, Steady/ flashing
- ST56MLF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST56MLF-WM Built-in 5 Melodies, Steady/ flashing
- ST56MLF-WA Built-in 5 Alarms, Steady/ flashing

* Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.120A | 0.080A | 0.048A | 0.024A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

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

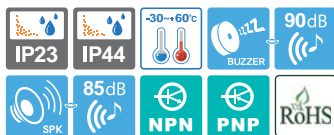


Order specification

| | | | | | | |
|---|---|--|---|--|---|--|
| ST56ML | - | 3 | - | 110 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST56ML • ST56ML-BZ • ST56ML-WS • ST56ML-WM • ST56ML-WA • ST56MLF • ST56MLF-BZ • ST56MLF-WS • ST56MLF-WM • ST56MLF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

ST56L

Ø56mm LED Steady/Flashing Tower Lights



ST56L series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST56L-WS, ST56L-WM, ST56L-WA are substituted for old model number ST56WL.

All specifications such as diameter and functions are all the same.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



ST56L Ø56mm Pole Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|--------------------------------------|--------|--|
| ST56L ST56L-BZ ST56L-WS ST56L-WM ST56L-WA ST56LF ST56LF-BZ ST56LF-WS ST56LF-WM ST56LF-WA | 1 | AC/DC12V | 0.120A | CE DC24V only UL DC24V only | 0.44kg | ● R-Red |
| | | AC/DC24V | 0.080A | | 0.44kg | |
| | | AC110V | 0.048A | | 0.60kg | |
| | | AC220V | 0.024A | | 0.60kg | |
| | 2 | AC/DC12V | 0.240A | | 0.52kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.160A | | 0.52kg | |
| | | AC110V | 0.057A | | 0.68kg | |
| | 3 | AC/DC12V | 0.360A | | 0.60kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.240A | | 0.60kg | |
| | | AC110V | 0.066A | | 0.76kg | |
| | 4 | AC/DC12V | 0.480A | | 0.68kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.320A | | 0.68kg | |
| | | AC110V | 0.075A | | 0.84kg | |
| | 5 | AC/DC12V | 0.600A | | 0.77kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.400A | | 0.77kg | |
| AC110V | | 0.082A | 0.93kg | | | |
| | | AC220V | 0.041A | | 0.93kg | |

- ST56L Steady
- ST56L-BZ Built-in buzzer, Steady
- ST56L-WS Built-in 5 Warning sounds, Steady
- ST56L-WM Built-in 5 Melodies, Steady
- ST56L-WA Built-in 5 Alarms, Steady
- ST56LF Steady/ flashing
- ST56LF-BZ Built-in buzzer, Steady/ flashing
- ST56LF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST56LF-WM Built-in 5 Melodies, Steady/ flashing
- ST56LF-WA Built-in 5 Alarms, Steady/ flashing

※ Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.120A | 0.080A | 0.048A | 0.024A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |



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 Specification

| | | | | | | | | |
|---|---|--|---|--|---|--|---|--|
| ST56L | - | 3 | - | 220 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST56L • ST56L-BZ • ST56L-WS • ST56L-WM • ST56L-WA • ST56LF • ST56LF-BZ • ST56LF-WS • ST56LF-WM • ST56LF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • LB18 • LW18 • QZ18 • SZ18 • QL18 • SL18 • QLA18 |

ST56ML/ST56L

Ø56mm LED Steady/Flashing Tower Lights



Technical Diagram

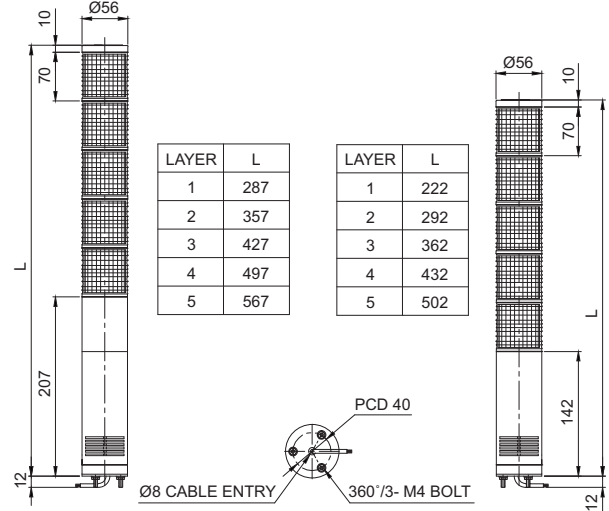
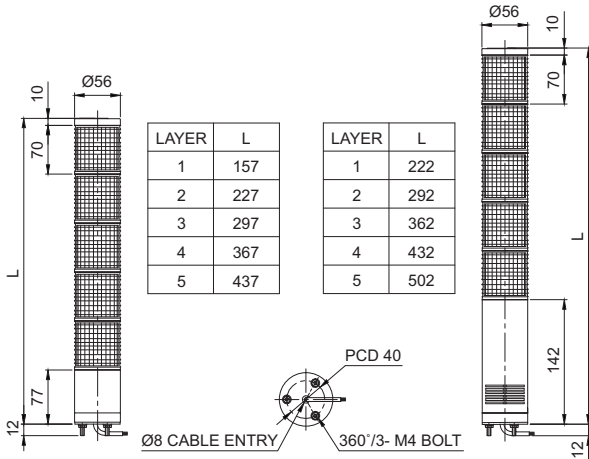
(Units : mm)

ST56ML : AC/DC
ST56ML-BZ : DC

ST56ML-BZ : AC
ST56MLF-BZ : AC/DC

ST56ML-W□ : AC
ST56MLF-W□ : AC

ST56ML-W□ : DC
ST56MLF-W□ : DC

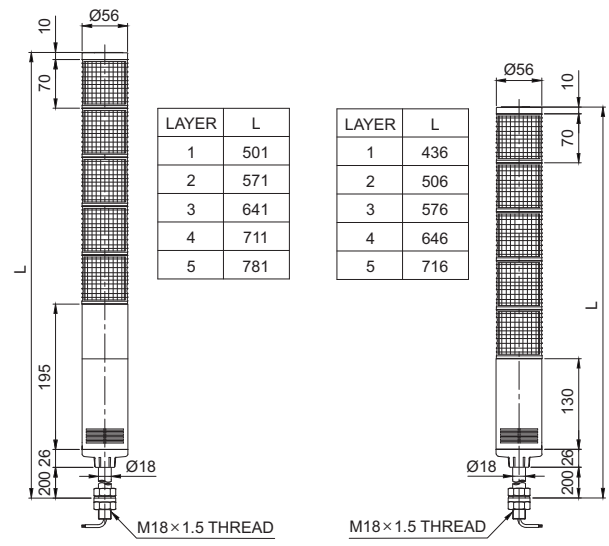
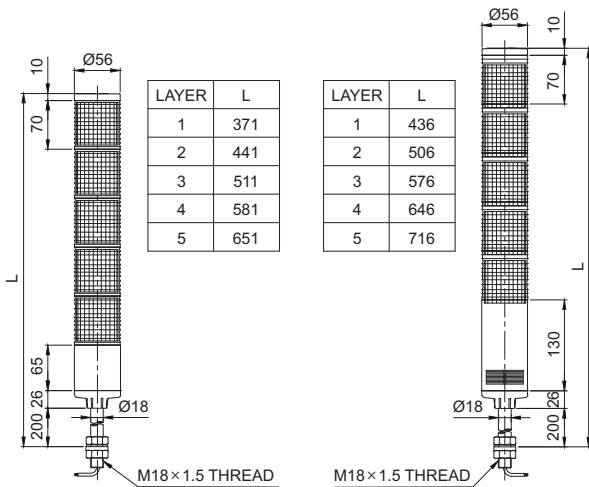


ST56L : AC/DC
ST56L-BZ : DC
ST56LF : DC

ST56L-BZ : AC
ST56LF-BZ : AC/DC
ST56LF : AC

ST56L-W□ : AC
ST56LF-W□ : AC

ST56L-W□ : DC
ST56LF-W□ : DC

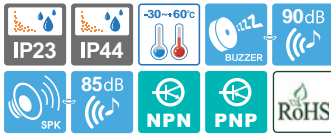


Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 55-56 for detailed wiring instructions.

ST80MEL

Ø80mm LED Steady/Flashing Tower Lights



ST80MEL series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST80MEL-WS, ST80MEL-WM, ST80MEL-WA are substituted for old model number ST80WMEL. All specifications such as diameter and functions are all the same.

ST80MEL Ø80mm Direct Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|----------|----------|---------|--|--------|---|
| ST80MEL ST80MEL-BZ ST80MEL-WS ST80MEL-WM ST80MEL-WA ST80MELF ST80MELF-BZ ST80MELF-WS ST80MELF-WM ST80MELF-WA | 1 | AC/DC12V | 0.080A | UL DC24V only | 0.36kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.36kg | |
| | | AC110V | 0.046A | | 0.59kg | |
| | | AC220V | 0.023A | | 0.59kg | |
| | 2 | AC/DC12V | 0.160A | | 0.45kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.45kg | |
| | | AC110V | 0.051A | | 0.68kg | |
| | | AC220V | 0.025A | | 0.68kg | |
| | 3 | AC/DC12V | 0.240A | | 0.55kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.55kg | |
| | | AC110V | 0.057A | | 0.76kg | |
| | | AC220V | 0.028A | | 0.76kg | |
| | 4 | AC/DC12V | 0.320A | | 0.64kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.64kg | |
| | | AC110V | 0.064A | | 0.87kg | |
| AC220V | | 0.032A | 0.87kg | | | |
| 5 | AC/DC12V | 0.400A | 0.73kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 0.200A | 0.73kg | | | |
| | AC110V | 0.071A | 0.96kg | | | |
| | AC220V | 0.035A | 0.96kg | | | |

- ST80MEL Steady
- ST80MEL-BZ Built-in buzzer, Steady
- ST80MEL-WS Built-in 5 Warning sounds, Steady
- ST80MEL-WM Built-in 5 Melodies, Steady
- ST80MEL-WA Built-in 5 Alarms, Steady
- ST80MELF Steady/ flashing
- ST80MELF-BZ Built-in buzzer, Steady/ flashing
- ST80MELF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST80MELF-WM Built-in 5 Melodies, Steady/ flashing
- ST80MELF-WA Built-in 5 Alarms, Steady/ flashing

* Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal Line Current | 0.080A | 0.040A | 0.046A | 0.023A |
| Audible Line Current | 0.016A | 0.031A | 0.027A | 0.030A |

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

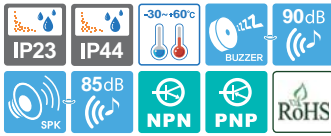
Wall Mount Bracket TWA80

Ordering Specification

| ST80MEL | - | 3 | - | 24 | - | RAG |
|---|---|--|---|--|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST80MEL • ST80MEL-BZ • ST80MEL-WS • ST80MEL-WM • ST80MEL-WA • ST80MELF • ST80MELF-BZ • ST80MELF-WS • ST80MELF-WM • ST80MELF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

ST80EL

Ø80mm LED Steady/Flashing Tower Lights



ST80EL series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST80EL-WS, ST80EL-WM, ST80EL-WA are substituted for old model number ST80WEL. All specifications such as diameter and functions are all the same.

Mounting Bracket

| Standard | LB24 | LW24 | QZ24 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ24 | QL24 | SL24 | QLA24 |
| | | | |
| AI | PC | AI | PC |

※ Please refer to page 162-167 for detailed dimensions.

ST80EL Ø80mm Pole Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|----------|----------|---------|--|--------|---|
| ST80EL ST80EL-BZ ST80EL-WS ST80EL-WM ST80EL-WA ST80ELF ST80ELF-BZ ST80ELF-WS ST80ELF-WM ST80ELF-WA | 1 | AC/DC12V | 0.080A | UL DC24V only | 0.58kg | ● R-Red |
| | | AC/DC24V | 0.040A | | 0.58kg | |
| | | AC110V | 0.046A | | 0.81kg | |
| | | AC220V | 0.023A | | 0.81kg | |
| | 2 | AC/DC12V | 0.160A | | 0.67kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.080A | | 0.67kg | |
| | | AC110V | 0.051A | | 0.91kg | |
| | 3 | AC/DC12V | 0.240A | | 0.77kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.120A | | 0.77kg | |
| | | AC110V | 0.057A | | 1.00kg | |
| | | AC220V | 0.028A | | 1.00kg | |
| | 4 | AC/DC12V | 0.320A | | 0.86kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.160A | | 0.86kg | |
| | | AC110V | 0.064A | | 1.09kg | |
| | | AC220V | 0.032A | | 1.09kg | |
| 5 | AC/DC12V | 0.400A | 0.95kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC/DC24V | 0.200A | 0.95kg | | | |
| | AC110V | 0.071A | 1.19kg | | | |
| | AC220V | 0.035A | 1.19kg | | | |

- ST80EL Steady
- ST80EL-BZ Built-in buzzer, Steady
- ST80EL-WS Built-in 5 Warning sounds, Steady
- ST80EL-WM Built-in 5 Melodies, Steady
- ST80EL-WA Built-in 5 Alarms, Steady
- ST80ELF Steady/ flashing
- ST80ELF-BZ Built-in buzzer, Steady/ flashing
- ST80ELF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST80ELF-WM Built-in 5 Melodies, Steady/ flashing
- ST80ELF-WA Built-in 5 Alarms, Steady/ flashing

※ Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.080A | 0.040A | 0.046A | 0.023A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

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 Specification

| | | | | | | | | |
|---|---|--|---|--|---|--|---|--|
| ST80EL | - | 3 | - | 220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST80EL • ST80EL-BZ • ST80EL-WS • ST80EL-WM • ST80EL-WA • ST80ELF • ST80ELF-BZ • ST80ELF-WS • ST80ELF-WM • ST80ELF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24 |

ST80MEL/ST80EL

Ø80mm LED Steady/Flashing Tower Lights



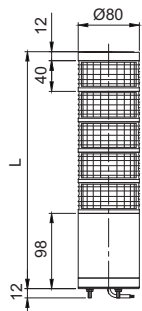
Technical Diagram

(Units : mm)

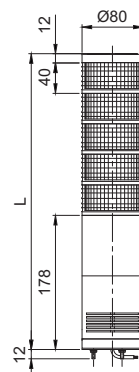
ST80MEL : AC/DC
ST80MELF : AC/DC

ST80MEL-BZ : AC/DC
ST80MELF-BZ : AC/DC

ST80MEL-W□
ST80MELF-W□



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



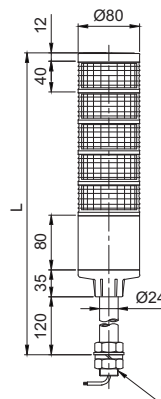
| LAYER | L |
|-------|-----|
| 1 | 230 |
| 2 | 270 |
| 3 | 310 |
| 4 | 350 |
| 5 | 390 |



ST80EL : AC/DC
ST80ELF : AC/DC

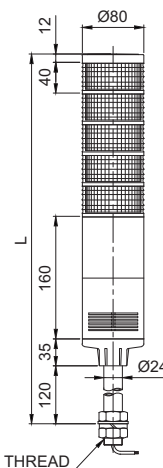
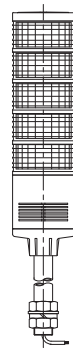
ST80EL-BZ : AC/DC
ST80ELF-BZ : AC/DC

ST80EL-W□
ST80ELF-W□



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

M24×1.5 THREAD



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

M24×1.5 THREAD

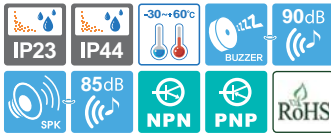


Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 55-56 for detailed wiring instructions.

ST80ML

Ø80mm LED Steady/Flashing Tower Lights



ST80ML series

Built-in buzzer output holes formed on the body of the product.



Substitute model numbers for discontinued model

Built-in signal sound type, ST80ML-WS, ST80ML-WM, ST80ML-WA are substituted for old model number ST80WML. All specifications such as diameter and functions are all the same.

ST80ML Ø80mm Direct Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|--------------------|--------|--|
| ST80ML ST80ML-BZ ST80ML-WS ST80ML-WM ST80ML-WA ST80MLF ST80MLF-BZ ST80MLF-WS ST80MLF-WM ST80MLF-WA | 1 | AC/DC12V | 0.160A | DC24V only | 0.40kg | ● R-Red |
| | | AC/DC24V | 0.080A | | 0.40kg | |
| | | AC110V | 0.055A | | 0.64kg | |
| | | AC220V | 0.027A | | 0.64kg | |
| | 2 | AC/DC12V | 0.320A | | 0.54kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.160A | | 0.54kg | |
| | | AC110V | 0.064A | | 0.78kg | |
| | 3 | AC/DC12V | 0.480A | | 0.68kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.240A | | 0.68kg | |
| | | AC110V | 0.073A | | 0.92kg | |
| | 4 | AC/DC12V | 0.640A | | 0.83kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.320A | | 0.83kg | |
| | | AC110V | 0.084A | | 1.06kg | |
| | 5 | AC/DC12V | 0.800A | | 0.97kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.400A | | 0.97kg | |
| AC110V | | 0.093A | 1.20kg | | | |
| | | AC220V | 0.046A | 1.20kg | | |

- ST80ML Steady
- ST80ML-BZ Built-in buzzer, Steady
- ST80ML-WS Built-in 5 Warning sounds, Steady
- ST80ML-WM Built-in 5 Melodies, Steady
- ST80ML-WA Built-in 5 Alarms, Steady
- ST80MLF Steady/ flashing
- ST80MLF-BZ Built-in buzzer, Steady/ flashing
- ST80MLF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST80MLF-WM Built-in 5 Melodies, Steady/ flashing
- ST80MLF-WA Built-in 5 Alarms, Steady/ flashing

* Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal line current | 0.160A | 0.080A | 0.055A | 0.027A |
| Audible line current | 0.016A | 0.031A | 0.027A | 0.030A |

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



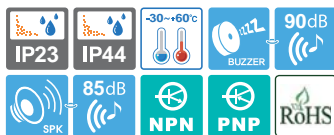
Wall Mount Bracket TWA80

Ordering Specification

| | | | | | | |
|---|---|--|---|--|---|--|
| ST80ML | - | 3 | - | 110 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • ST80ML • ST80ML-BZ • ST80ML-WS • ST80ML-WM • ST80ML-WA • ST80MLF • ST80MLF-BZ • ST80MLF-WS • ST80MLF-WM • ST80MLF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

ST80L

Ø80mm LED Steady/Flashing Tower Lights



ST80L series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST80L-WS, ST80L-WM, ST80L-WA are substituted for old model number ST80WL. All specifications such as diameter and functions are all the same.



Mounting Bracket

| Standard | LB24 | LW24 | QZ24 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ24 | QL24 | SL24 | QLA24 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



ST80L Ø80mm Pole Mount, LED Steady/Flashing

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|------------------------|--------|--|
| ST80L ST80L-BZ ST80L-WS ST80L-WM ST80L-WA ST80LF ST80LF-BZ ST80LF-WS ST80LF-WM ST80LF-WA | 1 | AC/DC12V | 0.160A | CE DC24V only UL | 0.62kg | ● R-Red |
| | | AC/DC24V | 0.080A | | 0.62kg | |
| | | AC110V | 0.055A | | 0.86kg | |
| | | AC220V | 0.027A | | 0.86kg | |
| | 2 | AC/DC12V | 0.320A | | 0.77kg | ● R-Red ● G-Green |
| | | AC/DC24V | 0.160A | | 0.77kg | |
| | | AC110V | 0.064A | | 1.00kg | |
| | 3 | AC/DC12V | 0.480A | | 0.91kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.240A | | 0.91kg | |
| | | AC110V | 0.073A | | 1.14kg | |
| | 4 | AC/DC12V | 0.640A | | 1.05kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | AC/DC24V | 0.320A | | 1.05kg | |
| | | AC110V | 0.084A | | 1.29kg | |
| | 5 | AC/DC12V | 0.800A | | 1.19kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.400A | | 1.19kg | |
| AC110V | | 0.093A | 1.14kg | | | |
| | | AC220V | 0.046A | 1.14kg | | |

- ST80L** Steady
- ST80L-BZ** Built-in buzzer, Steady
- ST80L-WS** Built-in 5 Warning sounds, Steady
- ST80L-WM** Built-in 5 Melodies, Steady
- ST80L-WA** Built-in 5 Alarms, Steady
- ST80LF** Steady/ flashing
- ST80LF-BZ** Built-in buzzer, Steady/ flashing
- ST80LF-WS** Built-in 5 Warning sounds, Steady/ flashing
- ST80LF-WM** Built-in 5 Melodies, Steady/ flashing
- ST80LF-WA** Built-in 5 Alarms, Steady/ flashing

※ Please refer to page 160 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V | AC220V |
|----------------------|----------|----------|--------|--------|
| Signal Line Current | 0.160A | 0.080A | 0.055A | 0.027A |
| Audible Line Current | 0.016A | 0.031A | 0.027A | 0.030A |



- 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



Order Specification

| | | | | | | | | |
|---|---|--|---|--|---|--|---|--|
| ST80L | - | 3 | - | 220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • ST80L • ST80L-BZ • ST80L-WS • ST80L-WM • ST80L-WA • ST80LF • ST80LF-BZ • ST80LF-WS • ST80LF-WM • ST80LF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24 |

ST80ML/ST80L

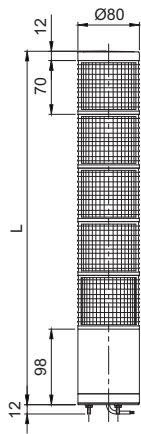
Ø80mm LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

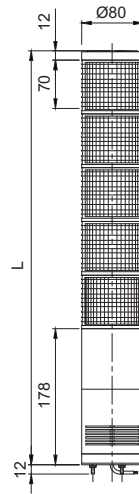
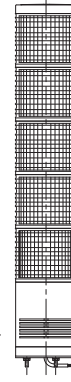
ST80ML : AC/DC
ST80MLF : AC/DC



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



ST80ML-BZ : AC/DC
ST80MLF-BZ : AC/DC

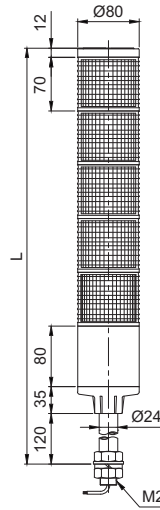


| LAYER | L |
|-------|-----|
| 1 | 260 |
| 2 | 330 |
| 3 | 400 |
| 4 | 470 |
| 5 | 540 |



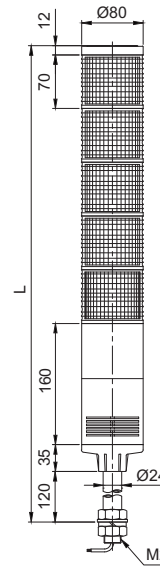
ST80ML-W□
ST80MLF-W□

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



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

ST80L-W□
ST80LF-W□



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 55-56 for detailed wiring instructions.

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights



Wiring Instructions(using external contact)

- Please wire based on below instructions in case of using external contact.
- Customized AC each layer power supply type wiring is same as DC steady type.

| Applied products | Wiring Instructions | Applied products | Wiring Instructions |
|--|--|---|--|
| DC Steady ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L | <p style="text-align: center;">EXTERNAL CONTACT</p> | AC Steady ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L | <p style="text-align: center;">EXTERNAL CONTACT</p> |
| DC Steady/Flashing ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | <p style="text-align: center;">EXTERNAL CONTACT</p> | AC Steady/Flashing ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | <p style="text-align: center;">EXTERNAL CONTACT</p> |
| DC/AC Steady Built-in Signal Sound ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • STXXM(E)L - WS/ WM/ WA same wiring instruction • STXX(E)L - WS/ WM/ WA same wiring instruction • STXXL <ul style="list-style-type: none"> └ Lens diameter 45(45mm) : ST45L 56(56mm) : ST56L 80(80mm) : ST80L | DC/AC Steady/Flashing Built-in Signal Sound ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • STXXM(E)LF - WS/ WM/ WA same wiring instruction • STXX(E)LF - WS/ WM/ WA same wiring instruction • STXXLF <ul style="list-style-type: none"> └ Lens diameter 45(45mm) : ST45LF 56(56mm) : ST56LF 80(80mm) : ST80LF |

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

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights



Wiring Instructions(using transistor)

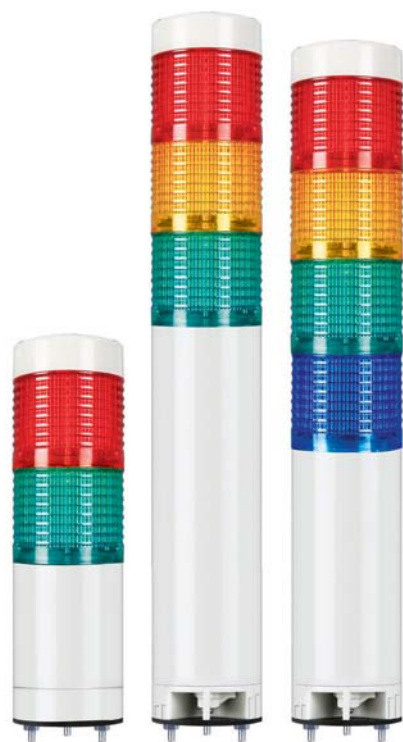
• In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.

| Applied products | Wiring Instructions | | |
|---|--|---|--|
| DC Steady | <p>EXTERNAL TRANSISTOR-NPN</p> | <p>EXTERNAL TRANSISTOR-PNP</p> | |
| ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L | | | |
| Applied products | Wiring Instructions | Applied products | Wiring Instructions |
| DC Steady/Flashing | <p>EXTERNAL TRANSISTOR-PNP</p> | AC Steady/Flashing | <p>EXTERNAL TRANSISTOR-PNP</p> |
| ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | | ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | |
| DC/AC Steady Built-in Signal Sound | <p>EXTERNAL TRANSISTOR-NPN</p> | DC/AC Steady/Flashing Built-in Signal Sound | <p>EXTERNAL TRANSISTOR-PNP</p> |
| ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L | | ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF | |
| | <ul style="list-style-type: none"> • STXXM(E)L - WS/ WM/ WA same wiring instruction • STXX(E)L - WS/ WM/ WA same wiring instruction • STXXL <ul style="list-style-type: none"> └ Lens diameter 45(45mm) : ST45L 56(56mm) : ST56L 80(80mm) : ST80L | | <ul style="list-style-type: none"> • STXXM(E)LF - WS/ WM/ WA same wiring instruction • STXX(E)LF - WS/ WM/ WA same wiring instruction • STXXLF <ul style="list-style-type: none"> └ Lens diameter 45(45mm) : ST45LF 56(56mm) : ST56LF 80(80mm) : ST80LF |

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

STG40ML

Ø 40mm LED Steady/Flashing Tower Lights



STG40ML 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

- 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

Common Specifications(STG40ML/ STG40L)

- Ø 40mm LED steady/flashing tower lights
- The special vertical contact structure of the lens allows for easy assembly and disassembly
- Can select between standard type and built-in buzzer type to fit your application needs
- Can be used with an NPN open collector transistor driven input which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min
- Customized color arrangement available(LED light distribution system and Lens is integrated into a combined structure)
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Compliant with RoHS directive

STG40ML Ø40mm Direct Mount Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------------------------------|--------------------------------|--------------|--------------------------------------|--|
| STG40ML Steady STG40ML-BZ Steady /w built-in buzzer STG40MLF Steady/Flashing STG40MLF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V AC/DC24V AC110V-220V | 0.040A 0.020A Max 0.035A | - | 0.12kg 0.12kg 0.14kg 0.14kg | • R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V-220V | 0.080A 0.040A Max 0.055A | | 0.19kg 0.19kg 0.21kg 0.21kg | • R-Red • G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V-220V | 0.120A 0.060A Max 0.075A | | 0.25kg 0.25kg 0.27kg 0.27kg | • R-Red • A-Amber • G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V-220V | 0.160A 0.080A Max 0.095A | | 0.31kg 0.31kg 0.33kg 0.33kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V-220V | 0.200A 0.100A Max 0.115A | | 0.36kg 0.36kg 0.38kg 0.38kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

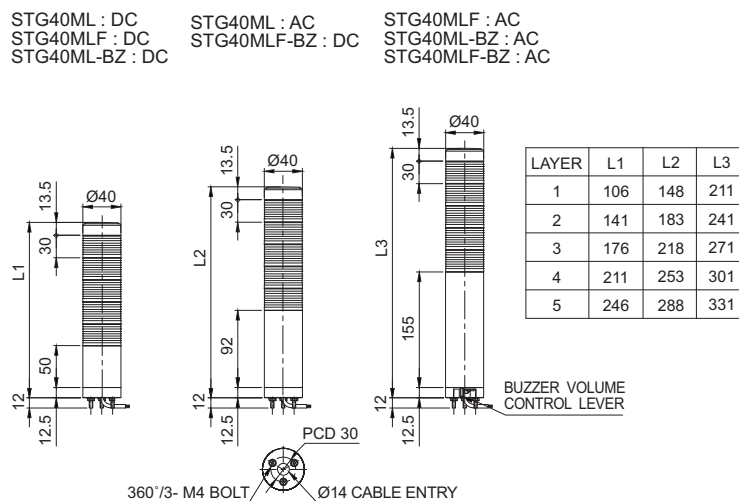
* AC type model has a free-voltage range of 100V-240V.

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.040A | 0.020A | Max 0.035A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

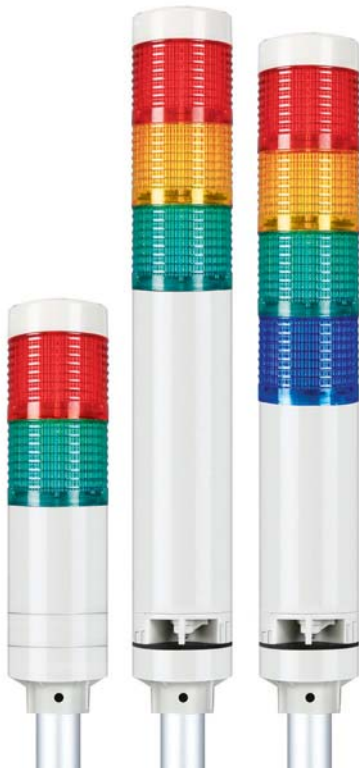
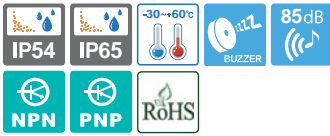
Technical Diagram

(Units : mm)



STG40L

Ø40mm LED Steady/Flashing Tower Lights



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

- 2 buzzer sound types : Both prolonged (beep, beep) and Staccato (beep, beep, beep) buzzer output available
- Customized pole length available

Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB18 | LW18 | QZ18 |
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

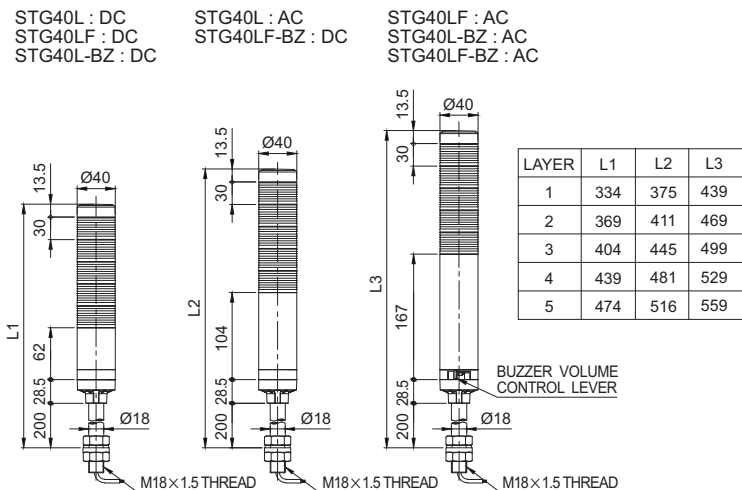
STG40L Ø40mm Pole Mount

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------------------------------|--------------------------------|--------------|--------------------------------------|--|
| STG40L Steady STG40L-BZ Steady /w built-in buzzer STG40LF Steady/Flashing STG40LF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V AC/DC24V AC110V-220V | 0.040A 0.020A Max 0.035A | | 0.29kg 0.29kg 0.31kg 0.31kg | • R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V-220V | 0.080A 0.040A Max 0.055A | | 0.33kg 0.33kg 0.36kg 0.36kg | • R-Red • G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V-220V | 0.120A 0.060A Max 0.075A | - | 0.38kg 0.38kg 0.40kg 0.40kg | • R-Red • A-Amber • G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V-220V | 0.160A 0.080A Max 0.095A | | 0.45kg 0.45kg 0.47kg 0.47kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V-220V | 0.200A 0.100A Max 0.115A | | 0.51kg 0.51kg 0.53kg 0.53kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

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

Technical Diagram

(Units : mm)



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)x2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and external contact

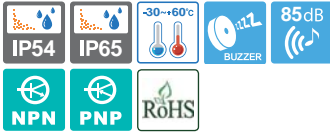
※ Please refer to page 61-62 for detailed wiring instruction.

Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|--|
| STG40L | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • STG40ML • STG40ML-BZ • STG40MLF • STG40MLF-BZ • STG40L • STG40L-BZ • STG40LF • STG40LF-BZ | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

STG50ML

Ø50mm LED Steady/Flashing Tower Lights



Common Specifications(STG50ML/ STG50L)

- 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
- Flashing rate : 60-80 flashes/min
- Customized color arrangement available(LED light distribution system and lens is integrated into a combined structure)
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant
- Compliant with RoHS directive



STG50ML Ø50mm Direct Mount Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------------------------------|--------------------------------|---------------------|--------------------------------------|--|
| STG50ML Steady STG50ML-BZ Steady /w built-in buzzer STG50MLF Steady/Flashing STG50MLF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V AC/DC24V AC110V-220V | 0.040A 0.020A Max 0.035A | CE DC24V only | 0.20kg 0.20kg 0.22kg 0.22kg | • R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V-220V | 0.080A 0.040A Max 0.055A | | 0.28kg 0.28kg 0.30kg 0.30kg | • R-Red • G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V-220V | 0.120A 0.060A Max 0.075A | | 0.36kg 0.36kg 0.38kg 0.38kg | • R-Red • A-Amber • G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V-220V | 0.160A 0.080A Max 0.095A | | 0.45kg 0.45kg 0.47kg 0.47kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V-220V | 0.200A 0.100A Max 0.115A | | 0.53kg 0.53kg 0.55kg 0.55kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.040A | 0.020A | Max 0.035A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

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

- 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

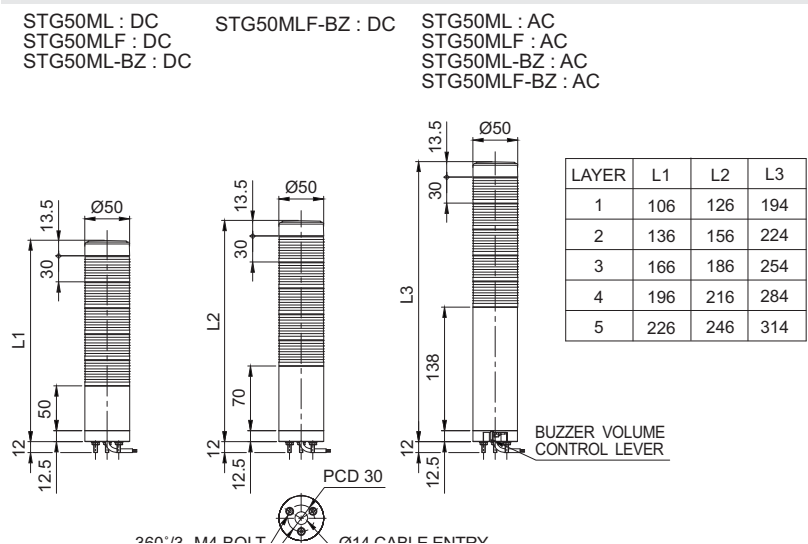


Wall Mount Bracket
TWA45



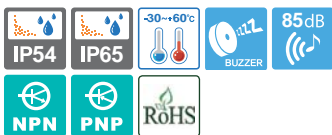
Technical Diagram

(Units : mm)



STG50L

Ø50mm LED Steady/Flashing Tower Lights



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

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available



Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB18 | LW18 | QZ18 |
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



STG50L Ø50mm Pole Mount Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------------------------------|--------------------------------|---------------------|--------------------------------------|--|
| STG50L Steady STG50L-BZ Steady /w built-in buzzer STG50LF Steady/Flashing STG50LF-BZ Steady/Flashing /w built-in buzzer | 1 | AC/DC12V AC/DC24V AC110V-220V | 0.040A 0.020A Max 0.035A | CE DC24V only | 0.36kg 0.36kg 0.38kg 0.38kg | • R-Red |
| | 2 | AC/DC12V AC/DC24V AC110V-220V | 0.080A 0.040A Max 0.055A | | 0.43kg 0.43kg 0.45kg 0.45kg | • R-Red • G-Green |
| | 3 | AC/DC12V AC/DC24V AC110V-220V | 0.120A 0.060A Max 0.075A | | 0.53kg 0.53kg 0.55kg 0.55kg | • R-Red • A-Amber • G-Green |
| | 4 | AC/DC12V AC/DC24V AC110V-220V | 0.160A 0.080A Max 0.095A | | 0.59kg 0.59kg 0.61kg 0.61kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | AC/DC12V AC/DC24V AC110V-220V | 0.200A 0.100A Max 0.115A | | 0.67kg 0.67kg 0.69kg 0.69kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

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



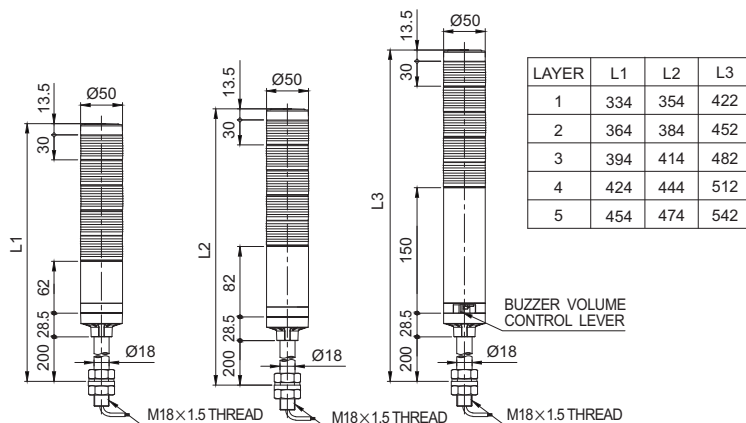
Technical Diagram

(Units : mm)

STG50L : DC
STG50LF : DC
STG50L-BZ : DC

STG50LF-BZ : DC

STG50L : AC
STG50LF : AC
STG50L-BZ : AC
STG50LF-BZ : AC



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)x2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and external contact

※ Please refer to page 61-62 for detailed wiring instructions.



Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|--|
| STG50L | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • STG50ML • STG50ML-BZ • STG50MLF • STG50MLF-BZ • STG50L • STG50L-BZ • STG50LF • STG50LF-BZ | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

STG series

LED Steady/Flashing Tower Lights



Wiring Instructions(using transistor)

• Please wiring based below instruction in case of using external contact.

| Applied products | Wiring Instructions | Applied products | Wiring Instructions |
|--------------------|---|--------------------|---|
| DC Steady | <p>STG40ML STG40L STG50ML STG50L</p> <ul style="list-style-type: none"> • STGXXML - Same wiring including buzzer type • STGXXL - Same wiring including buzzer type • STGXXL <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)L 50(50mm) : STG50(M)L | AC Steady | <p>STG40ML STG40L STG50ML STG50L</p> <ul style="list-style-type: none"> • STGXXML - Same wiring including buzzer type • STGXXL - Same wiring including buzzer type • STGXXL <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)L 50(50mm) : STG50(M)L |
| DC Steady/Flashing | <p>STG40MLF STG40LF STG50MLF STG50LF</p> <ul style="list-style-type: none"> • STGXXMLF - Same wiring including buzzer type • STGXXLF - Same wiring including buzzer type • STGXXLF <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)LF 50(50mm) : STG50(M)LF | AC Steady/Flashing | <p>STG40MLF STG40LF STG50MLF STG50LF</p> <ul style="list-style-type: none"> • STGXXMLF - Same wiring including buzzer type • STGXXLF - Same wiring including buzzer type • STGXXLF <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)LF 50(50mm) : STG50(M)LF |

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

STG series

LED Steady/Flashing Tower Lights



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.

| Applied products | Wiring Instructions | | |
|--|--|--|--|
| DC Steady | <p>EXTERNAL TRANSISTOR-NPN</p> <p>EXTERNAL TRANSISTOR-PNP</p> | | |
| STG40ML STG40L STG50ML STG50L | <ul style="list-style-type: none"> • STGXXML - Same wiring including buzzer type • STGXXL - Same wiring including buzzer type • STGXXL <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)L 50(50mm) : STG50(M)L | | |
| Applied products | Wiring Instructions | Applied products | Wiring Instructions |
| DC Steady/Flashing | <p>EXTERNAL TRANSISTOR-PNP</p> | AC Steady/Flashing | <p>EXTERNAL TRANSISTOR-PNP</p> |
| STG40MLF STG40LF STG50MLF STG50LF | <ul style="list-style-type: none"> • STGXXMLF - Same wiring including buzzer type • STGXXLF - Same wiring including buzzer type • STGXXLF <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)LF 50(50mm) : STG50(M)LF | STG40MLF STG40LF STG50MLF STG50LF | <ul style="list-style-type: none"> • STGXXMLF - Same wiring including buzzer type • STGXXLF - Same wiring including buzzer type • STGXXLF <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)LF 50(50mm) : STG50(M)LF |

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

Clear and Strong Signal Light Emitted through the Colored Diffusion Lens



Common Specifications(QTG50/ QTG60/ QTG70)

- Modular 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
- Buzzer sound output : Sound volume of Max 85dB at 1m
- Available in 2 customized options; sounds buzzer type and high volume(105dB) buzzer type
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



• 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.



• 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)

1 High volume buzzer (105dB) option can be fitted to the top of the product. (Customization)

High volume 105dB 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 Black body option available

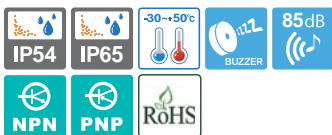
Products can be configured with the black body and cover option. In addition, the buzzer option is also available in a black color body and buzzer.

4 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.

QTG50ML

Ø50mm LED Steady/Flashing Tower Lights



QTG50ML series



QTGA50ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.



QTG50ML Ø50mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|-------------|------------|--------------------------|--|-----------------------------------|
| QTG50ML Steady | 1 | AC/DC12V | 0.080A | DC24V only DC24V only | 0.19kg | • R-Red |
| QTG50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.19kg | |
| QTG50MLF Steady/Flashing | 2 | AC/DC12V | 0.160A | | 0.27kg | • R-Red • G-Green |
| QTG50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.090A | | 0.27kg | |
| QTGA50ML Steady | 3 | AC/DC12V | 0.240A | | 0.36kg | • R-Red • A-Amber • G-Green |
| QTGA50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.135A | 0.46kg | | |
| QTGA50MLF Steady/Flashing | 4 | AC/DC12V | 0.320A | 0.44kg | • R-Red • A-Amber • G-Green • B-Blue | |
| QTGA50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.180A | 0.54kg | | |
| QTGA50MLF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.400A | 0.53kg | • R-Red • A-Amber • G-Green • B-Blue • W-White | |
| | | AC/DC24V | 0.225A | 0.63kg | | |
| | | AC110V-220V | Max 0.045A | | | |
| | | AC110V-220V | Max 0.065A | | | |
| | | AC110V-220V | Max 0.080A | | | |
| | | AC110V-220V | Max 0.100A | | | |
| | | AC110V-220V | Max 0.120A | | | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.080A | 0.045A | Max 0.045A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

※ Please refer to page 87-88 for detailed wiring instructions.



Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount

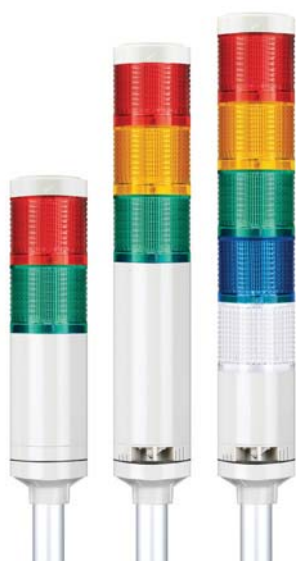


Ordering Specification

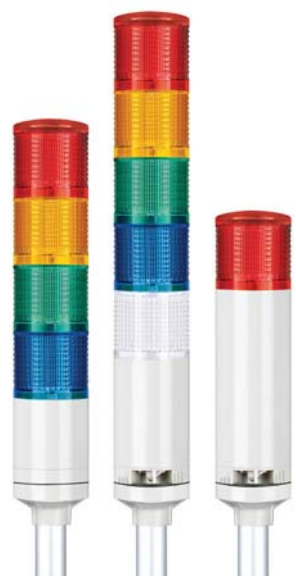
| | | | | | | |
|--|---|--|---|---|---|--|
| QTG50ML | - | 3 | - | 110/220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTG50ML • QTG50ML-BZ • QTG50MLF • QTG50MLF-BZ • QTGA50ML • QTGA50ML-BZ • QTGA50MLF • QTGA50MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTG50L

Ø50mm LED Steady/Flashing Tower Lights



QTG50L series



QTGA50L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTG50L Ø50mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|--|-------|-------------|------------|--------------------------------------|--|---|--------|
| QTG50L Steady | 1 | AC/DC12V | 0.080A | CE DC24V only UL DC24V only | 0.34kg | • R-Red | |
| QTG50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.34kg | | |
| QTG50LF Steady/Flashing | | AC110V-220V | Max 0.045A | | 0.44kg | | |
| QTG50LF-BZ Steady/Flashing /w built-in buzzer | 2 | AC/DC12V | 0.160A | | 0.43kg | • R-Red • G-Green | |
| QTGA50L Steady | | AC/DC24V | 0.090A | | | | 0.43kg |
| QTGA50L-BZ Steady /w built-in buzzer | 3 | AC/DC12V | 0.240A | | 0.51kg | • R-Red • A-Amber • G-Green | |
| QTGA50LF Steady/Flashing | | AC/DC24V | 0.135A | | | | 0.51kg |
| QTGA50LF-BZ Steady/Flashing /w built-in buzzer | 4 | AC/DC12V | 0.320A | | 0.60kg | • R-Red • A-Amber • G-Green • B-Blue | |
| QTGA50L Steady | | AC/DC24V | 0.180A | | | | 0.60kg |
| QTGA50LF Steady/Flashing | | AC110V-220V | Max 0.100A | | | | 0.70kg |
| QTGA50LF-BZ Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.400A | 0.68kg | • R-Red • A-Amber • G-Green • B-Blue • W-White | | |
| QTGA50L Steady | | AC/DC24V | 0.225A | | | 0.68kg | |
| QTGA50LF Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.120A | 0.78kg | | | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

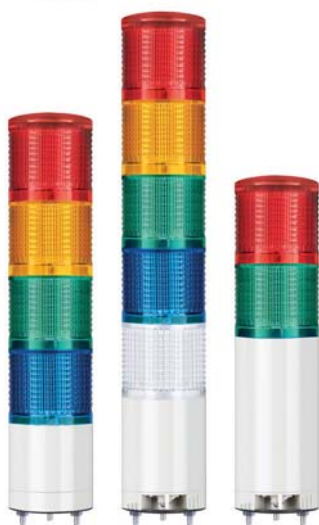
| QTG50L | - | 3 | - | 110/220 | - | RAG | - | LW18 |
|----------------|---|-------------|---|----------------|---|-----------|---|--------------------|
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QTG50L | | • 1-1Layer | | • 12-DC12V | | • R-Red | | • None |
| • QTG50L-BZ | | • 2-2Layers | | • 24-DC24V | | • A-Amber | | • -Standard |
| • QTG50LF | | • 3-3Layers | | • 110/220 | | • G-Green | | • Bracket |
| • QTG50LF-BZ | | • 4-4Layers | | • -AC110V-220V | | • B-Blue | | • -LB18 -LW18 |
| • QTGA50L | | • 5-5Layers | | | | • W-White | | • -QZ18 -SZ18 |
| • QTGA50L-BZ | | | | | | | | • -QL18 -SL18 |
| • QTGA50LF | | | | | | | | • -QLA18 |
| • QTGA50LF-BZ | | | | | | | | |

QTG60ML

Ø60mm LED Steady/Flashing Tower Lights



QTG60ML series



QTGA60ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTG60ML Ø60mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|-------------|------------|--------------------------|--------|--|
| QTG60ML Steady | 1 | AC/DC12V | 0.090A | DC24V only DC24V only | 0.26kg | • R-Red |
| QTG60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.26kg | |
| QTG60MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.34kg | • R-Red • G-Green |
| QTG60MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | | |
| QTGA60ML Steady | 3 | AC/DC12V | 0.270A | | 0.43kg | • R-Red • A-Amber • G-Green |
| QTGA60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | | |
| QTGA60MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.51kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTGA60MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | | |
| QTGA60MLF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.450A | | 0.59kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| | | AC/DC24V | 0.250A | | 0.69kg | |
| | | AC110V-220V | Max 0.050A | | | |
| | | AC110V-220V | Max 0.072A | | | |
| | | AC110V-220V | Max 0.094A | | | |
| | | AC110V-220V | Max 0.116A | | | |
| | | AC110V-220V | Max 0.138A | | | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



Ordering Specification

| | | | | | | |
|--|---|--|---|---|---|--|
| QTG60ML | - | 3 | - | 24 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTG60ML • QTG60ML-BZ • QTG60MLF • QTG60MLF-BZ • QTGA60ML • QTGA60ML-BZ • QTGA60MLF • QTGA60MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220-AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTG60L

Ø60mm LED Steady/Flashing Tower Lights



QTG60L series



QTGA60L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTG60L Ø60mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------|------------|--------------------------------------|--------|--|
| QTG60L Steady | 1 | AC/DC12V | 0.090A | CE DC24V only UL DC24V only | 0.41kg | • R-Red |
| QTG60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.41kg | |
| QTG60LF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.50kg | • R-Red • G-Green |
| QTG60LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.50kg | |
| QTGA60L Steady | 3 | AC/DC12V | 0.270A | | 0.58kg | • R-Red • A-Amber • G-Green |
| QTGA60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.58kg | |
| QTGA60LF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.67kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTGA60LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | 0.67kg | |
| QTGA60LF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.450A | | 0.75kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| | | AC/DC24V | 0.250A | | 0.75kg | |
| | | AC110V-220V | Max 0.050A | 0.51kg | | |
| | | AC110V-220V | Max 0.072A | 0.60kg | | |
| | | AC110V-220V | Max 0.094A | 0.68kg | | |
| | | AC110V-220V | Max 0.116A | 0.77kg | | |
| | | AC110V-220V | Max 0.138A | 0.85kg | | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

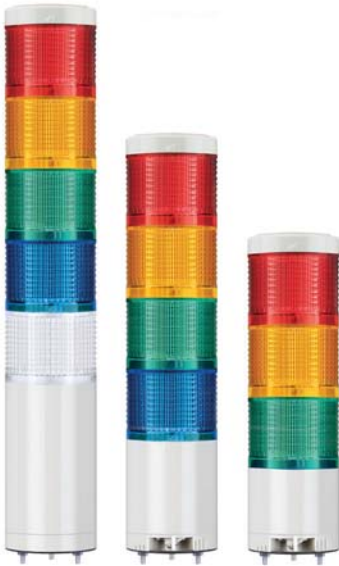
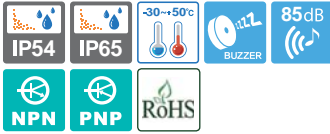
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

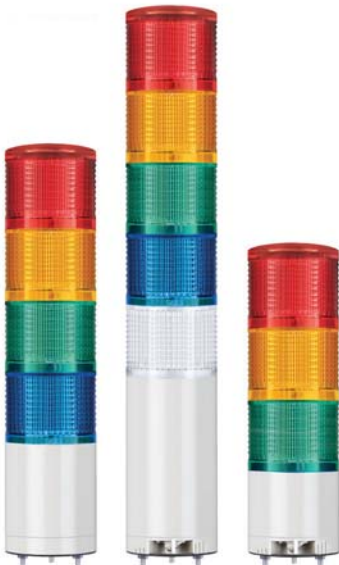
| | | | | | | | | |
|--|---|--|---|---|---|--|---|---|
| QTG60L | - | 3 | - | 110/220 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTG60L • QTG60L-BZ • QTG60LF • QTG60LF-BZ • QTGA60L • QTGA60L-BZ • QTGA60LF • QTGA60LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

QTG70ML

Ø70mm LED Steady/Flashing Tower Lights



QTG70ML series



QTGA70ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTG70ML Ø70mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|--------------------------|--------|--|
| QTG70ML Steady | 1 | AC/DC12V | 0.090A | DC24V only DC24V only | 0.42kg | • R-Red |
| QTG70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.42kg | |
| QTG70MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.56kg | • R-Red • G-Green |
| QTG70MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.66kg | |
| QTGA70ML Steady | 3 | AC/DC12V | 0.270A | | 0.77kg | • R-Red • A-Amber • G-Green |
| QTGA70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.87kg | |
| QTGA70MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.92kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTGA70MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | 1.02kg | |
| QTGA70MLF Steady/Flashing | 5 | AC/DC12V | 0.450A | | 1.07kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTGA70MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | 1.17kg | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



Ordering Specification

| QTG70ML | 3 | 24 | RAG |
|--|--|---|--|
| [Model number] | [Layer] | [Voltage] | [Color] |
| <ul style="list-style-type: none"> • QTG70ML • QTG70ML-BZ • QTG70MLF • QTG70MLF-BZ • QTGA70ML • QTGA70ML-BZ • QTGA70MLF • QTGA70MLF-BZ | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTG70L

Ø70mm LED Steady/Flashing Tower Lights



QTG70L series



QTGA70L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTG70L Ø70mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|--|-------|----------|---------|--------------------------|--------------------------|--|--|
| QTG70L Steady | 1 | AC/DC12V | 0.090A | DC24V only DC24V only | 0.54kg | • R-Red | |
| QTG70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.54kg | | |
| QTG70LF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.66kg | • R-Red • G-Green | |
| QTG70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | | | 0.76kg |
| QTGA70L Steady | 3 | AC/DC12V | 0.270A | | DC24V only DC24V only | 0.81kg | • R-Red • A-Amber • G-Green |
| QTGA70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | | 0.81kg | |
| QTGA70LF Steady/Flashing | 4 | AC/DC12V | 0.360A | | | 0.96kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTGA70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | | | |
| QTGA70L | 5 | AC/DC12V | 0.450A | | | 1.20kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTGA70L-BZ | | AC/DC24V | 0.250A | | | | |
| QTGA70LF | 5 | AC/DC12V | 0.250A | 1.29kg | | • R-Red • A-Amber • G-Green • B-Blue • W-White | |
| QTGA70LF-BZ | | AC/DC24V | 0.138A | | | | 1.29kg |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.

Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|---|
| QTG70L | - | 3 | - | 110/220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTG70L • QTG70L-BZ • QTG70LF • QTG70LF-BZ • QTGA70L • QTGA70L-BZ • QTGA70LF • QTGA70LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24 |

QTG series



Technical Diagram

(Units : mm)

QTG50ML : DC
QTG50MLF : DC
QTG50ML-BZ : DC

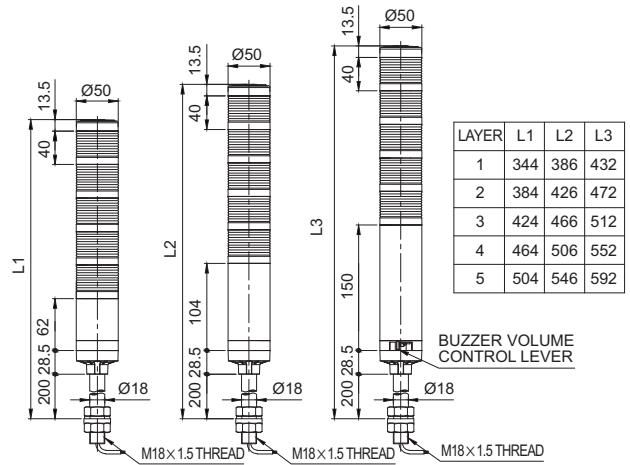
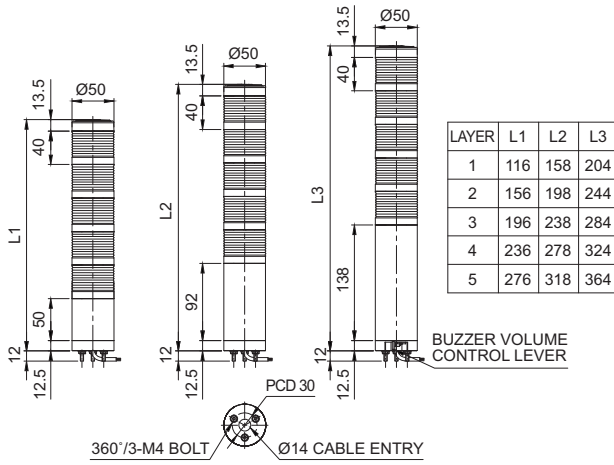
QTG50ML : AC
QTG50MLF-BZ : DC

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

QTG50L : DC
QTG50LF : DC
QTG50L-BZ : DC

QTG50L : AC
QTG50LF-BZ : DC

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



QTG60ML : DC
QTG60MLF : DC
QTG60ML-BZ : DC

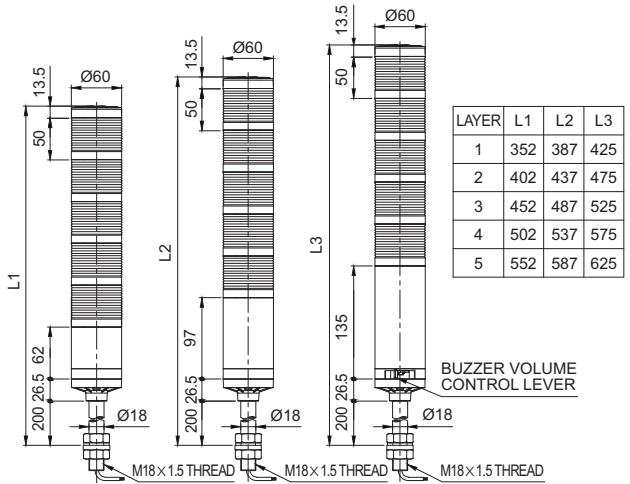
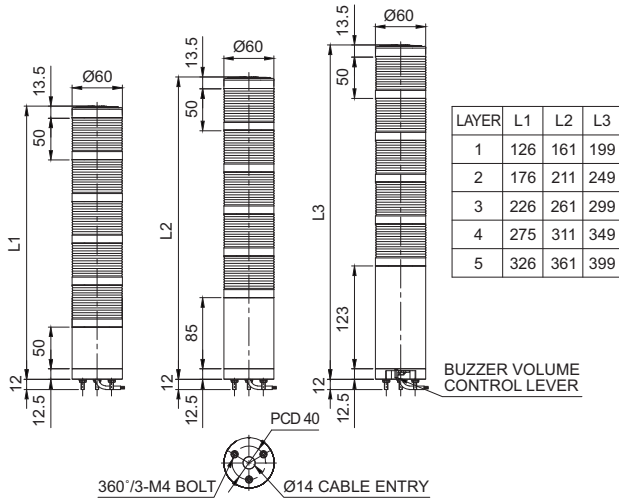
QTG60ML : AC
QTG60MLF-BZ : DC

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

QTG60L : DC
QTG60LF : DC
QTG60L-BZ : DC

QTG60L : AC
QTG60LF-BZ : DC

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



QTG70ML : DC
QTG70MLF : DC
QTG70ML-BZ : DC

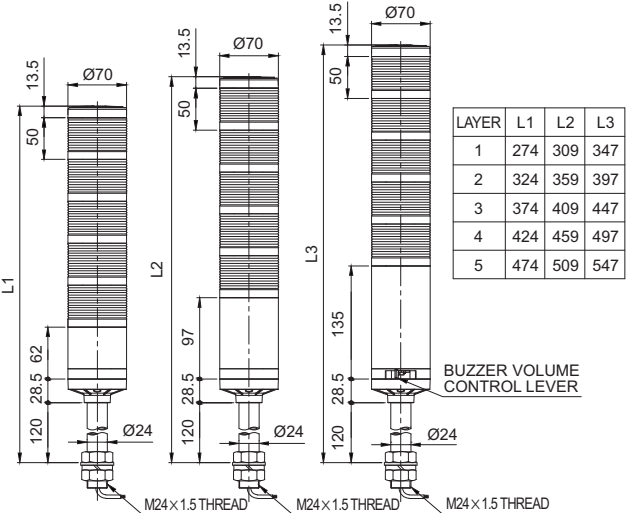
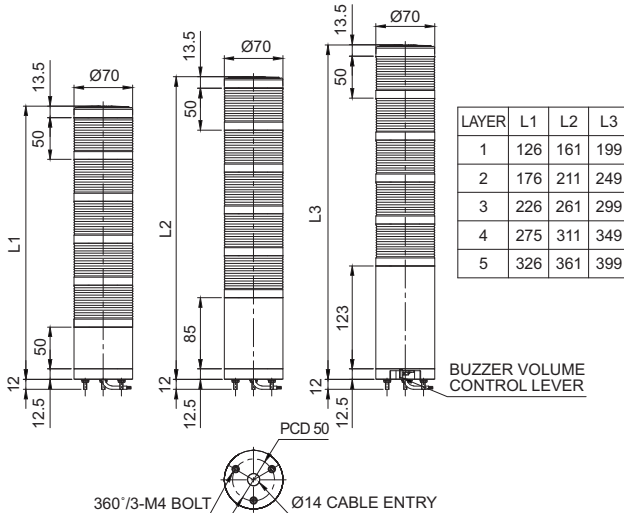
QTG70ML : AC
QTG70MLF : AC
QTG70ML-BZ : AC
QTG70MLF-BZ : DC

QTG70MLF-BZ : AC

QTG70L : DC
QTG70LF : DC
QTG70L-BZ : DC

QTG70L : AC
QTG70LF : AC
QTG70L-BZ : AC
QTG70LF-BZ : DC

QTG70LF-BZ : AC



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



Common Specifications(QTC50/ QTC60/ QTC70)

- 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 to the operator
- A variety of mounting bracket selections for the pole mount type to fit your location and mounting needs
- Built-in buzzer available : Volume of Max 85dB at 1m
- Available in customized 2 sound buzzer type and high volume(105dB) buzzer type
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Filter lens : PC, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



• 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.



• QTC Series Special Lens

• 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)

1 High volume buzzer (105dB) option can be fitted to the top of the product. (Customization)

High volume 105dB 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 Black housing option available

Products can be configured with the black housing and cover option. In addition, the buzzer option is also available in a black color housing and buzzer.

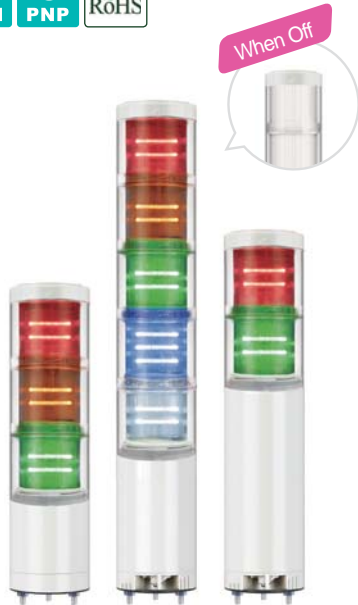
4 Can select from a variety of mounting brackets option to fit your application needs and build environment

There are a variety of mounting options brackets available depending on cost and installation requirements.

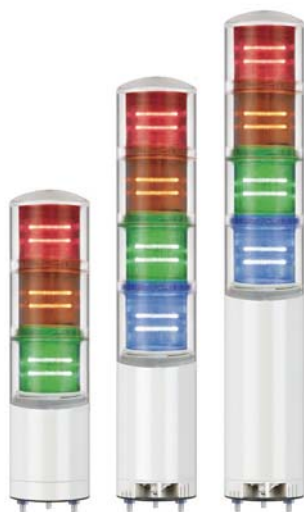


QTC50ML

Ø50mm LED Steady/Flashing Tower Lights



QTC50ML series



QTC50ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC50ML Ø50mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------|------------|--------------------------|--------|--|
| QTC50ML Steady | 1 | AC/DC12V | 0.080A | DC24V only DC24V only | 0.20kg | • R-Red |
| QTC50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.20kg | |
| QTC50MLF Steady/Flashing | 2 | AC/DC12V | 0.160A | | 0.28kg | • R-Red • G-Green |
| QTC50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.090A | | 0.28kg | |
| QTC50ML Steady | 3 | AC/DC12V | 0.240A | | 0.37kg | • R-Red • A-Amber • G-Green |
| QTC50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.135A | | 0.37kg | |
| QTC50MLF Steady/Flashing | 4 | AC/DC12V | 0.320A | | 0.45kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTC50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.180A | | 0.45kg | |
| QTC50ML Steady | 5 | AC/DC12V | 0.400A | | 0.54kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.225A | | 0.54kg | |
| QTC50MLF Steady/Flashing | | AC110V-220V | Max 0.045A | 0.30kg | | |
| QTC50MLF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.065A | 0.38kg | | |
| QTC50ML Steady | | AC110V-220V | Max 0.080A | 0.47kg | | |
| QTC50ML-BZ Steady /w built-in buzzer | | AC110V-220V | Max 0.100A | 0.55kg | | |
| QTC50MLF Steady/Flashing | | AC110V-220V | Max 0.120A | 0.64kg | | |
| QTC50MLF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.120A | 0.64kg | | |

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

| | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
| Signal line current | 0.080A | 0.045A | Max 0.045A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount

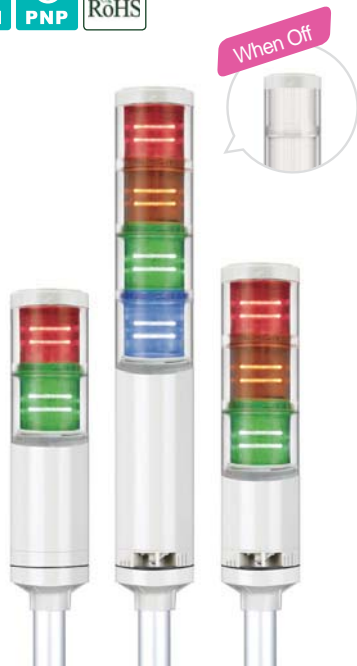


Ordering Specification

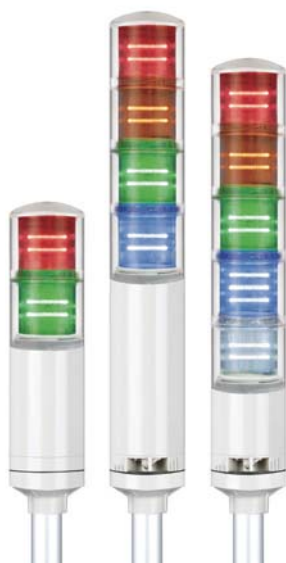
| QTC50ML | - | 3 | - | 110/220 | - | RAG |
|--|---|--|---|---|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTC50ML • QTC50ML-BZ • QTC50MLF • QTC50MLF-BZ • QTCA50ML • QTCA50ML-BZ • QTCA50MLF • QTCA50MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTC50L

Ø50mm LED Steady/Flashing Tower Lights



QTC50L series



QTC50L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC50L Ø50mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|-------------|------------|--------------------------|--------|--|
| QTC50L Steady | 1 | AC/DC12V | 0.080A | DC24V only DC24V only | 0.35kg | • R-Red |
| QTC50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.35kg | |
| QTC50LF Steady/Flashing | 2 | AC/DC12V | 0.160A | | 0.44kg | • R-Red • G-Green |
| QTC50LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.090A | | 0.44kg | |
| QTC50L Steady | 3 | AC/DC12V | 0.240A | | 0.52kg | • R-Red • A-Amber • G-Green |
| QTC50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.135A | | 0.52kg | |
| QTC50LF Steady/Flashing | 4 | AC/DC12V | 0.320A | | 0.61kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTC50LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.180A | | 0.61kg | |
| QTC50L Steady | 5 | AC/DC12V | 0.400A | | 0.69kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.225A | | 0.69kg | |
| QTC50LF Steady/Flashing | | AC110V-220V | Max 0.045A | 0.45kg | | |
| QTC50LF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.065A | 0.54kg | | |
| QTC50L Steady | | AC110V-220V | Max 0.080A | 0.62kg | | |
| QTC50L-BZ Steady /w built-in buzzer | | AC110V-220V | Max 0.100A | 0.71kg | | |
| QTC50LF Steady/Flashing | | AC110V-220V | Max 0.120A | 0.79kg | | |
| QTC50LF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.120A | 0.79kg | | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.



| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

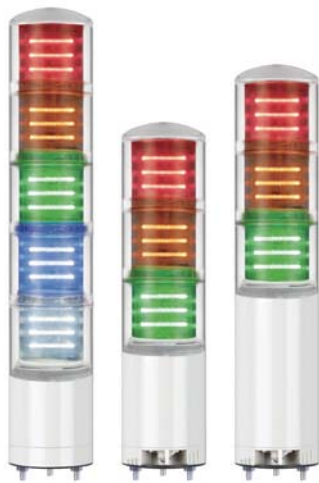
| QTC50L | 3 | 24 | RAG | LW18 |
|--|--|---|--|---|
| [Model number] | [Layer] | [Voltage] | [Color] | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTC50L • QTC50L-BZ • QTC50LF • QTC50LF-BZ • QTCA50L • QTCA50L-BZ • QTCA50LF • QTCA50LF-BZ | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | <ul style="list-style-type: none"> • None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

QTC60ML

Ø60mm LED Steady/Flashing Tower Lights



QTC60ML series



QTCA60ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC60ML Ø60mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|---|-------|----------|---------|--------------------------|--------------------------|----------------------|--|
| QTC60ML Steady | 1 | AC/DC12V | 0.090A | DC24V only DC24V only | 0.28kg | • R-Red | |
| QTC60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.28kg | | |
| QTC60MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.36kg | • R-Red • G-Green | |
| QTC60MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | | | 0.46kg |
| QTCA60ML Steady | 3 | AC/DC12V | 0.270A | | DC24V only DC24V only | 0.45kg | • R-Red • A-Amber • G-Green |
| QTCA60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | | 0.45kg | |
| QTCA60MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | | 0.53kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTCA60MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | | | |
| QTC60ML Steady | 5 | AC/DC12V | 0.450A | | | 0.61kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.250A | | | | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



Ordering Specification

| QTC60ML | - | 3 | - | 110/220 | - | RAG |
|--|---|--|---|---|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTC60ML • QTC60ML-BZ • QTC60MLF • QTC60MLF-BZ • QTCA60ML • QTCA60ML-BZ • QTCA60MLF • QTCA60MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTC60L

Ø60mm LED Steady/Flashing Tower Lights



QTC60L series



QTC60L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC60L Ø60mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | | |
|---|-------|-------------|------------|--------------------------|--------------------------|--------------------------|----------------------|--|
| QTC60L Steady | 1 | AC/DC12V | 0.090A | DC24V only DC24V only | 0.43kg | • R-Red | | |
| QTC60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.43kg | | | |
| QTC60LF Steady/Flashing | | AC110V-220V | Max 0.050A | | 0.53kg | | | |
| QTC60LF-BZ Steady/Flashing /w built-in buzzer | 2 | AC/DC12V | 0.180A | | DC24V only DC24V only | 0.52kg | • R-Red • G-Green | |
| QTC60LF Steady/Flashing | | AC/DC24V | 0.100A | | | 0.52kg | | |
| QTC60LF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.072A | | | 0.62kg | | |
| QTC60L Steady | 3 | AC/DC12V | 0.270A | | | DC24V only DC24V only | 0.60kg | • R-Red • A-Amber • G-Green |
| QTC60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | | | 0.60kg | |
| QTC60LF Steady/Flashing | | AC110V-220V | Max 0.094A | | | | 0.70kg | |
| QTC60LF-BZ Steady/Flashing /w built-in buzzer | 4 | AC/DC12V | 0.360A | | DC24V only DC24V only | | 0.69kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTC60LF Steady/Flashing | | AC/DC24V | 0.200A | 0.69kg | | | | |
| QTC60LF-BZ Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.116A | 0.79kg | | | | |
| QTC60L Steady | 5 | AC/DC12V | 0.450A | DC24V only DC24V only | | | 0.77kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.250A | | | | 0.77kg | |
| QTC60LF Steady/Flashing /w built-in buzzer | | AC110V-220V | Max 0.138A | | | | 0.87kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

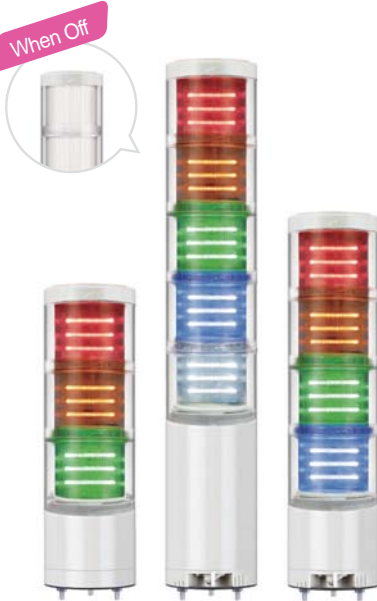
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

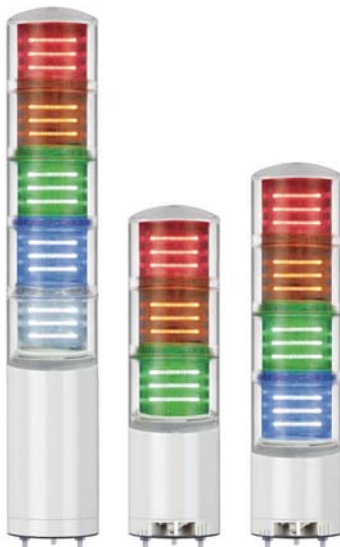
| QTC60L | 3 | 24 | RAG | LW18 |
|--|--|---|--|---|
| [Model number] | [Layer] | [Voltage] | [Color] | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTC60L • QTC60L-BZ • QTC60LF • QTC60LF-BZ • QTCA60L • QTCA60L-BZ • QTCA60LF • QTCA60LF-BZ | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | <ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

QTC70ML

Ø70mm LED Steady/Flashing Tower Lights



QTC70ML series



QTC70ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC70ML Ø70mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|--------------------------------------|--------|--|
| QTC70ML Steady | 1 | AC/DC12V | 0.090A | CE DC24V only UL DC24V only | 0.44kg | • R-Red |
| QTC70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.44kg | |
| QTC70MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.58kg | • R-Red • G-Green |
| QTC70MLF-BZ Steady /w built-in buzzer/Flashing | | AC/DC24V | 0.100A | | 0.68kg | |
| QTCA70ML Steady | 3 | AC/DC12V | 0.270A | | 0.79kg | • R-Red • A-Amber • G-Green |
| QTCA70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.89kg | |
| QTCA70MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.94kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTCA70MLF-BZ Steady /w built-in buzzer/Flashing | | AC/DC24V | 0.200A | | 1.04kg | |
| QTC70ML Steady | 5 | AC/DC12V | 0.450A | | 1.09kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.250A | | 1.19kg | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- ※ Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



Ordering Specification

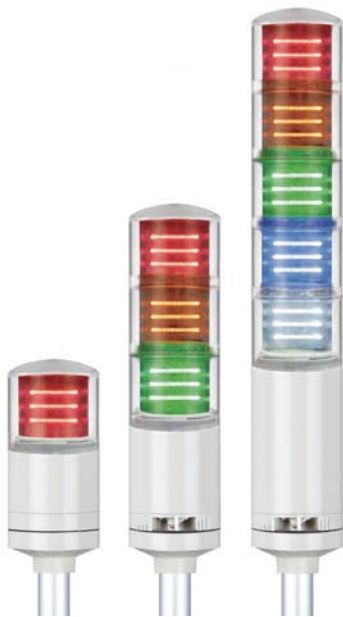
| QTC70ML | - | 3 | - | 12 | - | RAG |
|--|---|--|---|---|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTC70ML • QTC70ML-BZ • QTC70MLF • QTC70MLF-BZ • QTCA70ML • QTCA70ML-BZ • QTCA70MLF • QTCA70MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTC70L

Ø70mm LED Steady/Flashing Tower Lights



QTC70L series



QTCA70L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTC70L Ø70mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|----------|---------|--------------------------------------|--------|--|
| QTC70L Steady | 1 | AC/DC12V | 0.090A | CE DC24V only UL DC24V only | 0.56kg | • R-Red |
| QTC70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.66kg | |
| QTC70LF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.68kg | • R-Red • G-Green |
| QTC70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.78kg | |
| QTCA70L Steady | 3 | AC/DC12V | 0.270A | | 0.83kg | • R-Red • A-Amber • G-Green |
| QTCA70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.92kg | |
| QTCA70LF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.98kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTCA70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | 1.08kg | |
| QTC70L Steady | 5 | AC/DC12V | 0.450A | | 1.22kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTC70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.250A | | 1.31kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|---|
| QTC70L | - | 3 | - | 110/220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTC70L • QTC70L-BZ • QTC70LF • QTC70LF-BZ • QTCA70L • QTCA70L-BZ • QTCA70LF • QTCA70LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24 |

QTC series

LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

QTC50ML : DC
QTC50MLF : DC
QTC50ML-BZ : DC

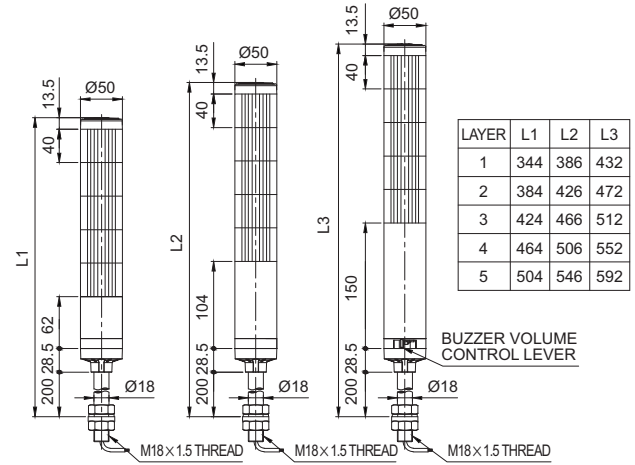
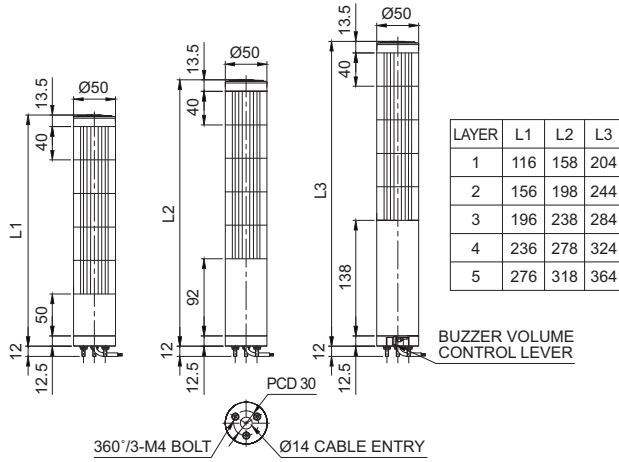
QTC50ML : AC
QTC50MLF-BZ : DC

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

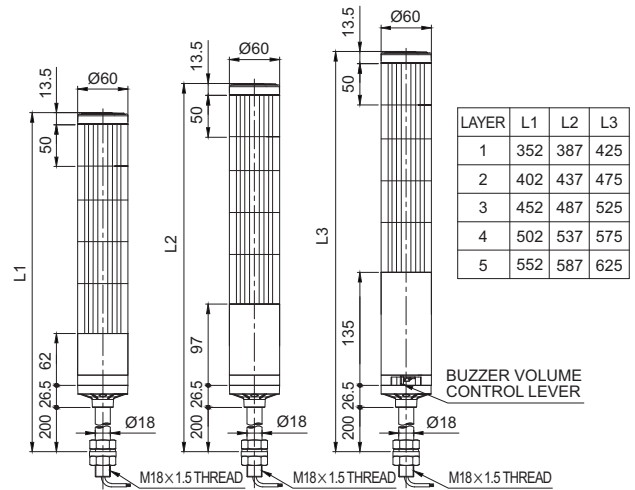
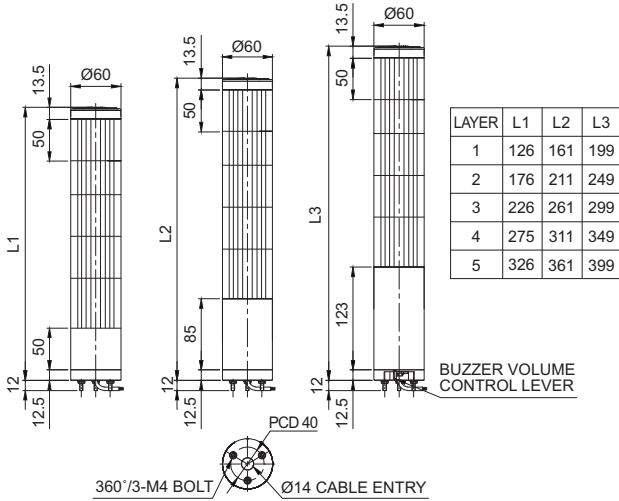
QTC60ML : AC
QTC60MLF-BZ : DC

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

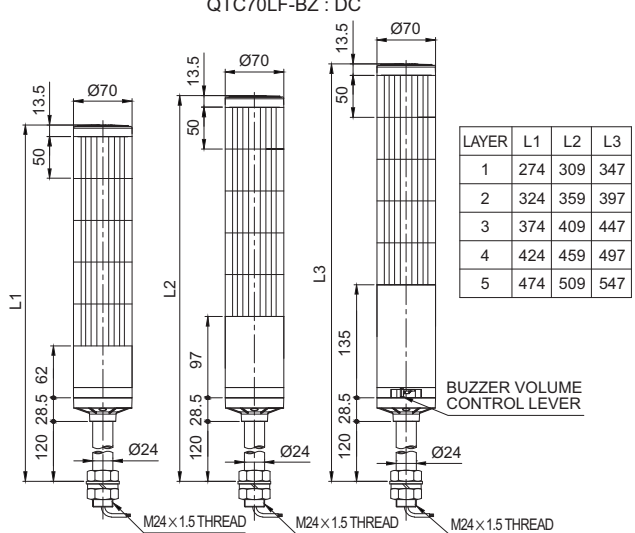
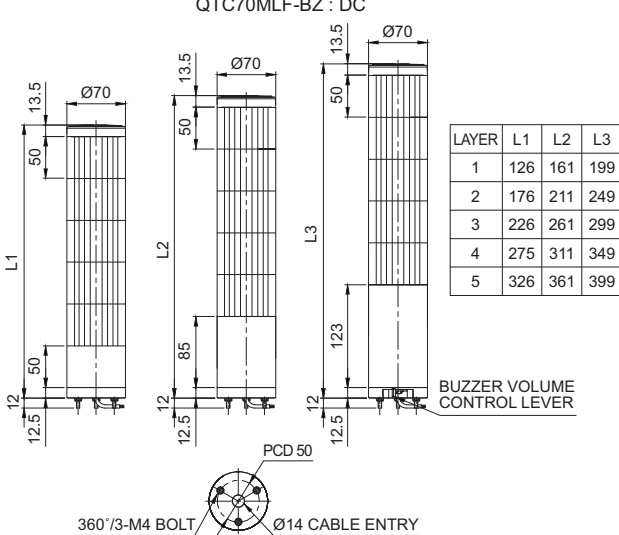
QTC70ML : AC
QTC70MLF : AC
QTC70ML-BZ : AC
QTC70MLF-BZ : DC

QTC70MLF-BZ : AC

QTC70L : DC
QTC70LF : DC
QTC70L-BZ : DC

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

QTC70LF-BZ : AC



Soft and Comfortable Signal Light Emitted through the Translucent Milky Lens



Common Specifications(QTR50/ QTR60/ QTR70)

- 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
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Available in customized 2 sound buzzer type and high volume(105dB) buzzer type
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min.
- Materials : Lens-PC, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating: Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



- **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.



• QTR series special lens

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

• 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)

- 1 High volume buzzer (105dB) option can be fitted to the top of the product.**
High volume 105dB 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 Housing cover and lens model (QTRA50/ QTRA60/ QTRA70)**
The sleek housing cover and lens model is made of one piece for a simple unified look.
- 3 Black Housing option available**
Products can be configured with the black housing and cover option. In addition, the buzzer option is also available in a black color housing and buzzer.
- 4 Can select from a variety of mounting bracket options to fit your application needs and build environment**
There are a variety of mounting bracket options available depending on cost and installation requirements.

QTR50ML

Ø50mm LED Steady/Flashing Tower Lights



QTR50ML series



QTRA50ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTR50ML Ø50mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|-------------|------------|---------------------------------------|--------|--|
| QTR50ML Steady | 1 | AC/DC12V | 0.080A | CE DC only UL DC24V only | 0.19kg | • R-Red |
| QTR50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.19kg | |
| QTR50MLF Steady/Flashing | 2 | AC/DC12V | 0.160A | | 0.27kg | • R-Red • G-Green |
| QTR50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.090A | | | |
| QTRA50ML Steady | 3 | AC/DC12V | 0.240A | | 0.36kg | • R-Red • A-Amber • G-Green |
| QTRA50ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.135A | | | |
| QTRA50MLF Steady/Flashing | 4 | AC/DC12V | 0.320A | | 0.44kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTRA50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.180A | | | |
| QTRA50MLF Steady/Flashing | 5 | AC/DC12V | 0.400A | | 0.53kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTRA50MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.225A | | | |
| | | AC110V-220V | Max 0.045A | | 0.29kg | |
| | | AC110V-220V | Max 0.065A | | 0.37kg | |
| | | AC110V-220V | Max 0.080A | | 0.46kg | |
| | | AC110V-220V | Max 0.100A | | 0.54kg | |
| | | AC110V-220V | Max 0.120A | | 0.63kg | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.080A | 0.045A | Max 0.045A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights
- 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 mount



Ordering Specification

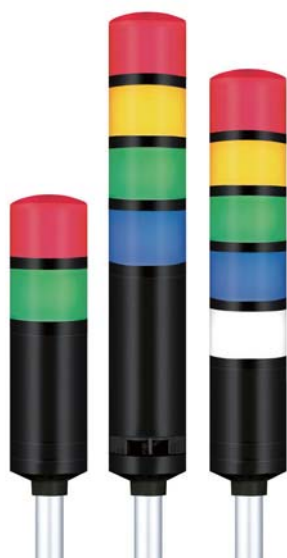
| | | | | | | |
|--|---|--|---|---|---|--|
| QTR50ML | - | 3 | - | 12 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTR50ML • QTR50ML-BZ • QTR50MLF • QTR50MLF-BZ • QTRA50ML • QTRA50ML-BZ • QTRA50MLF • QTRA50MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTR50L

Ø50mm LED Steady/Flashing Tower Lights



QTR50L series



QTRA50L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTR50L

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|----------|---------|---------------------------------------|--------|--|
| QTR50L Steady | 1 | AC/DC12V | 0.080A | CE DC only UL DC24V only | 0.34kg | • R-Red |
| QTR50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.045A | | 0.34kg | |
| QTR50LF Steady/Flashing | 2 | AC/DC12V | 0.160A | | 0.43kg | • R-Red • G-Green |
| QTR50LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.090A | | 0.53kg | |
| QTRA50L Steady | 3 | AC/DC12V | 0.240A | | 0.51kg | • R-Red • A-Amber • G-Green |
| QTRA50L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.135A | | 0.61kg | |
| QTRA50LF Steady/Flashing | 4 | AC/DC12V | 0.320A | | 0.60kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTRA50LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.180A | | 0.70kg | |
| QTRA50LF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.400A | | 0.68kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| | | AC/DC24V | 0.225A | | 0.78kg | |

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



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights



Ordering Specification

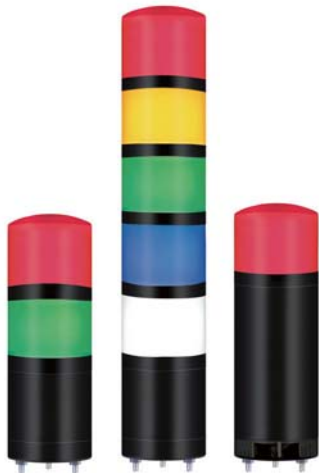
| | | | | | | | | |
|--|---|--|---|---|---|--|---|--|
| QTR50L | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTR50L • QTR50L-BZ • QTR50LF • QTR50LF-BZ • QTRA50L • QTRA50L-BZ • QTRA50LF • QTRA50LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

QTR60ML

Ø60mm LED Steady/Flashing Tower Lights



QTR60ML series



QTRA60ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTR60ML Ø60mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|-------------|------------|---------------------------------------|--------|--|
| QTR60ML Steady | 1 | AC/DC12V | 0.090A | CE DC only UL DC24V only | 0.26kg | ● R-Red |
| QTR60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.26kg | |
| QTR60MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.34kg | ● R-Red ● G-Green |
| QTR60MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.34kg | |
| QTRA60ML Steady | 3 | AC/DC12V | 0.270A | | 0.43kg | ● R-Red ● A-Amber ● G-Green |
| QTRA60ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.43kg | |
| QTRA60MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.51kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| QTRA60MLF-BZ Steady/Flashing /w built-in buzzer/ | | AC/DC24V | 0.200A | | 0.51kg | |
| | 5 | AC/DC12V | 0.450A | | 0.59kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.250A | | 0.59kg | |
| | | AC110V-220V | Max 0.050A | | 0.36kg | |
| | | AC110V-220V | Max 0.072A | | 0.44kg | |
| | | AC110V-220V | Max 0.094A | | 0.53kg | |
| | | AC110V-220V | Max 0.116A | | 0.61kg | |
| | | AC110V-220V | Max 0.138A | | 0.69kg | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 - Signal line standard : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights
- 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 mount



Ordering Specification

| | | | | | | |
|--|---|--|---|---|---|--|
| QTR60ML | - | 3 | - | 110/220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTR60ML • QTR60ML-BZ • QTR60MLF • QTR60MLF-BZ • QTRA60ML • QTRA60ML-BZ • QTRA60MLF • QTRA60MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

QTR60L

Ø60mm LED Steady/Flashing Tower Lights



QTR60L series



QTRA60L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTR60L Ø60mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|--|-------|----------|---------|---------------------------------------|--------|-----------------------------------|--|
| QTR60L Steady | 1 | AC/DC12V | 0.090A | CE DC only UL DC24V only | 0.41kg | • R-Red | |
| QTR60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.41kg | | |
| QTR60LF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.50kg | • R-Red • G-Green | |
| QTR60LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | | | 0.60kg |
| QTRA60L Steady | 3 | AC/DC12V | 0.270A | | 0.58kg | • R-Red • A-Amber • G-Green | |
| QTRA60L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | | | 0.68kg |
| QTRA60LF Steady/Flashing | 4 | AC/DC12V | 0.360A | | | 0.67kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTRA60LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | | | |
| QTRA60LF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.450A | | | 0.75kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTRA60LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | | | |

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



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights



Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|---|
| QTR60L | - | 3 | - | 12 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTR60L • QTR60L-BZ • QTR60LF • QTR60LF-BZ • QTRA60L • QTRA60L-BZ • QTRA60LF • QTRA60LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

QTR70ML

Ø70mm LED Steady/Flashing Tower Lights



QTR70ML series



QTRA70ML series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.

QTR70ML Ø70mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---|-------|----------|---------|---------------------------------------|--------|--|
| QTR70ML Steady | 1 | AC/DC12V | 0.090A | CE DC only UL DC24V only | 0.42kg | • R-Red |
| QTR70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.42kg | |
| QTR70MLF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.56kg | • R-Red • G-Green |
| QTR70MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.66kg | |
| QTRA70ML Steady | 3 | AC/DC12V | 0.270A | | 0.77kg | • R-Red • A-Amber • G-Green |
| QTRA70ML-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.77kg | |
| QTRA70MLF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.92kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTRA70MLF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | 1.02kg | |
| QTR70ML Steady | 5 | AC/DC12V | 0.450A | | 1.07kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| QTRA70MLF Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | 1.17kg | |

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

Signal/ Audible Line Current(per each layer)

| Voltage | AC/DC12V | AC/DC24V | AC110V-220V |
|----------------------|----------|----------|-------------|
| Signal line current | 0.090A | 0.050A | Max 0.050A |
| Audible line current | 0.016A | 0.031A | Max 0.030A |

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights
- 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 mount



Ordering Specification

| | | | | | | |
|--|---|--|---|---|---|--|
| QTR70ML | - | 3 | - | 24 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTR70ML • QTR70ML-BZ • QTR70MLF • QTR70MLF-BZ • QTRA70ML • QTRA70ML-BZ • QTRA70MLF • QTRA70MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTR70L

Ø70mm LED Steady/Flashing Tower Lights



QTR70L series



QTRA70L series

• Customization



- High buzzer module equipped on top/ Black housing tower lights.



QTR70L Ø70mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|--|-------|----------|---------|---------------------------------------|--------|--|
| QTR70L Steady | 1 | AC/DC12V | 0.090A | CE DC only UL DC24V only | 0.54kg | • R-Red |
| QTR70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.050A | | 0.54kg | |
| QTR70LF Steady/Flashing | 2 | AC/DC12V | 0.180A | | 0.66kg | • R-Red • G-Green |
| QTR70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.100A | | 0.76kg | |
| QTRA70L Steady | 3 | AC/DC12V | 0.270A | | 0.81kg | • R-Red • A-Amber • G-Green |
| QTRA70L-BZ Steady /w built-in buzzer | | AC/DC24V | 0.150A | | 0.90kg | |
| QTRA70LF Steady/Flashing | 4 | AC/DC12V | 0.360A | | 0.96kg | • R-Red • A-Amber • G-Green • B-Blue |
| QTRA70LF-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.200A | | 1.06kg | |
| QTRA70LF Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.450A | | 1.20kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |
| | | AC/DC24V | 0.250A | | 1.29kg | |

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



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 87-88 for detailed wiring instructions.



Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Black housing tower lights



Ordering Specification

| | | | | | | | | |
|--|---|--|---|---|---|--|---|---|
| QTR70L | - | 3 | - | 110/220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTR70L • QTR70L-BZ • QTR70LF • QTR70LF-BZ • QTRA70L • QTRA70L-BZ • QTRA70LF • QTRA70LF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24 |

QTR series

LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

QTR50ML : DC
QTR50MLF : DC
QTR50ML-BZ : DC

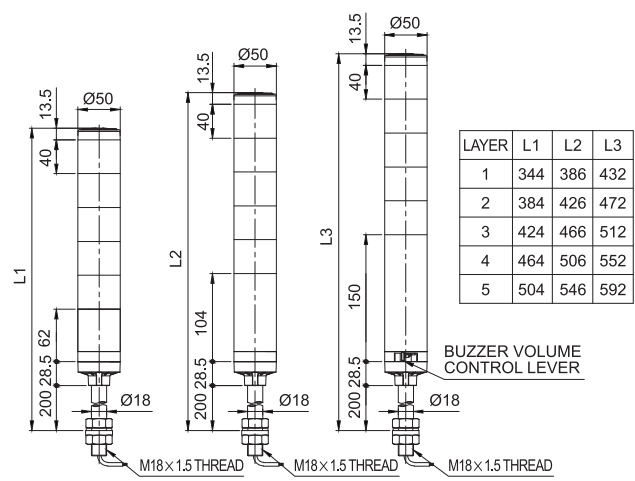
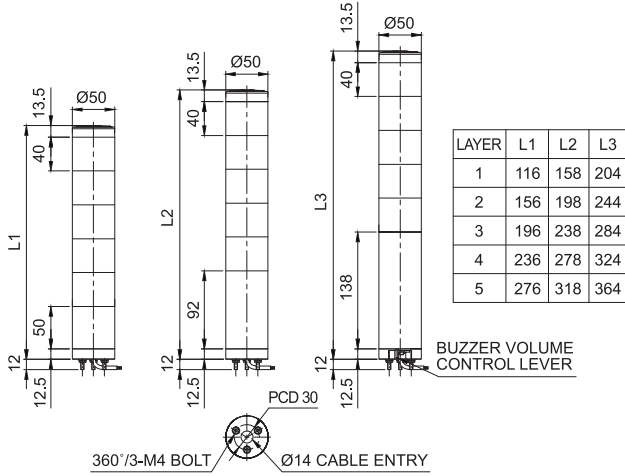
QTR50ML : AC
QTR50MLF-BZ : DC

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

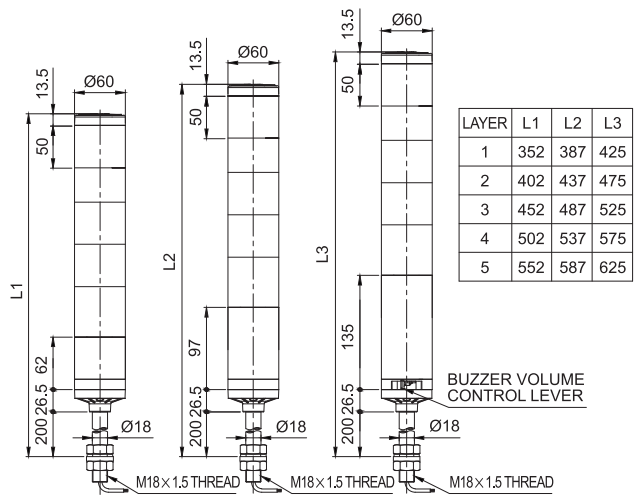
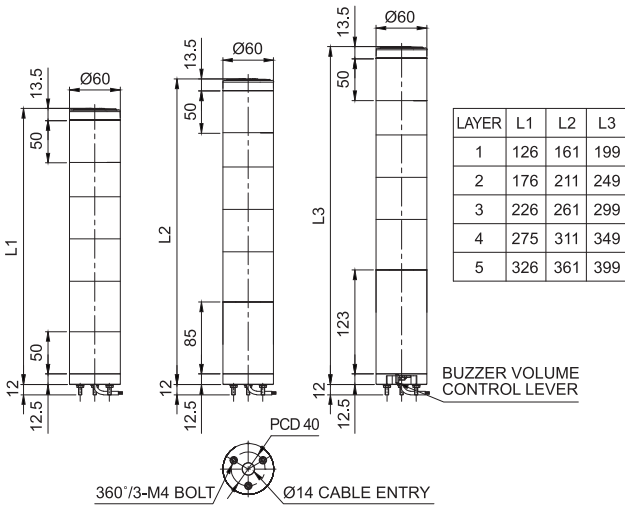
QTR60ML : AC
QTR60MLF-BZ : DC

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

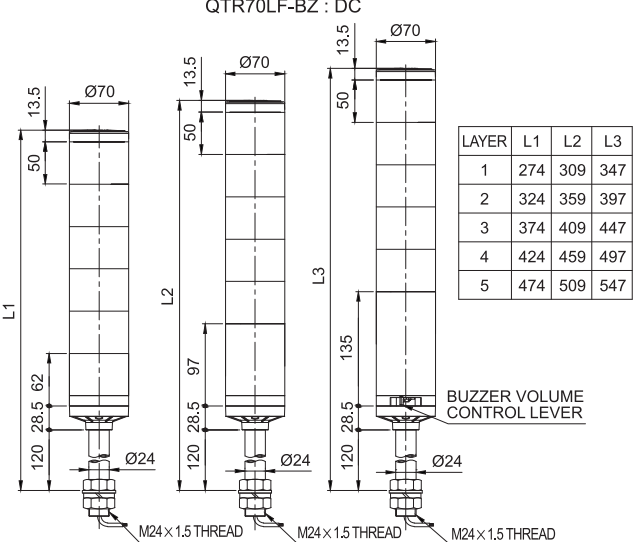
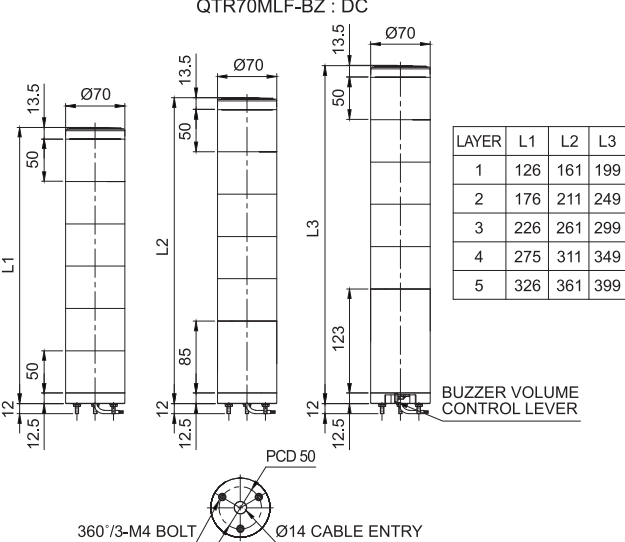
QTR70ML : AC
QTR70MLF : AC
QTR70ML-BZ : AC
QTR70MLF-BZ : DC

QTR70MLF-BZ : AC

QTR70L : DC
QTR70LF : DC
QTR70L-BZ : DC

QTR70L : AC
QTR70LF : AC
QTR70L-BZ : AC
QTR70LF-BZ : DC

QTR70LF-BZ : AC



QTG/QTC/QTR series



Wiring Instructions(using external contact)

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

| Applied products | Wiring Instructions | Applied products | Wiring Instructions |
|--|--|--|--|
| DC Steady QTG50ML QTG50L QTG60ML QTG60L QTG70ML QTG70L QTC50ML QTC50L QTC60ML QTC60L QTC70ML QTC70L QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> | AC Steady QTG50ML QTG50L QTG60ML QTG60L QTG70ML QTG70L QTC50ML QTC50L QTC60ML QTC60L QTC70ML QTC70L QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> |
| DC Steady/Flashing QTG50MLF QTG50LF QTG60MLF QTG60LF QTG70MLF QTG70LF QTC50MLF QTC50LF QTC60MLF QTC60LF QTC70MLF QTC70LF QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> | AC Steady/Flashing QTG50MLF QTG50LF QTG60MLF QTG60LF QTG70MLF QTG70LF QTC50MLF QTC50LF QTC60MLF QTC60LF QTC70MLF QTC70LF QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF | <p style="text-align: center;">EXTERNAL CONTACT</p> <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> |

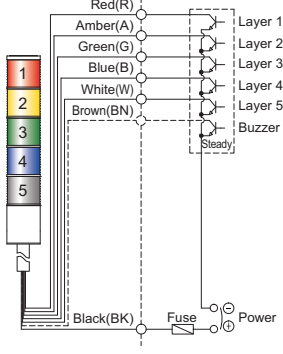
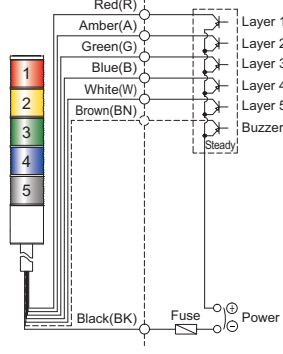
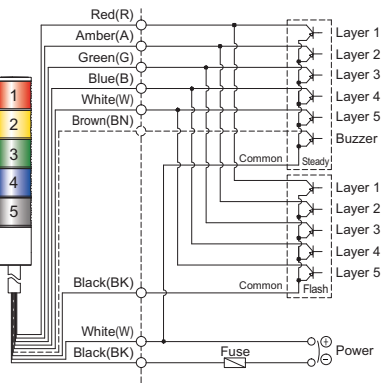
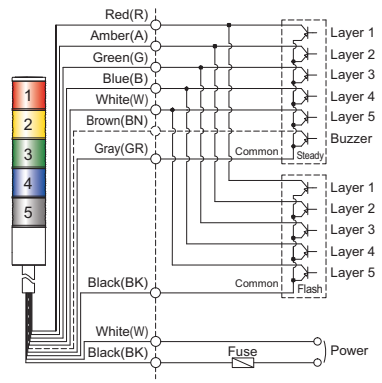
- DC steady type : External power/ signal line standard : UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type : External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
External signal line standard : UL1007 AWG22(0.3sq) 400mm

QTG/QTC/QTR series



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.

| Applied products | Wiring Instructions | |
|---|---|---|
| <p>DC Steady</p> <p>QTG50ML QTG50L QTG60ML QTG60L QTG70ML QTG70L QTC50ML QTC50L QTC60ML QTC60L QTC70ML QTC70L QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L</p> | <p>EXTERNAL TRANSISTOR-NPN</p>  <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> | <p>EXTERNAL TRANSISTOR-PNP</p>  |
| <p>DC Steady/Flashing</p> <p>QTG50MLF QTG50LF QTG60MLF QTG60LF QTG70MLF QTG70LF QTC50MLF QTC50LF QTC60MLF QTC60LF QTC70MLF QTC70LF QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF</p> | <p>EXTERNAL TRANSISTOR-PNP</p>  <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> | <p>AC Steady/Flashing</p> <p>EXTERNAL TRANSISTOR-PNP</p>  <ul style="list-style-type: none"> • QTG(A)XX(M)L - Same wiring including buzzer type • QTC(A)XX(M)L - Same wiring including buzzer type • QTR(A)XX(M)L - Same wiring including buzzer type • QTGXXL • QTCXXL • QTRXXL <p>└ Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L</p> |

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

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, ethernet cord, 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 normal operation, a red module would indicate risk which can be highlighted further by selecting a strobe flashing or rotating module.



1 Buzzer Tone Type
2 Buzzer Tone Type

5 Warning Sounds Type
5 Melodies Type
5 Alarms Type

• Select from 15 kinds of buzzer tones

There are 4 audible modules available which includes one buzzer type module and 3 alarm modules. Each alarm module comes with 5 sound patterns that can be selected for your specific application environment. The Buzzer module is customizable with two options- the 2 tone buzzer and high volume buzzer. Detailed specifications of the alarm sounds and buzzer sounds are included in page 90-92.

• Can select from a variety of pole selections to fit your application needs

You can chose from 8 different kinds of pole options for mounting. The pole materials vary from steel, aluminum, and polycarbonate. Please refer to page 162-167 for more detailed information about the pole specifications and dimensions.



• Module Selections

Users can directly purchase the necessary modules for assembly. Detailed specifications and features for each Individual module are introduced in page 94-97(QT50), page 104-107(QT70). For information about module combination procedure can be found in the assembly Instructions page.

• Assembled Product

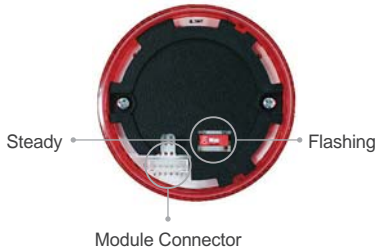
We are able to provide the consumer with an assembled product with module specifications provided by the customer. Specifications and products assembled in a variety of formats are detailed in page 98-103(QT50), page 108-113(QT70).

QT series

Modular Multi-Functional LED Tower Lights

Module

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.

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.



LED Steady Module

- Output LED Steady signal
- High brightness LED
- Voltage : DC12V, DC24V, AC110V, AC220V



LED Steady/Flashing Module

- Output LED Steady/Flashing signal
- High brightness LED
- Voltage : DC12V, DC24V, AC110V, AC220V



LED Strobe Module

- LED flashing light
- Excellent notice compare to flashing type
- Voltage : DC12V, DC24V



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.



Siren Sound Buzzer Module

- Siren buzzer volume : Max 90dB
- Sound fixed
- Voltage : DC12V, DC24V, AC110V, AC220V



Bip Sound Buzzer Module

- Bip sound(Pi-Pi) volume : Max 90dB
- Sound adjustable
- Voltage : DC12V, DC24V, AC110V, AC220V

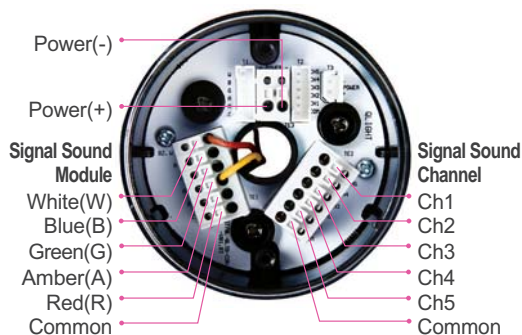


- Sound adjustable by lever on module side
- Buzzer module position can be chosen freely

QT series

Modular Multi-Functional LED Tower Lights

Basic Signal Sound Module



Please follow wiring instruction for power and signal line on page 114.



Lever for sound adjustment
Channel switch



Example for Signal Sound Module

Signal Sound Module

- Warning sound, melody, and alarm sound selection can be chosen by dip switch or external contact on top of module.
- For sound selection by dip switch the module can be in any position. However, for sound selection by external contact the module should be located at the base/ bottom.
- Excellent air tight seal.

| | |
|--|--|
| | <p>Warning Sound Module</p> <ul style="list-style-type: none"> • 5 Warning sounds : Max 85dB - fire, emergency , Ambulance, PI.PI.PI Short, Machinery Fault , Beep Intermittent • Voltage : DC12V, DC24V |
| | <p>Melody Module</p> <ul style="list-style-type: none"> • 5 Melodies : Max 85dB - Sweet home, For Elise, Cuckoo's Waltz, Piano sonata, Turkish March • Voltage : DC12V, DC24V |
| | <p>Alarm Module</p> <ul style="list-style-type: none"> • 5 Alarms : Max 85dB - Beep Intermittent, Door Chime, Phone Ring, PI.PI.PI Short, Triple Beat • Voltage : DC12V, DC24V |

Signal Sound Selection and Sound Adjust

- Signal module built-in 3 signal sounds, warning sound(WS), melody(WM) and alarm(WA).(User can select sound pattern)
- Warning sound, melody, and alarm and sound selection can be chosen by dip switch or external contact on top of module.
- Sound can be adjusted by lever on module.
- Please refer to below list for sound and specification.

| Article | Built-in Sounds | Channel | Sound |
|---------|------------------|---------------------------------|--|
| WS | 5 Warning Sounds | Ch1 Ch2 Ch3 Ch4 Ch5 | Fire, emergency Ambulance PI.PI.PI Short Machinery Fault Beep Intermittent |
| WM | 5 Melodies | Ch1 Ch2 Ch3 Ch4 Ch5 | Sweet home For Elise Cuckoo's Waltz Piano sonata Turkish March |
| WA | 5 Alarms | Ch1 Ch2 Ch3 Ch4 Ch5 | Beep Intermittent Door Chime Phone Ring PI.PI.PI Short Triple Beat |

- For sound selection by external contact, please refer to the following picture for an example of easy wiring of the sound module using the enclosed signal lines for the module.

USB Module(Built-in Signal Sound)

- LED tower light system with built-in sound connected and controlled by a PC application program.
- Sound module should be positioned at the base of the tower light.
- Sound can be adjusted with the lever on the module.

| | |
|-------------------------------------|---|
| <p>Q70L-USB-WS Q50L-USB-WS</p> | <p>Built-in Warning USB Sound Module</p> <ul style="list-style-type: none"> • 5 Warning sounds : Max 85dB - fire, emergency , Ambulance, PI.PI.PI Short, Machinery Fault , Beep Intermittent • Voltage : DC12V, DC24V |
| <p>Q70L-USB-WM Q50L-USB-WM</p> | <p>Built-in Melody USB Module</p> <ul style="list-style-type: none"> • 5 Melodies : Max 85dB - Sweet home, For Elise, Cuckoo's Waltz, Piano sonata, Turkish March • Voltage : DC12V, DC24V |
| <p>Q70L-USB-WA Q50L-USB-WA</p> | <p>Built-in Alarm USB Module</p> <ul style="list-style-type: none"> • 5 Alarms : Max 85dB - Beep Intermittent, Door Chime, Phone Ring, PI.PI.PI Short, Triple Beat • Voltage : DC12V, DC24V |

Module Connection



1 Connect wire between module



2 Match the edge of module



3 To assemble turn right



Uses a connector for easy assembly.

Ethernet Module(Built-in Signal Sound)

- Ethernet tower light system that can be controlled by internet or LAN from a remote place.
- Sound module should be positioned at the base of the tower light.
- Sound can be adjust with the lever on the module.
- Excellent air tight seal.

| | |
|-------------------------------------|--|
| <p>Q70L-ETN-WS Q50L-ETN-WS</p> | <p>Built-in Warning Ethernet Sound Module</p> <ul style="list-style-type: none"> • 5 Warning sounds : Max 85dB - fire, emergency , Ambulance, PI.PI.PI Short, Machinery Fault , Beep Intermittent • Voltage : DC12V, DC24V |
| <p>Q70L-ETN-WM Q50L-ETN-WM</p> | <p>Built-in Melody Ethernet Module</p> <ul style="list-style-type: none"> • 5 Melodies : Max 85dB - Sweet home, For Elise, Cuckoo's Waltz, Piano sonata, Turkish March • Voltage : DC12V, DC24V |
| <p>Q70L-ETN-WA Q50L-ETN-WA</p> | <p>Built-in Alarm Ethernet Module</p> <ul style="list-style-type: none"> • 5 Alarms : Max 85dB - Beep Intermittent, Door Chime, Phone Ring, PI.PI.PI Short, Triple Beat • Voltage : DC12V, DC24V |

Module Connection

- Adopts a convenient connector for easy assemble.
- Simple connection structure makes assembly straightforward and effortless when compared to other manufacturer's products.

QT series

Modular Multi-Functional LED Tower Lights

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 page 114 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 Instruction

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

※ Please refer to page 114 for detailed wiring instruction.



Mounting Bracket

- Pole Mounting Bracket

| Standard | LB18 LB24 | LW18 LW24 | QZ18 QZ24 | SZ18 SZ24 | QL18 QL24 | SL18 SL24 | QLA18 QLA24 |
|----------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed information about the pole specifications and dimensions.

Power Line Wiring Instruction




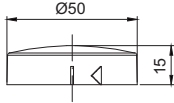
Terminal box can be wired without a special tool by using the push and release locking mechanism.

QT50 series

Modular Multi-Functional LED Tower Lights


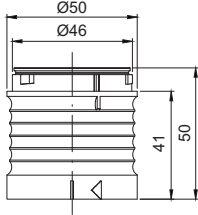




Modular Products Detailed Specifications : QT50L/QT50ML

(Units : mm)

| Shape | Parts Name | Model No. | Common Specifications |
|---|-------------|-----------|---|
|  | QT50L cover | Q50L-CV | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 50 \times 15$  |


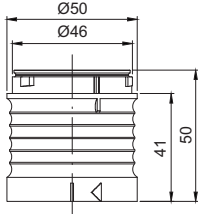


LED Steady Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------------|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q50L-NR Red LED Steady Module | Q50L-NR-12 Q50L-NR-24 Q50L-NR-110 Q50L-NR-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 50 \times 50$  |
|  | Q50L-NA Amber LED Steady Module | Q50L-NA-12 Q50L-NA-24 Q50L-NA-110 Q50L-NA-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |
|  | Q50L-NG Green LED Steady Module | Q50L-NG-12 Q50L-NG-24 Q50L-NG-110 Q50L-NG-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |
|  | Q50L-NB Blue LED Steady Module | Q50L-NB-12 Q50L-NB-24 Q50L-NB-110 Q50L-NB-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |
|  | Q50L-NC White LED Steady Module | Q50L-NC-12 Q50L-NC-24 Q50L-NC-110 Q50L-NC-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |

LED Simulated Revolving module


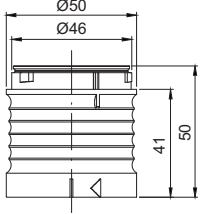

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q50L-FR Red LED Steady/Flashing Module | Q50L-FR-12 Q50L-FR-24 Q50L-FR-110 Q50L-FR-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 50 \times 50$  |
|  | Q50L-FA Amber LED Steady/Flashing Module | Q50L-FA-12 Q50L-FA-24 Q50L-FA-110 Q50L-FA-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |
|  | Q50L-FG Green LED Steady/Flashing Module | Q50L-FG-12 Q50L-FG-24 Q50L-FG-110 Q50L-FG-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |

QT50 series


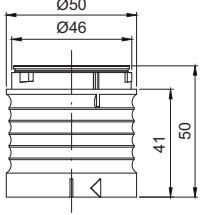




Modular Multi-Functional LED Tower Lights

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--|--|------------------------------------|--------------------------------------|--|
| | | | Voltage | Current | |
|  | Q50L-FB Blue LED Steady/Flashing Module | Q50L-FB-12 Q50L-FB-24 Q50L-FB-110 Q50L-FB-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50×50  |
|  | Q50L-FC White LED Steady/Flashing Module | Q50L-FC-12 Q50L-FC-24 Q50L-FC-110 Q50L-FC-220 | DC12V DC24V AC110V AC220V | 0.080A 0.040A 0.018A 0.020A | |


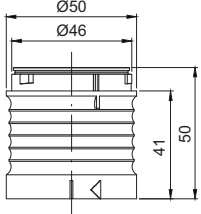

LED Strobe Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------------|--------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q50L-SR Red LED Strobe Module | Q50L-SR-12 Q50L-SR-24 | DC12V DC24V | 0.100A 0.120A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50×50  |
|  | Q50L-SA Amber LED Strobe Module | Q50L-SA-12 Q50L-SA-24 | DC12V DC24V | 0.100A 0.120A | |
|  | Q50L-SG Green LED Strobe Module | Q50L-SG-12 Q50L-SG-24 | DC12V DC24V | 0.100A 0.120A | |
|  | Q50L-SB Blue LED Strobe Module | Q50L-SB-12 Q50L-SB-24 | DC12V DC24V | 0.100A 0.120A | |
|  | Q50L-SC White LED Strobe Module | Q50L-SC-12 Q50L-SC-24 | DC12V DC24V | 0.100A 0.120A | |

LED Revolving/ Flashing Module


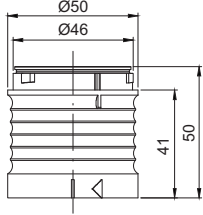


(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---|--------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q50L-RR Red LED Revolving Flashing Module | Q50L-RR-12 Q50L-RR-24 | DC12V DC24V | 0.050A 0.060A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50×50  |
|  | Q50L-RA Amber LED Revolving Flashing Module | Q50L-RA-12 Q50L-RA-24 | DC12V DC24V | 0.050A 0.060A | |

QT50 series


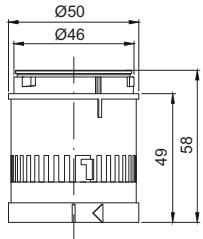
Modular Multi-Functional LED Tower Lights

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---|--------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q50L-RG Green LED Revolving Flashing Module | Q50L-RG-12 Q50L-RG-24 | DC12V DC24V | 0.050A 0.060A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50×50  |
|  | Q50L-RB Blue LED Revolving Flashing Module | Q50L-RB-12 Q50L-RB-24 | DC12V DC24V | 0.050A 0.060A | |
|  | Q50L-RC White LED Revolving Flashing Module | Q50L-RC-12 Q50L-RC-24 | DC12V DC24V | 0.050A 0.060A | |


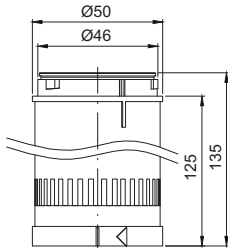
Buzzer Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--------------------------|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q50L-BZ Buzzer Module | Q50L-BZ-12 Q50L-BZ-24 Q50L-BZ-110 Q50L-BZ-220 | DC12V DC24V AC110V AC220V | 0.015A 0.028A 0.021A 0.038A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP54 Product size : Ø50×58 Sound : Max 90dB  |

Signal Sound Module

(Units : mm)


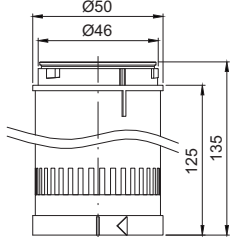
| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------|--------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q50L-WS Warning sound module | Q50L-WS-12 Q50L-WS-24 | DC12V DC24V | 0.250A 0.172A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP54 Product size : Ø50×135 Sound : Max 85dB  |
| | Q50L-WM Melody module | Q50L-WM-12 Q50L-WM-24 | DC12V DC24V | 0.283A 0.194A | |
| | Q50L-WA Alarm module | Q50L-WA-12 Q50L-WA-24 | DC12V DC24V | 0.288A 0.200A | |

QT50 series

Modular Multi-Functional LED Tower Lights


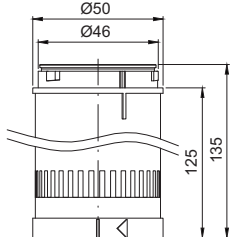
USB Module(Built-In Signal Sound)

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--|----------------------------------|---------------|---------|---|
| | | | Voltage | Current | |
|  | Q50L-USB-WS Warning Sounds Module (USB Type) | Q50L-USB-WS-12 Q50L-USB-WS-24 | USB 5V | 0.500A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 54 Product size : Ø50×135 Sound : Max 85dB  |
| | Q50L-USB-WM Melody Module (USB Type) | Q50L-USB-WM-12 Q50L-USB-WM-24 | USB 5V | 0.500A | |
| | Q50L-USB-WA Alarm Module (USB Type) | Q50L-USB-WA-12 Q50L-USB-WA-24 | USB 5V | 0.500A | |


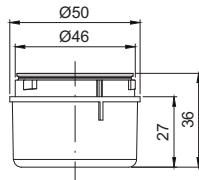
Ethernet Module(Built-In Signal Sound)

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|--|---|----------------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q50L-ETN-WS Warning Sounds Module (Ethernet type) | Q50L-ETN-WS-12 Q50L-ETN-WS-24 | DC12V DC24V | 0.250A 0.172A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 54 Product size : Ø50 x 135 Sound : Max 85dB  |
| | Q50L-ETN-WM Melody Module (Ethernet Type) | Q50L-ETN-WM-12 Q50L-ETN-WM-24 | DC12V DC24V | 0.283A 0.194A | |
| | Q50L-ETN-WA Alarm Module (Ethernet Type) | Q50L-ETN-WA-12 Q50L-ETN-WA-24 | DC12V DC24V | 0.288A 0.200A | |


Base Module

(Units : mm)

| Shape | Parts Name | Model No. | Common Specifications | |
|---|------------------------------|-----------------|--|---|
|  | Base Module | Q50L-BS | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50 x 36 |  |
| | Built-In Signal Sound Module | Q50L-W-BS | | |
| | PC Control Module | Q50L-Special-BS | | |

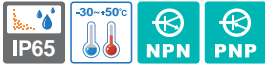
Mount Bracket Module

(Units : mm)

| Shape | Parts Name | Model No. | Material | Technical Diagram |
|---|--------------------|-----------|----------|---|
|  | Wall Mount Bracket | TWS45 | Steel |   |
|  | Wall Mount Bracket | TWA45 | PC |   |
|  | Pole Module | Q50L-PB | PC |   |

QT50L

Ø50mm Modular Multi-Functional LED Tower Lights



QT50L

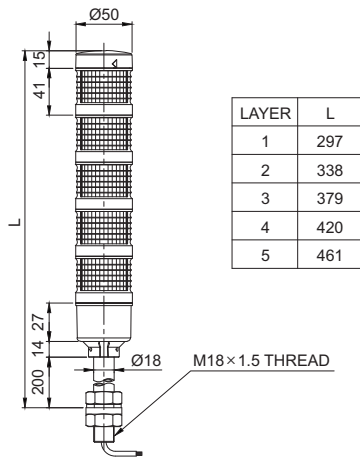
Color Options:

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)



QT50L Ø50mm Modular LED Tower Lights, Pole Mount

Product consist of signal light modules, base module, and pole module



| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-----------------|--------|---------|---------|--|--------|----------------------|
| QT50L QT50LF | 1 | DC12V | 0.080A | CE DC24V only | 0.25kg | • R-Red |
| | | DC24V | 0.040A | | 0.25kg | |
| | AC110V | 0.018A | 0.26kg | | | |
| | AC220V | 0.020A | 0.26kg | | | |
| | 2 | DC12V | 0.160A | | 0.30kg | • R-Red • G-Green |
| DC24V | | 0.080A | 0.30kg | | | |
| AC110V | | 0.036A | 0.31kg | | | |
| 3 | DC12V | 0.240A | 0.34kg | • R-Red • A-Amber • G-Green | | |
| | DC24V | 0.120A | 0.34kg | | | |
| | AC110V | 0.054A | 0.35kg | | | |
| 4 | DC12V | 0.320A | 0.38kg | • R-Red • A-Amber • G-Green • B-Blue | | |
| | DC24V | 0.160A | 0.38kg | | | |
| | AC110V | 0.072A | 0.39kg | | | |
| 5 | DC12V | 0.400A | 0.43kg | • R-Red • A-Amber • G-Green • B-Blue • W-White | | |
| | DC24V | 0.200A | 0.43kg | | | |
| | AC110V | 0.090A | 0.44kg | | | |
| | | AC220V | 0.100A | 0.44kg | | |

QT50L
QT50LF

Steady Module
Steady/Flashing Module

Base Module(BS)
+
Pole Module(PB)

※ Please refer to page 94-97 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed information about the pole specifications and dimensions.



Ordering Specification

| | | | | | | | | |
|---------------------|---|--|---|--|---|--|---|--|
| QT50L | - | 3 | - | 24 | - | RAG | - | QZ18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QT50L • QT50LF | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None • Standard • Bracket • LB18 -LW18 • QZ18 -SZ18 • QL18 -SL18 • QLA18 |

QT50L-BZ

Ø50mm Built-in Buzzer Modular Multi-Functional LED Tower Lights



QT50L-BZ

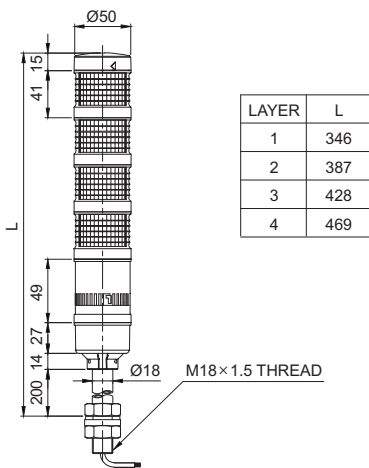
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT50L-BZ



Customization

- Customized pole length available
- Beige color
- LED strobe (Model number : QT50LS-BZ)
- LED simulated revolving (Model number : QT50LR-BZ)



QT50L-BZ Ø50mm Built-in Buzzer Modular LED Tower Lights, Pole Mount

Product that consist of signal lights module, base module, pole module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-------------------------------------|-------|---------|---------|---------------------|--------|---|
| QT50L-BZ QT50LF-BZ (Max 90dB) | 1 | DC12V | 0.095A | CE DC24V only | 0.32kg | • R-Red |
| | | DC24V | 0.068A | | 0.32kg | |
| | | AC110V | 0.039A | | 0.33kg | |
| | | AC220V | 0.058A | | 0.33kg | |
| | 2 | DC12V | 0.175A | | 0.37kg | • R-Red • G-Green |
| | | DC24V | 0.108A | | 0.37kg | |
| | | AC110V | 0.057A | | 0.38kg | |
| | | AC220V | 0.078A | | 0.38kg | |
| | 3 | DC12V | 0.255A | | 0.41kg | • R-Red • A-Amber • G-Green |
| | | DC24V | 0.148A | | 0.41kg | |
| | | AC110V | 0.075A | | 0.42kg | |
| | | AC220V | 0.098A | | 0.42kg | |
| | 4 | DC12V | 0.335A | | 0.45kg | • R-Red • A-Amber • G-Green • B-Blue |
| | | DC24V | 0.188A | | 0.45kg | |
| | | AC110V | 0.093A | | 0.46kg | |
| | | AC220V | 0.118A | | 0.46kg | |

QT50L Steady Module + Base Module(BS) + Buzzer Module(BZ)
 QT50LF Steady/Flashing Module + Pole Module(PB)

* Please refer to page 94-97 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor

* Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed information about the pole specifications and dimensions.



Ordering Specification

| | | | | | | | | |
|---------------------------|---|---|---|--|---|---|---|--|
| QT50L-BZ | - | 3 | - | 24 | - | RAG | - | QZ18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QT50L-BZ • QT50LF-BZ | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue | | • None • Standard • Bracket • LB18 • LW18 • QZ18 • SZ18 • QL18 • SL18 • QLA18 |

QT50L-W

Ø50mm Built-in Signal Modular Multi-Functional LED Tower Lights



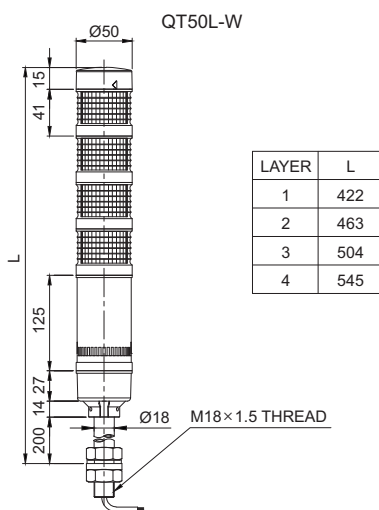
QT50L-W

Color Options:

Beige color is available



Technical Diagram (Units : mm)



Customization

- Customized pole length available
- Beige color
- LED strobe (Model number : QT50LS-W)
- LED simulated revolving (Model number : QT50LR-W)



QT50L-W Ø50mm Built-in Signal Modular LED Tower Lights, Pole Mount

Product consists of signal light modules, base module, and pole module



Specifications

| Model number | Layer | built-in Sound | Voltage | Current | Certificates | Weight | Color |
|---|-------|---|---------|---------|--------------|---|---------|
| QT50L-WS QT50L-WM QT50L-WA QT50LF-WS QT50LF-WM QT50LF-WA | 1 | WS-5 Warning Sounds WM-5 Melodies WA-Alarm Sounds (Max 85dB) | DC12V | 0.368A | | 0.42kg | • R-Red |
| | | | DC24V | 0.240A | | 0.42kg | |
| 2 | DC12V | | 0.448A | 0.46kg | | • R-Red • G-Green | |
| | DC24V | | 0.280A | 0.46kg | | | |
| 3 | DC12V | | 0.528A | 0.50kg | | • R-Red • A-Amber • G-Green | |
| | DC24V | | 0.320A | 0.50kg | | | |
| 4 | DC12V | | 0.608A | 0.54kg | | • R-Red • A-Amber • G-Green • B-Blue | |
| | DC24V | | 0.360A | 0.54kg | | | |

QT50L Steady Module
QT50LF Steady/Flashing Module

Base Module(BS)
+ Pole Module(PB)

Signal Sound Module
WS Warning Sounds
WM Melody
WA Alarm

- * Please refer to page 94-97 for detailed specification of module.
- * Please refer to page 160 for detailed sound specification.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- * Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

* Please refer to page 162-167 for detailed information about the pole specifications and dimensions.

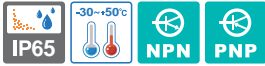


Ordering Specification

| | | | | |
|---|---|--|---|--|
| QT50L-WS | 3 | 24 | RAG | QZ18 |
| [Model number] | [Layer] | [Voltage] | [Color] | [Mounting bracket] |
| <ul style="list-style-type: none"> • QT50L-WS • QT50L-WM • QT50L-WA • QT50LF-WS • QT50LF-WM • QT50LF-WA | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue | <ul style="list-style-type: none"> • None • Standard • Bracket • LB18 • LW18 • QZ18 • SZ18 • QL18 • SL18 • QLA18 |

QT50ML

Ø50mm Modular LED Tower Lights



QT50ML

Color Options:

Beige color is available



QT50ML Ø50mm Modular LED Tower Lights, Direct Mount

Product that consist of signal lights module, base module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-------------------|--------|---------|---------|--|--------|---|
| QT50ML QT50MLF | 1 | DC12V | 0.080A | CE DC24V only | 0.10kg | ● R-Red |
| | | DC24V | 0.040A | | 0.10kg | |
| | | AC110V | 0.018A | | 0.11kg | |
| | | AC220V | 0.020A | | 0.11kg | |
| | 2 | DC12V | 0.160A | | 0.14kg | ● R-Red ● G-Green |
| | | DC24V | 0.080A | | 0.14kg | |
| | | AC110V | 0.036A | | 0.15kg | |
| | 3 | DC12V | 0.240A | | 0.19kg | ● R-Red ● A-Amber ● G-Green |
| | | DC24V | 0.120A | | 0.19kg | |
| | 4 | AC110V | 0.054A | | 0.20kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| AC220V | | 0.060A | 0.20kg | | | |
| DC12V | | 0.320A | 0.23kg | | | |
| DC24V | | 0.160A | 0.23kg | | | |
| 5 | AC110V | 0.072A | 0.24kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | AC220V | 0.080A | 0.24kg | | | |
| | DC12V | 0.400A | 0.27kg | | | |
| | DC24V | 0.200A | 0.27kg | | | |
| | AC110V | 0.090A | 0.28kg | | | |
| | | AC220V | 0.100A | 0.28kg | | |

QT50L
QT50LF

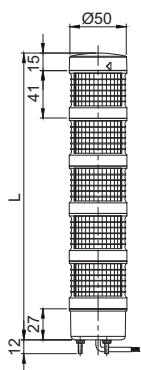
+ Base Module(BS)

※ Please refer to page 94-97 for detailed specification of module.

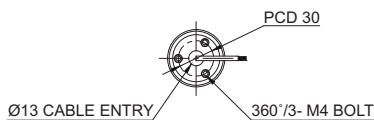


(Units : mm)

QT50ML



| LAYER | L |
|-------|-----|
| 1 | 83 |
| 2 | 124 |
| 3 | 165 |
| 4 | 206 |
| 5 | 247 |



Wiring Instructions

• LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Customization

- Beige color
- LED strobe(Model number: QT50MLS)
- LED simulated revolving(Model number : QT50MLR)
- Wall mount bracket :

Bracket Structure allows for threading through the bracket hole or into the wall mount



TWS45



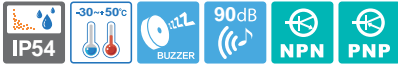
Wall Mount Bracket
TWA45



| | | | | | | |
|---|---|--|---|--|---|--|
| QT50ML | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QT50ML • QT50MLF | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

QT50ML-BZ

Ø50mm Built-in Buzzer Modular LED Tower Lights



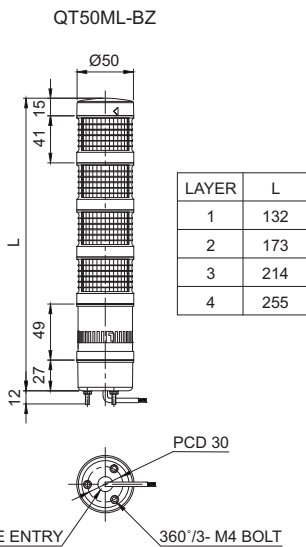
QT50ML-BZ

Color Options:

Beige color is available



Technical Diagram (Units : mm)



QT50ML-BZ Ø50mm Built-in Buzzer Modular LED Tower Lights, Direct Mount

Product that consist of signal lights module, base module, buzzer module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---------------------------------------|-------|---------|---------|---------------------|---|---------|
| QT50ML-BZ QT50MLF-BZ (Max 90dB) | 1 | DC12V | 0.095A | CE DC24V only | 0.17kg | ● R-Red |
| | | DC24V | 0.068A | | 0.17kg | |
| | | AC110V | 0.039A | | 0.18kg | |
| | | AC220V | 0.058A | | 0.18kg | |
| | 2 | DC12V | 0.175A | | ● R-Red ● G-Green | |
| | | DC24V | 0.108A | | | 0.21kg |
| | | AC110V | 0.057A | | | 0.21kg |
| | | AC220V | 0.078A | | | 0.22kg |
| | 3 | DC12V | 0.255A | | ● R-Red ● A-Amber ● G-Green | |
| | | DC24V | 0.148A | | | 0.25kg |
| | | AC110V | 0.075A | | | 0.26kg |
| | | AC220V | 0.098A | | | 0.26kg |
| | 4 | DC12V | 0.335A | | ● R-Red ● A-Amber ● G-Green ● B-Blue | |
| | | DC24V | 0.188A | | | 0.30kg |
| | | AC110V | 0.093A | | | 0.31kg |
| | | AC220V | 0.118A | | | 0.31kg |

QT50L Steady Module + Base Module(BS) + Buzzer(BZ)
 QT50LF Steady/Flashing Module

※ Please refer to page 94-97 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 114 for detailed information about the wiring instructions.



Customization

- Beige color
- LED strobe(model number : QT50MLS-BZ)
- LED simulated revolving(model number : QT50MLR-BZ)
- Wall mount bracket :
Bracket Structure allows for threading through the bracket hole or into the wall mount



Wall Mount Bracket
TWS45

Wall Mount Bracket
TWA45



Ordering Specification

| | | | | | | |
|---|---|---|---|--|---|---|
| QT50ML-BZ | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QT50ML-BZ • QT50MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue |

QT50ML-W

Ø50mm Built-in Signal Modular LED Tower Lights



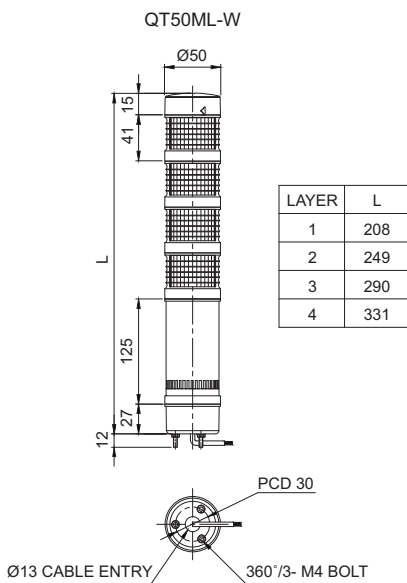
QT50ML-W

Color Options:

Beige color is available



Technical Diagram (Units : mm)



QT50ML-W Ø50mm Built-in Signal Modular LED Tower Lights, Direct Mount

Product that consist of signal lights module, base module, buzzer module



Specifications

| Model number | Layer | built-in Sound | Voltage | Current | Certificates | Weight | Color | | | |
|---|-------|---|---------|---------|--------------|--------|----------------------|-----------------------------------|--------|---|
| QT50ML-WS QT50ML-WM QT50ML-WA QT50MLF-WS QT50MLF-WM QT50MLF-WA | 1 | WS-5 Warning Sounds WM-5 Melodies WA-Alarm Sounds (Max 85dB) | DC12V | 0.368A | | 0.27kg | ● R-Red | | | |
| | | | DC24V | 0.240A | | 0.27kg | | | | |
| | 2 | | DC12V | 0.448A | | 0.28kg | ● R-Red ● G-Green | | | |
| | | | DC24V | 0.280A | | 0.28kg | | | | |
| | 3 | | | DC12V | | 0.528A | 0.30kg | ● R-Red ● A-Amber ● G-Green | | |
| | | | | DC24V | | 0.320A | 0.30kg | | | |
| | | | | 4 | | DC12V | 0.608A | | 0.32kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | | | | | DC24V | 0.360A | | 0.32kg | |

QT50L Steady Module

QT50LF Steady/Flashing Module

+ Base Module(BS)

+ Signal Sound Module

WS Warning Sounds

WM Melody

WA Alarm

※ Please refer to page 94-97 for detailed specification of module.

※ Please refer to page 160 for detailed sound specification.



Wiring Instructions

• LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Customization

- Beige color
- LED strobe(model number : QT50MLS-W)
- LED simulated revolving(model number : QT50MLR-W)
- Wall mount bracket :

Bracket structure allows for threading through the bracket hole or into the wall mount



Wall Mount Bracket
TWS45



Wall Mount Bracket
TWA45



Ordering Specification


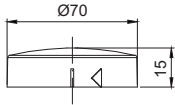
| | | | | | | |
|---|---|---|---|--|---|---|
| QT50ML-WS | - | 3 | - | 24 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QT50ML-WS • QT50ML-WM • QT50ML-WA • QT50MLF-WS • QT50MLF-WM • QT50MLF-WA | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue |

QT70

Modular Multi-Functional LED Tower Lights


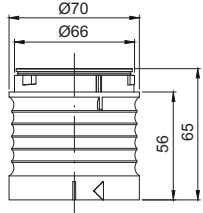




Module Specifications QT70L/QT70ML

(Units : mm)

| Shape | Parts Name | Model No. | Common Specifications | |
|---|-------------|-----------|---|---|
|  | QT70L cover | Q70L-CV | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 70 \times 15$ |  |


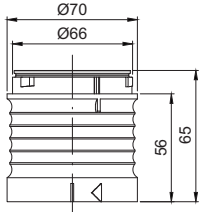


LED Steady Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------------|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q70L-NR Red LED Steady Module | Q70L-NR-12 Q70L-NR-24 Q70L-NR-110 Q70L-NR-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 70 \times 65$  |
|  | Q70L-NA Amber LED Steady Module | Q70L-NA-12 Q70L-NA-24 Q70L-NA-110 Q70L-NA-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |
|  | Q70L-NG Green LED Steady Module | Q70L-NG-12 Q70L-NG-24 Q70L-NG-110 Q70L-NG-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |
|  | Q70L-NB Blue LED Steady Module | Q70L-NB-12 Q70L-NB-24 Q70L-NB-110 Q70L-NB-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |
|  | Q70L-NC White LED Steady Module | Q70L-NC-12 Q70L-NC-24 Q70L-NC-110 Q70L-NC-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |

LED Simulated Revolving module


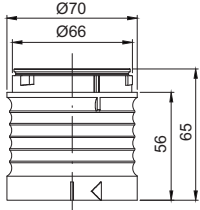

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q70L-FR Red LED Steady/Flashing Module | Q70L-FR-12 Q70L-FR-24 Q70L-FR-110 Q70L-FR-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 70 \times 65$  |
|  | Q70L-FA Amber LED Steady/Flashing Module | Q70L-FA-12 Q70L-FA-24 Q70L-FA-110 Q70L-FA-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |
|  | Q70L-FG Green LED Steady/Flashing Module | Q70L-FG-12 Q70L-FG-24 Q70L-FG-110 Q70L-FG-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |

QT70 series


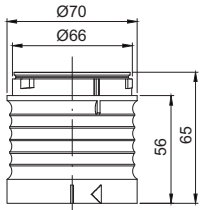




Modular Multi-Functional LED Tower Lights

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--|--|------------------------------------|--------------------------------------|---|
| | | | Voltage | Current | |
|  | Q70L-FB Blue LED Steady/Flashing Module | Q70L-FB-12 Q70L-FB-24 Q70L-FB-110 Q70L-FB-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | <ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65  |
|  | Q70L-FC White LED Steady/Flashing Module | Q70L-FC-12 Q70L-FC-24 Q70L-FC-110 Q70L-FC-220 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | |


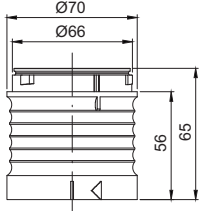

LED Strobe Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------------|--------------------------|----------------|------------------|---|
| | | | Voltage | Current | |
|  | Q70L-SR Red LED Strobe Module | Q70L-SR-12 Q70L-SR-24 | DC12V DC24V | 0.140A 0.160A | <ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65  |
|  | Q70L-SA Amber LED Strobe Module | Q70L-SA-12 Q70L-SA-24 | DC12V DC24V | 0.140A 0.160A | |
|  | Q70L-SG Green LED Strobe Module | Q70L-SG-12 Q70L-SG-24 | DC12V DC24V | 0.140A 0.160A | |
|  | Q70L-SB Blue LED Strobe Module | Q70L-SB-12 Q70L-SB-24 | DC12V DC24V | 0.140A 0.160A | |
|  | Q70L-SC White LED Strobe Module | Q70L-SC-12 Q70L-SC-24 | DC12V DC24V | 0.140A 0.160A | |

LED Revolving/ Flashing module


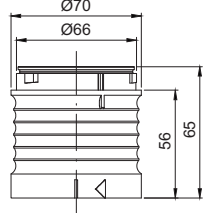


(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---|--------------------------|----------------|------------------|---|
| | | | Voltage | Current | |
|  | Q70L-RR Red LED Revolving Flashing Module | Q70L-RR-12 Q70L-RR-24 | DC12V DC24V | 0.060A 0.070A | <ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65  |
|  | Q70L-RA Amber LED Revolving Flashing Module | Q70L-RA-12 Q70L-RA-24 | DC12V DC24V | 0.060A 0.070A | |

QT70 series


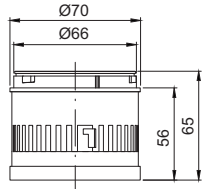

Modular Multi-Functional LED Tower Lights

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---|--------------------------|----------------|------------------|---|
| | | | Voltage | Current | |
|  | Q70L-RG Green LED Revolving Flashing Module | Q70L-RG-12 Q70L-RG-24 | DC12V DC24V | 0.060A 0.070A | <ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65  |
|  | Q70L-RB Blue LED Revolving Flashing Module | Q70L-RB-12 Q70L-RB-24 | DC12V DC24V | 0.060A 0.070A | |
|  | Q70L-RC White LED Revolving Flashing Module | Q70L-RC-12 Q70L-RC-24 | DC12V DC24V | 0.060A 0.070A | |


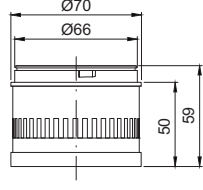
Buzzer Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|---------------------------------|--|------------------------------------|--------------------------------------|--|
| | | | Voltage | Current | |
|  | Q70L-BZ Buzzer Module | Q70L-BZ-12 Q70L-BZ-24 Q70L-BZ-110 Q70L-BZ-220 | DC12V DC24V AC110V AC220V | 0.015A 0.028A 0.021A 0.038A | <ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : Ø70×65 Volume : Max 90dB  |
|  | Q70L-BZS Siren Buzzer Module | Q70L-BZS-12 Q70L-BZS-24 Q70L-BZS-110 Q70L-BZS-220 | DC12V DC24V AC110V AC220V | 0.240A 0.150A 0.018A 0.009A | |

Siren Module

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|---|--------------------------|--------------------------|----------------|------------------|--|
| | | | Voltage | Current | |
|  | Q70L-WS Siren Module | Q70L-WS-12 Q70L-WS-24 | DC12V DC24V | 0.250A 0.170A | <ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : Ø70×59 Volume : Max 85dB  |
| | Q70L-WM Melody Module | Q70L-WM-12 Q70L-WM-24 | DC12V DC24V | 0.280A 0.190A | |
| | Q70L-WA Alarm Module | Q70L-WA-12 Q70L-WA-24 | DC12V DC24V | 0.280A 0.200A | |

QT70 series

Modular Multi-Functional LED Tower Lights

USB Module(Built-in Sounder)

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|-------|--|----------------------------------|---------------|---------|---|
| | | | Voltage | Current | |
| | Q70L-USB-WS Siren Module (USB Type) | Q70L-USB-WS-12 Q70L-USB-WS-24 | USB 5V | 0.500A | <ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : $\varnothing 70 \times 59$ Volume : Max 85dB |
| | Q70L-USB-WM Melody Module (USB Type) | Q70L-USB-WM-12 Q70L-USB-WM-24 | USB 5V | 0.500A | |
| | Q70L-USB-WA Alarm Module (USB Type) | Q70L-USB-WA-12 Q70L-USB-WA-24 | USB 5V | 0.500A | |

Ethernet Module(Built-in Sounder)

(Units : mm)

| Shape | Parts Name | Model No. | Specification | | Common Specifications |
|-------|---|----------------------------------|----------------|------------------|---|
| | | | Voltage | Current | |
| | Q70L-ETN-WS Siren Module (Ethernet Type) | Q70L-ETN-WS-12 Q70L-ETN-WS-24 | DC12V DC24V | 0.250A 0.172A | <ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : $\varnothing 70 \times 59$ Volume : Max 85dB |
| | Q70L-ETN-WM Melody Module (Ethernet Type) | Q70L-ETN-WM-12 Q70L-ETN-WM-24 | DC12V DC24V | 0.283A 0.194A | |
| | Q70L-ETN-WA Alarm Module (Ethernet Type) | Q70L-ETN-WA-12 Q70L-ETN-WA-24 | DC12V DC24V | 0.288A 0.200A | |

Base Module

(Units : mm)

| Shape | Parts Name | Model No. | Common Specifications | | |
|-------|-------------------------|-----------------|--|--|--|
| | Basic Module | Q70L-BS | <ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : $\varnothing 70 \times 36$ | | |
| | Built-in Sounder Module | Q70L-W-BS | | | |
| | Special Module | Q70L-Special-BS | | | |

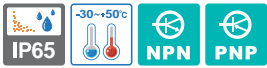
Ethernet Module(Built-in Sounder)

(Units : mm)

| Shape | Parts Name | Model No. | Material | Technical Diagram |
|-------|--------------------|-----------|----------|-------------------|
| | Wall Mount Bracket | TWS80 | Steel | |
| | Wall Mount Bracket | TWA80 | PC | |
| | Pole Module | Q70L-PB | PC | |

QT70L

Ø70mm Multi-Functional Modular LED Tower Lights



QT70L

Color Options:

Beige color is available



QT70L Ø70mm Pole Mount Modular LED Tower Lights

Consist of lens module, base module and pole module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-----------------|--------|---------|---------|--|--------|---|
| QT70L QT70LF | 1 | DC12V | 0.120A | CE DC24V only | 0.41kg | ● R-Red |
| | | DC24V | 0.060A | | 0.41kg | |
| | | AC110V | 0.018A | | 0.42kg | |
| | | AC220V | 0.020A | | 0.42kg | |
| | 2 | DC12V | 0.240A | | 0.48kg | ● R-Red ● G-Green |
| | | DC24V | 0.120A | | 0.48kg | |
| | | AC110V | 0.036A | | 0.49kg | |
| | 3 | DC12V | 0.360A | | 0.55kg | ● R-Red ● A-Amber ● G-Green |
| | | DC24V | 0.180A | | 0.55kg | |
| | 4 | DC12V | 0.480A | | 0.63kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| DC24V | | 0.240A | 0.63kg | | | |
| AC110V | | 0.072A | 0.64kg | | | |
| AC220V | | 0.080A | 0.64kg | | | |
| 5 | DC12V | 0.600A | 0.71kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | |
| | DC24V | 0.300A | 0.71kg | | | |
| | AC110V | 0.090A | 0.72kg | | | |
| | | AC220V | 0.100A | 0.72kg | | |

QT70L

Steady Module

Base Module(BS)

QT70LF

Steady/Flashing Module

+

+

Pole Module(PB)

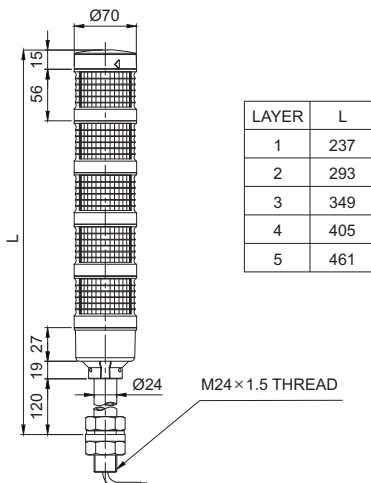
※ Please refer to page 104-107 for detailed specification of module.



Technical Diagram

(Units : mm)

QT70L



Customization

- Customized pole length available
- Beige color
- LED strobe (Model number : QT70LS)
- LED simulated revolving (Model number : QT70LR)



Wiring Instructions

- LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimension of mount brackets.



Ordering Specification

| | | | | | | | | |
|---------------------|---|--|---|--|---|--|---|---|
| QT70L | - | 3 | - | 24 | - | RAG | - | QZ24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QT70L • QT70LF | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24 |

QT70L-BZ

Ø70mm Multi-Functional Modular LED Tower Lights with Buzzer



QT70L-BZ

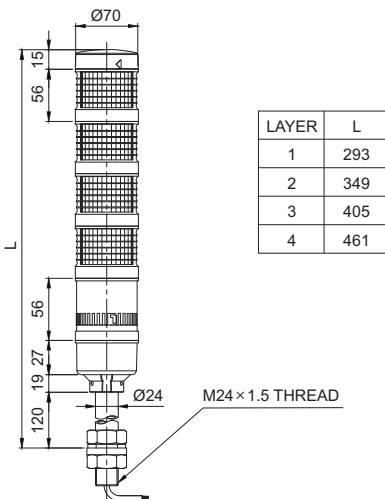
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT70L-BZ



Customization

- Customized pole length available
- Beige color
- LED strobe (Model number : QT70LS-BZ)
- LED simulated revolving (Model number : QT70LR-BZ)



QT70L-BZ Ø70mm Pole Mount Modular LED Tower Lights with Buzzer

Consist of LED module, base module, buzzer module and pole module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color | |
|-------------------------------------|-------|---------|---------|---------------------|--------|---|--------|
| QT70L-BZ QT70LF-BZ (Max 90dB) | 1 | DC12V | 0.135A | CE DC24V only | 0.50kg | • R-Red | |
| | | DC24V | 0.088A | | 0.50kg | | |
| | | AC110V | 0.039A | | 0.51kg | | |
| | | AC220V | 0.058A | | 0.51kg | | |
| | 2 | DC12V | 0.255A | | 0.58kg | • R-Red • G-Green | |
| | | DC24V | 0.148A | | | | 0.88kg |
| | | AC110V | 0.057A | | | | 0.59kg |
| | | AC220V | 0.078A | | | | 0.59kg |
| | 3 | DC12V | 0.375A | | 0.65kg | • R-Red • A-Amber • G-Green | |
| | | DC24V | 0.208A | | | | 0.65kg |
| | | AC110V | 0.075A | | | | 0.66kg |
| | | AC220V | 0.098A | | | | 0.66kg |
| | 4 | DC12V | 0.495A | | 0.73kg | • R-Red • A-Amber • G-Green • B-Blue | |
| | | DC24V | 0.268A | | | | 0.73kg |
| | | AC110V | 0.093A | | | | 0.74kg |
| | | AC220V | 0.118A | | | | 0.74kg |

QT70L Steady Module + Base Module(BS) + Buzzer Module(BZ)
 QT70LF Steady/Flashing Module + Pole Module(PB)

※ Please refer to page 104-107 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimension of mount brackets.



Ordering Specification

| | | | | | | | | |
|---------------------------|---|---|---|--|---|---|---|--|
| QT70L-BZ | - | 3 | - | 24 | - | RAG | - | QZ24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QT70L-BZ • QT70LF-BZ | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue | | • None • -Standard • Bracket • -LB24 • -LW24 • -QZ24 • -SZ24 • -QL24 • -SL24 • -QLA24 |

QT70L-W

Ø70mm Multi-Functional Modular LED Tower Lights with Sounder



QT70L-W

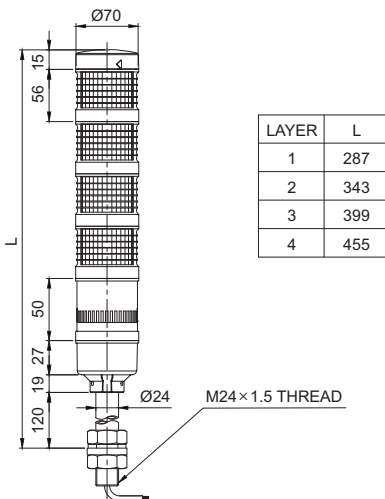
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT70L-W



Customization

- Customized pole length available
- Beige color
- LED strobe (Model number : QT70LS-W)
- LED simulated revolving (Model number : QT70LR-W)



QT70L-W Ø70mm Pole Mount Modular LED Tower Lights with Sounder

Consist of LED module, base module, sounder module and pole module



Specifications

| Model number | Layer | built-in Sound | Voltage | Current | Certificates | Weight | Color |
|----------------------------------|-------|---|---------|---------|--------------|---|---------|
| QT70L-WS QT70L-WM QT70L-WA | 1 | WS-5 Warning sounds WM-5 Melodies WA-Alarms (Max 85dB) | DC12V | 0.400A | | 0.62kg | • R-Red |
| | | | DC24V | 0.260A | | 0.62kg | |
| 2 | DC12V | | 0.520A | 0.69kg | | • R-Red • G-Green | |
| | DC24V | | 0.320A | 0.69kg | | | |
| 3 | DC12V | | 0.640A | 0.76kg | | • R-Red • A-Amber • G-Green | |
| | DC24V | | 0.380A | 0.76kg | | | |
| 4 | DC12V | | 0.760A | 0.84kg | | • R-Red • A-Amber • G-Green • B-Blue | |
| | DC24V | | 0.440A | 0.84kg | | | |

QT70L Steady Module
QT70LF Steady/Flashing Module

Base Module(BS)
+ Pole Module(PB)

Signal Sound Module
WS Warning sounds
WM Melodies
WA Alarms

※ Please refer to page 104-107 for detailed specification of module.

※ Please refer to page 160 for detailed sound specification.



Wiring Instructions

• LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Mounting Bracket

| Standard | LB24 | LW24 | QZ24 | SZ24 | QL24 | SL24 | QLA24 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimension of mount brackets.

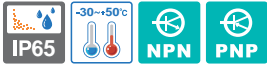


Ordering Specification

| | | | | | | | | |
|---|---|---|---|--------------------------|---|---|---|--|
| QT70L-WA | - | 3 | - | 24 | - | RAG | - | QZ24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| • QT70L-WS • QT70L-WM • QT70L-WA • QT70LF-WS • QT70LF-WM • QT70LF-WA | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | • 12-DC12V • 24-DC24V | | • R-Red • A-Amber • G-Green • B-Blue | | • None • -Standard • Bracket • -LB24 • -LW24 • -QZ24 • -SZ24 • -QL24 • -SL24 • -QLA24 |

QT70ML

Ø70mm Multi-Functional Modular LED Tower Lights



QT70ML

Color Options:

Beige color is available



QT70ML Ø70mm Direct Mount Modular LED Tower Lights

Consist of LED module and base module



Specifications

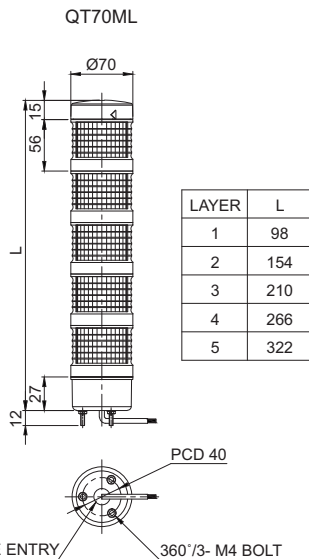
| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|-------------------|-------|------------------------------------|--------------------------------------|---------------------|--------------------------------------|--|
| QT70ML QT70MLF | 1 | DC12V DC24V AC110V AC220V | 0.120A 0.060A 0.018A 0.020A | CE DC24V only | 0.17kg 0.17kg 0.18kg 0.18kg | • R-Red |
| | 2 | DC12V DC24V AC110V AC220V | 0.240A 0.120A 0.036A 0.040A | | 0.25kg 0.25kg 0.26kg 0.26kg | • R-Red • G-Green |
| | 3 | DC12V DC24V AC110V AC220V | 0.360A 0.180A 0.054A 0.060A | | 0.32kg 0.32kg 0.33kg 0.33kg | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V AC110V AC220V | 0.480A 0.240A 0.072A 0.080A | | 0.40kg 0.40kg 0.41kg 0.41kg | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V AC110V AC220V | 0.600A 0.300A 0.090A 0.100A | | 0.47kg 0.47kg 0.48kg 0.48kg | • R-Red • A-Amber • G-Green • B-Blue • W-White |

QT70L Steady Module
QT70LF Steady/Flashing Module + Base Module(BS)

※ Please refer to page 104-107 for detailed specification of module.



Technical Diagram (Units : mm)



Wiring Instructions

• LED tower light can be wired with external contact and transistor

※ Please refer to page 114 for detailed information about the wiring instructions.



Customization

- Beige color
- LED strobe (Model number : QT70MLS)
- LED simulated revolving (Model number : QT70MLR)
- Wall mount bracket :
Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

| | | | | | | |
|-----------------------|---|--|---|--|---|--|
| QT70ML | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| • QT70ML • QT70MLF | | • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White |

QT70ML-BZ

Ø70mm Multi-Functional Modular LED Tower Lights with Buzzer



QT70ML-BZ

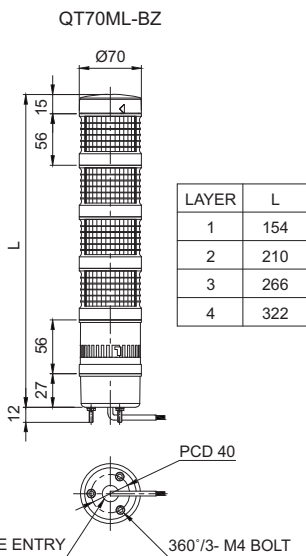
Color Options:

Beige color is available



Technical Diagram

(Units : mm)



QT70ML-BZ Ø70mm Direct Mount Modular LED Tower Lights with Buzzer

Consist of LED module, base module and buzzer module



Specifications

| Model number | Layer | Voltage | Current | Certificates | Weight | Color |
|---------------------------------------|-------|---------|---------|---------------------|--------|---|
| QT70ML-BZ QT70MLF-BZ (Max 90dB) | 1 | DC12V | 0.135A | CE DC24V only | 0.26kg | ● R-Red |
| | | DC24V | 0.088A | | 0.26kg | |
| | | AC110V | 0.039A | | 0.27kg | |
| | | AC220V | 0.058A | | 0.27kg | |
| | 2 | DC12V | 0.265A | | 0.34kg | ● R-Red ● G-Green |
| | | DC24V | 0.148A | | 0.34kg | |
| | | AC110V | 0.057A | | 0.35kg | |
| | | AC220V | 0.078A | | 0.35kg | |
| | 3 | DC12V | 0.375A | | 0.42kg | ● R-Red ● A-Amber ● G-Green |
| | | DC24V | 0.208A | | 0.42kg | |
| | | AC110V | 0.075A | | 0.43kg | |
| | | AC220V | 0.098A | | 0.43kg | |
| | 4 | DC12V | 0.495A | | 0.49kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | DC24V | 0.268A | | 0.49kg | |
| | | AC110V | 0.093A | | 0.50kg | |
| | | AC220V | 0.118A | | 0.50kg | |

QT70L Steady Module + Base Module(BS) + Buzzer(BZ)
 QT70LF Steady/Flashing Module

* Please refer to page 104-107 for detailed specification of module.



Wiring Instructions

• LED tower light can be wired with external contact and transistor

* Please refer to page 114 for detailed information about the wiring instructions.



Customization

- Beige color
- LED strobe (Model number : QT70MLS-BZ)
- LED simulated revolving (Model number : QT70MLR-BZ)
- Wall mount bracket :

Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

| | | | | | | |
|---|---|---|---|--|---|---|
| QT70ML-BZ | - | 3 | - | 220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QT70ML-BZ • QT70MLF-BZ | | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue |

QT70ML-W

Ø70mm Multi-Functional Modular LED Tower Lights with Sounder



QT70ML-W

Color Options:

Beige color is available



QT70ML-W Ø70mm Pole Mount Modular LED Tower Lights with Sounder

Consist of LED module, base module, sounder module and pole module



Specifications

| Model number | Layer | built-in Sound | Voltage | Current | Certificates | Weight | Color |
|---|-------|---|---------|---------|--------------|--------|---|
| QT70ML-WS QT70ML-WM QT70ML-WA QT70MLF-WS QT70MLF-WM QT70MLF-WA | 1 | WS-5 Warning sounds WM-5 Melodies WA-Alarms (Max 85dB) | DC12V | 0.400A | | 0.37kg | ● R-Red |
| | | | DC24V | 0.260A | | 0.37kg | |
| | 2 | | DC12V | 0.520A | | 0.44kg | ● R-Red ● G-Green |
| | | | DC24V | 0.320A | | 0.44kg | |
| | 3 | | DC12V | 0.640A | | 0.54kg | ● R-Red ● A-Amber ● G-Green |
| | | | DC24V | 0.380A | | 0.54kg | |
| | 4 | | DC12V | 0.760A | | 0.59kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | | | DC24V | 0.440A | | 0.59kg | |

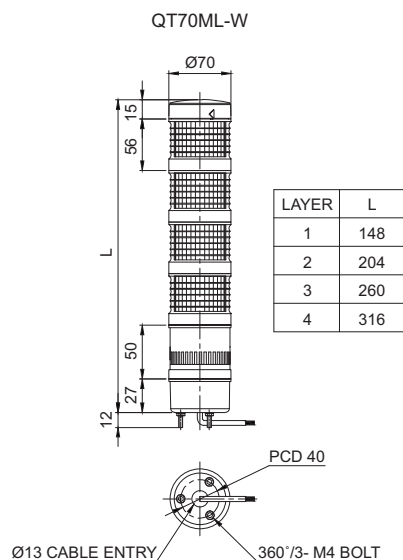
Steady Module + Base Module(BS) + Signal Sound Module
 Steady/Flashing Module + WS Warning sounds
 WM Melodies
 WA Alarms

* Please refer to page 104-107 for detailed specification of module.

* Please refer to page 160 for detailed sound specification.



Technical Diagram (Units : mm)



Wiring Instructions

• LED tower light can be wired with external contact and transistor

* Please refer to page 114 for detailed information about the wiring instructions.



Customization



Wall Mount Bracket TWS80 Wall Mount Bracket TWA80



Ordering Specification

| QT70ML-WA | 3 | 24 | RAG |
|---|---|--|---|
| [Model number] | [Layer] | [Voltage] | [Color] |
| <ul style="list-style-type: none"> • QT70ML-WS • QT70ML-WM • QT70ML-WA • QT70MLF-WS • QT70MLF-WM • QT70MLF-WA | <ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue |



Wiring Instructions

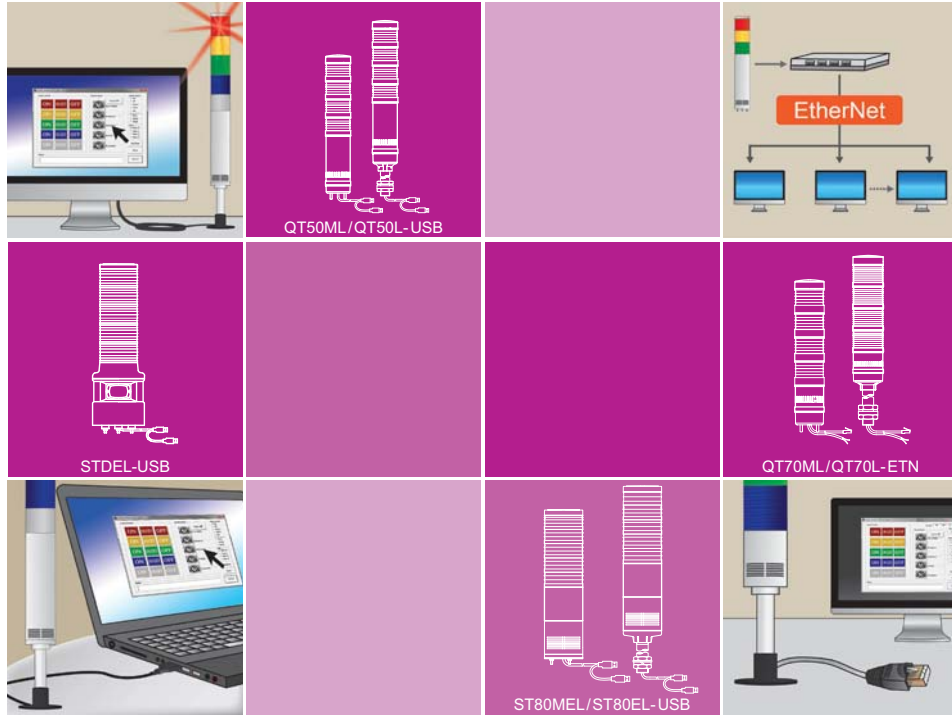
- QT series modular LED tower lights can be wired by external contact and transistor.
- Please follow below wiring instructions carefully.

| Type | External Contact | Type | Transistor |
|---|--|---|---|
| DC/AC Standard QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5</p> <p>Black(BK) Fuse Power</p> | DC/AC Standard QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>EXTERNAL TRANSISTOR-NPN</p> <p>EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 White(W) Layer 5</p> <p>Black(BK) Fuse Power</p> |
| DC/AC Buzzer QT50ML-BZ QT50MLF-BZ QT50MLS-BZ QT50MLR-BZ QT50L-BZ QT50LF-BZ QT50LS-BZ QT50LR-BZ QT70ML-BZ QT70MLF-BZ QT70MLS-BZ QT70MLR-BZ QT70L-BZ QT70LF-BZ QT70LS-BZ QT70LR-BZ | <p>EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Brown(BN) Buzzer</p> <p>Black(BK) Fuse Power</p> | DC/AC Buzzer QT50ML-BZ QT50MLF-BZ QT50MLS-BZ QT50MLR-BZ QT50L-BZ QT50LF-BZ QT50LS-BZ QT50LR-BZ QT70ML-BZ QT70MLF-BZ QT70MLS-BZ QT70MLR-BZ QT70L-BZ QT70LF-BZ QT70LS-BZ QT70LR-BZ | <p>EXTERNAL TRANSISTOR-NPN</p> <p>EXTERNAL TRANSISTOR-PNP</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Brown(BN) Buzzer</p> <p>Black(BK) Fuse Power</p> |
| DC/AC Built-in Sounder QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Gray(GR1) Ch 1 Sound Pattern Gray(GR2) Ch 2 Sound Pattern Gray(GR3) Ch 3 Sound Pattern Gray(GR4) Ch 4 Sound Pattern Gray(GR5) Ch 5 Sound Pattern Black(BK) [Steady] White(W) Fuse Power</p> <ul style="list-style-type: none"> • QTXX(M)L - Including WS/MM/WA type • QTXX(M)LF - Including WS/MM/WA type • QTXX(M)LS - Including WS/MM/WA type • QTXX(M)LR - Including WS/MM/WA type • QTXXL <p>↳ Lens Diameter 50(50mm) : QT50(M)L 70(70mm) : QT70(M)L</p> | DC/AC Built-in Sounder QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>Gray(GR1) Ch 1 Sound Pattern Gray(GR2) Ch 2 Sound Pattern Gray(GR3) Ch 3 Sound Pattern Gray(GR4) Ch 4 Sound Pattern Gray(GR5) Ch 5 Sound Pattern Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Black(BK) Common [Steady] White(W) Fuse Power</p> <ul style="list-style-type: none"> • QTXX(M)L - Including WS/MM/WA type • QTXX(M)LF - Including WS/MM/WA type • QTXX(M)LS - Including WS/MM/WA type • QTXX(M)LR - Including WS/MM/WA type • QTXXL <p>↳ Lens Diameter 50(50mm) : QT50(M)L 70(70mm) : QT70(M)L</p> |
| DC/AC Built-in Sounder Internal Switch QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>EXTERNAL CONTACT</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Brown(BN) Sound Pattern</p> <p>Black(BK) Fuse Power</p> <ul style="list-style-type: none"> • QTXX(M)L - Including WS/MM/WA type • QTXX(M)LF - Including WS/MM/WA type • QTXX(M)LS - Including WS/MM/WA type • QTXX(M)LR - Including WS/MM/WA type • QTXXL <p>↳ Lens Diameter 50(50mm) : QT50(M)L 70(70mm) : QT70(M)L</p> | DC/AC Built-in Sounder Internal Switch QT50ML QT50MLF QT50MLS QT50MLR QT50L QT50LF QT50LS QT50LR QT70ML QT70MLF QT70MLS QT70MLR QT70L QT70LF QT70LS QT70LR | <p>EXTERNAL TRANSISTOR-NPN</p> <p>Red(R) Layer 1 Amber(A) Layer 2 Green(G) Layer 3 Blue(B) Layer 4 Brown(BN) Sound Pattern</p> <p>Black(BK) Fuse Power</p> <ul style="list-style-type: none"> • QTXX(M)L - Including WS/MM/WA type • QTXX(M)LF - Including WS/MM/WA type • QTXX(M)LS - Including WS/MM/WA type • QTXX(M)LR - Including WS/MM/WA type • QTXXL <p>↳ Lens Diameter 50(50mm) : QT50(M)L 70(70mm) : QT70(M)L</p> |

CATALOGUE

USB/ Ethernet Signal Tower Lights

INNOVATION IN ALARM & SIGNAL

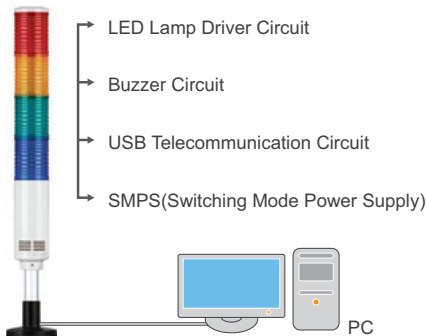


| | | |
|--------------------------------|-------|-----|
| USB Technical Information | | 116 |
| Product Specifications | | 119 |
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| Ethernet Technical Information | | 126 |
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Technical Data for USB 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 a USB port connection
- The USB communication cable is comprise 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 8-polyphonic clear melody, alarm sound, the type of sound can be chosen when ordered
- Supported OS: WINDOWS XP / WINDOWS 7 (32bit / 64bit)
- Supported Program: VC++, VB, Delphi(32bit), C#(64bit)



- 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

※ 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 | 0x00 | 0x01 |
| Communication Device | 0x02 | - |
| HID | 0x00 | 0x00 |
| HUB | 0x09 | 0x09 |
| Storage | 0x00 | 0x08 |
| Monitor | Same as HID | Same as HID |
| Print | - | 0x07 |

※ HID(Human Interface Devices)?

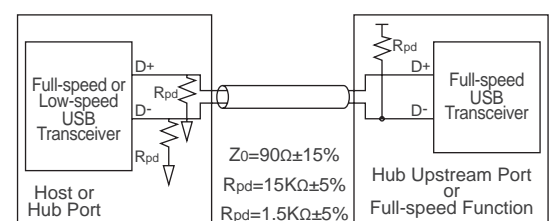
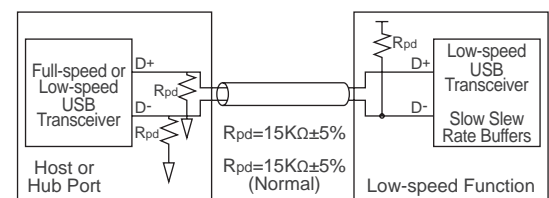
USB can be applied to various devices and can be classified by its use case. Among them is the USB classification called the Human Interface Device (HID). These devices can be used to control the PC. A typical HID device includes a mouse, keyboard, joystick, etc. The data from the devices is sent to 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.

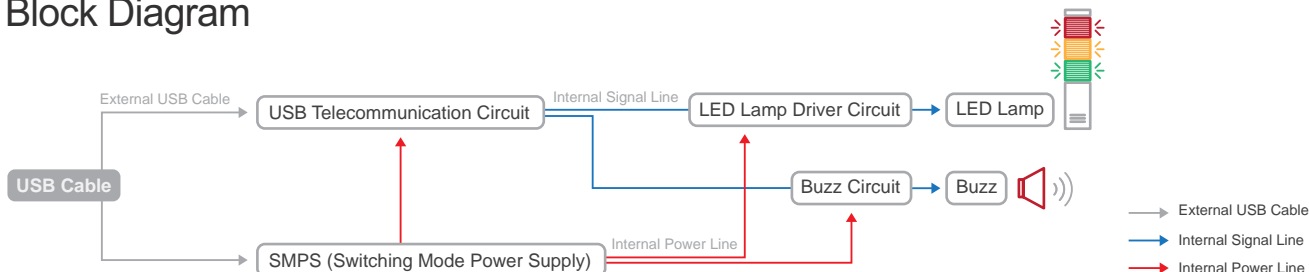


3. Communication data format of the USB product

Developers can use the programming format below to control the LED USB Tower light via PC. For detailed programming information, please see the reference code that is provided separately.

| PC to USB Tower Light | | | | |
|-----------------------|--------------------|-------------|--|-------------|
| No. | Type | ABB | Descript | Size(Bytes) |
| 1 | Device 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. 2. Field value helps to distinguish each USB tower light. 3. Reference - USB0 : 0x4970/ USB1 : 0x4971/ USB2 : 0x4972/ usb3 : 0x4973 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 Group | 1. Field for sound pattern designation. 0 : WS/ 1 : WP/ 2 : WM/ 3 : WA/ 4 : WB/ 5 : BZ/ 6 : WM(8)/ 7 : WA(8) 2. Total 8 groups are provided and each group has channel 1 to 5. | 1 |
| 3 | | R LAMP | 1. Field for controlling Red lamp. 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. 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. 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. 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. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care | 1 |

4. Block Diagram



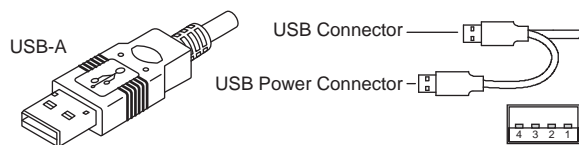
5. Specifications

| Category | Specifications | Category | Specifications |
|--------------|---|---------------|--|
| Tower light | <ul style="list-style-type: none"> Layer : 1-5 Voltage : DC12V Current : 0.300A Color : <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | Cable | <ol style="list-style-type: none"> VCC (Red) D- (White) D+ (Green) GND (Black) Shield |
| Speaker | <ul style="list-style-type: none"> Rated : 1W Volume : Max 85dB at 1m | Buzzer | <ul style="list-style-type: none"> Voltage : DC12V Current : 20mA Volume : Max 90dB at 1m |
| USB standard | <ul style="list-style-type: none"> Available on hosts that support USB 1.1 or higher DC5V/500mA rated (uses 2 USB port) | Input voltage | <ul style="list-style-type: none"> USB DC 5V×2PORT(Built-in 5V To 12V converter) |

Technical Data for USB Type LED Tower Light

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 |

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.

QLight_Lamptest_USB.exe

Test program

QUvc_dll.dll

Required library for test program

※ 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. Products 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 |
|----------------|---|
| 1 Lamp Control | - ON: Lamp turns on when the button is clicked - ON/OFF: Lamp flashes when the button is clicked - OFF: Lamp turns off when the button is clicked |
| 2 Sound Select | - 1ch-5ch: Has 5 sounds per model, turns on the chosen sound - Click “Sound off” button to turn off the sound |
| 3 Model Select | - WS : 5 warning sounds(mono) - WP : 5 special warning sounds(mono) - WM(1) : 5 Melodies(mono) - WA(1) : 5 alarms(mono) - WB : Software Buzzer 5 sounds(speaker type) - Buzzer : 5 Buzzer sounds - WM(8) : 5 Melodies(8 chord) - WA(8) : 5 alarms(8 chord) |
| 4 Index | - You can connect up to a maximum of 4 USB Tower lights per PC - Must be controlled by selecting Index0 - Index3 for controlling the USB tower light. The default is set to Index0 |

Specification List for USB LED Tower Lights



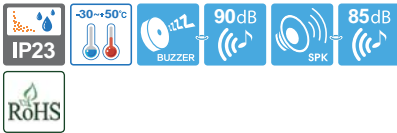
| Model number(series) | ST45ML-USB | ST45L-USB | ST56MEL-USB | ST56EL-USB | ST80MEL-USB | ST80EL-USB |
|--------------------------|--|---|--|---|--|---|
| Voltage | USB DC 5V | USB DC 5V | USB DC 5V | USB DC 5V | USB DC 5V | USB DC 5V |
| Dimension (mm) | Diameter | Ø45 | Ø45 | Ø56 | Ø56 | Ø80 |
| | Height | 198-358 | 412-572 | 192-352 | 406-566 | 230-390 |
| | Depth | | | | | |
| | | | | | | |
| Materials | Lens-AS | Lens-AS | Lens-AS | Lens-AS | Lens-AS | Lens-AS |
| | Housing-ABS | Housing-ABS | Housing-ABS | Housing-ABS | Housing-ABS | Housing-ABS |
| Layer | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | | |
| | LED Steady | | | | | |
| | LED Steady/Flashing | • | • | • | • | • |
| | LED Strobe | | | | | |
| 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 |
| | 5 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, SZ18, QL18, SL18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 |
| Protection rating | IP23 | IP23 | IP23 | IP23 | IP23 | IP23 |
| Certificates | | | | | | |
| Customization | Customized color arrangements, Wall mount brackets | Customized color arrangements, Customized pole length | Customized color arrangements, 70mm lens height, Wall mount brackets | Customized color arrangements, 70mm lens height, Customized pole length | Customized color arrangements, 70mm lens height, Wall mount brackets | Customized color arrangements, 70mm lens height, Customized pole length |
| Page | P120 | P120 | P121 | P121 | P122 | P122 |



| Model number(series) | QT50ML-USB | QT50L-USB | QT70ML-USB | QT70L-USB | STDEL-USB |
|--------------------------|--|---|--|---|---|
| Voltage | USB DC 5V | USB DC 5V | USB DC 5V | USB DC 5V | DC12V, DC24V AC110V, AC220V |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø70 | Ø80(Lens) Ø119(Housing) |
| | Height | 208-372 | 422-586 | 148-372 | 287-511 |
| | Depth | | | | |
| Materials | Lens-PC | Lens-PC | Lens-PC | Lens-PC | Lens-AS |
| | Housing-PC | Housing-PC | Housing-PC | Housing-PC | Housing-ABS |
| Layer | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | |
| | LED Steady | | | | |
| | LED Steady/Flashing | • | • | • | • |
| | LED Strobe | • | • | • | • |
| Sound & volume | 1 buzzer sound | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m | Max 90dB at 1m |
| | 5 Signal sounds | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m | Max 85dB at 1m |
| Layer color change | Yes | Yes | Yes | Yes | Yes |
| Mount bracket | Direct mount | Pole mount | Direct mount | Pole mount | Direct mount |
| Bracket | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 | - |
| Protection rating | IP54 | IP54 | IP54 | IP54 | IP54 |
| Certificates | | | | | |
| Customization | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized pole length | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized pole length | Customized color arrangements, 70mm lens height |
| Page | P124 | P124 | P125 | P125 | P123 |

ST45(M)L-USB

Ø45mm USB LED Tower Lights



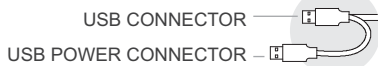
Connected to PC USB port without power supply unit



ST45(M)L-USB series

Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB18 | LW18 | QZ18 |
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| AI | PC | AI | PC |

* Please refer to page 162-167 for detailed dimensions.

Customization

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45

Common Specifications(ST45L-USB/ ST56EL-USB/ ST80EL-USB/ QT50L-USB/ QT70L-USB)

- Software controls the steady/flashing function
- Please refer to page 38-56 and 89-114 for detailed lamp specifications and page 160 for sound patterns
- 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
- Volume : Buzzer – Max 90dB at 1m / Sounder – Max 85db at 1m
- Compliant with RoHS directive

* Number of activated LED lights reference

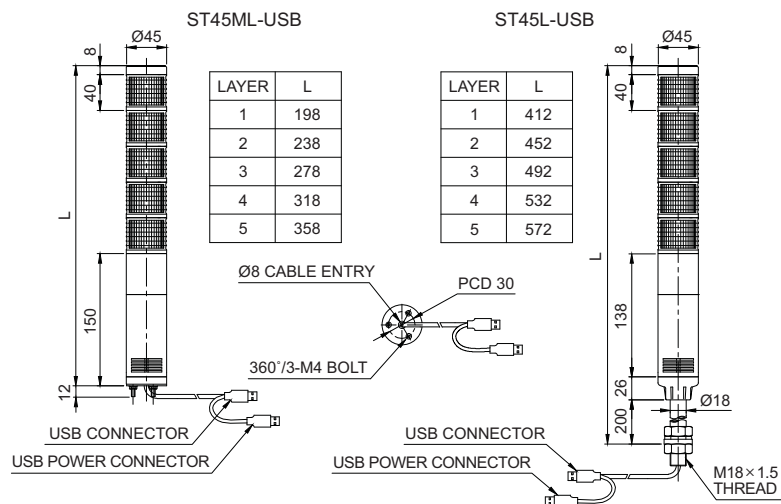
- ST45L-USB / ST45ML-USB : Three layers are activated simultaneously
- ST56EL-USB / ST56MEL-USB : Two layers are activated simultaneously
- ST80EL-USB / ST80MEL-USB : Two layers are activated simultaneously
- QT50L-USB / QT50ML-USB : Three layers are activated simultaneously
- QT70L-USB / QT70ML-USB : Two layers are activated simultaneously

ST45L-USB Ø45mm Pole Mount USB LED Tower Light

| Model number | Layer | Certificate | 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 | Layer | Certificate | 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 |

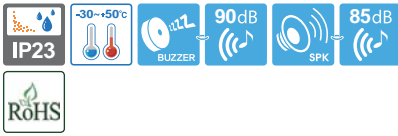
Ordering Specification

| | | | | | | |
|--|---|---|---|--|---|---|
| ST45L-USB-BZ | - | 3 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> ST45L-USB-BZ ST45L-USB-WS ST45L-USB-WM ST45L-USB-WA ST45ML-USB-BZ ST45ML-USB-WS ST45ML-USB-WM ST45ML-USB-WA | | <ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

* Mount brackets are available for the pole mount type(ST45L-USB series) only.

ST56(M)EL-USB

Ø56mm USB LED Tower Lights



Connected to PC USB port without power supply unit



ST56(M)EL-USB series

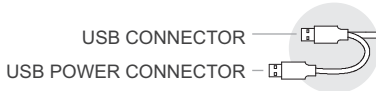


70mm lens height model is available upon request
(Model number : ST56(M)L-USB)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB18 | LW18 | QZ18 |
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.



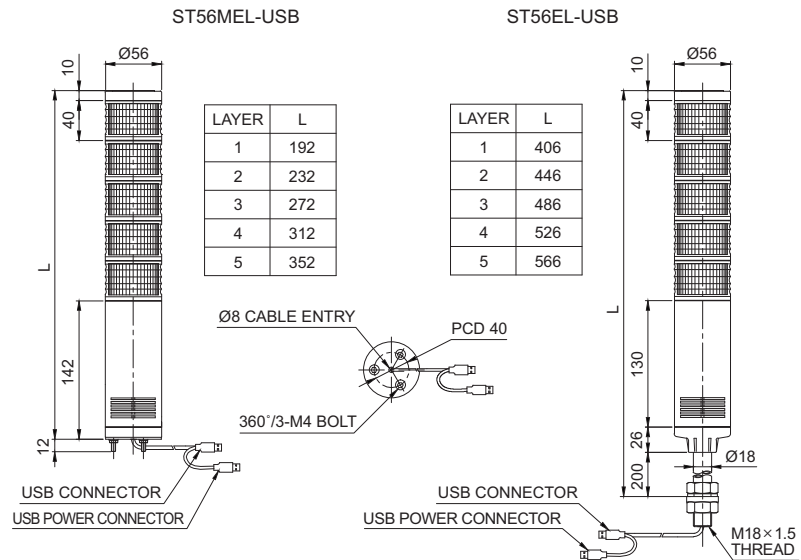
ST56EL-USB Ø56mm Pole Mount USB LED Tower Light

| Model number | Layer | Certificate | Color |
|---------------|------------------|-------------|---------------------------|
| ST56EL-USB-BZ | 5 Buzzer sounds | 1 layer | 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 |



Technical Diagram

(Units : mm)



ST56MEL-USB Ø56mm Direct Mount USB LED Tower Light

| Model number | Layer | Certificate | Color |
|----------------|------------------|-------------|---------------------------|
| ST56MEL-USB-BZ | 5 Buzzer sounds | 1 layer | 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 |



Customization

- Customized color arrangement available
- 70mm lens height(Standard : 40mm)
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45



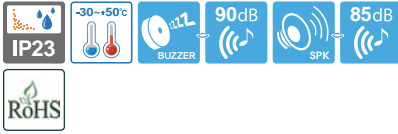
Ordering Specification

| | | | | | | |
|--|---|---|---|--|---|--|
| ST56EL-USB-WS | - | 3 | - | RAG | - | QL18 |
| [Model number] | | [Layer] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> ST56EL-USB-BZ ST56EL-USB-WS ST56EL-USB-WM ST56EL-USB-WA ST56MEL-USB-BZ ST56MEL-USB-WS ST56MEL-USB-WM ST56MEL-USB-WA | | <ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> None -Standard -Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

* Mount brackets are available for the pole mount type(ST56EL-USB series) only.

ST80(M)EL-USB

Ø80mm USB LED Tower Lights



Connected to PC USB port without power supply unit



ST80(M)EL-USB series

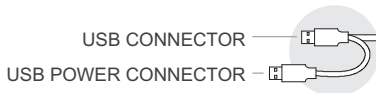


70mm lens height model is available upon request
(Model number : ST80(M)L-USB)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

| | | | |
|----------|-------|------|-------|
| Standard | LB24 | LW24 | QZ24 |
| | | | |
| Steel | Steel | PC | PC |
| SZ24 | QL24 | SL24 | QLA24 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



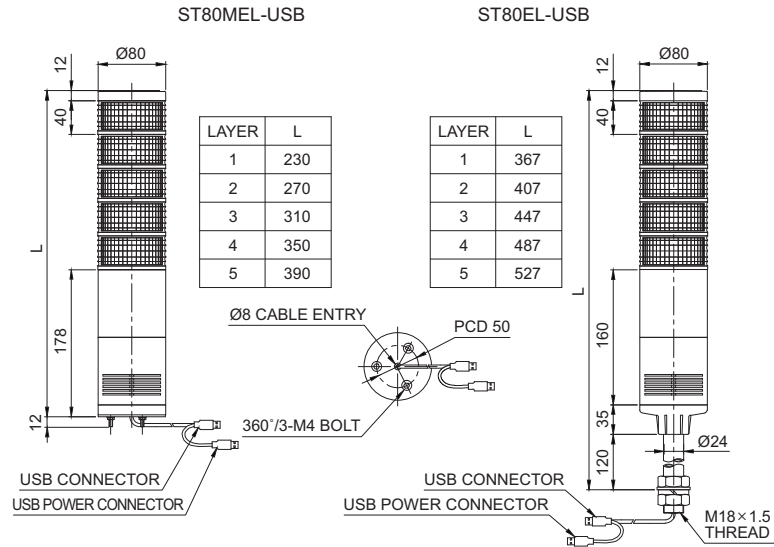
ST80EL-USB Ø80mm Pole Mount USB LED Tower Light

| Model number | Layer | Certificate | 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)



ST80MEL-USB Ø80mm Direct Mount USB LED Tower Light

| Model number | Layer | Certificate | 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 arrangement available
- 70mm lens height(Standard : 40mm)
- Customized pole length available
- Wall mount bracket available



Ordering Specification

| | | | | | | |
|--|---|---|---|--|---|--|
| ST80EL-USB-WS | - | 3 | - | RAG | - | QL24 |
| [Model number] | | [Layer] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> • ST80EL-USB-BZ • ST80EL-USB-WS • ST80EL-USB-WM • ST80EL-USB-WA | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • LB24 -LW24 • QZ24 -SZ24 • QL24 -SL24 • QLA24 |

※ Mount brackets are available for the pole mount type(ST80EL-USB series) only.

STDEL-USB

USB LED Steady/ Flashing Tower Light & Electric Horn Combination



USB controllable high signal sound



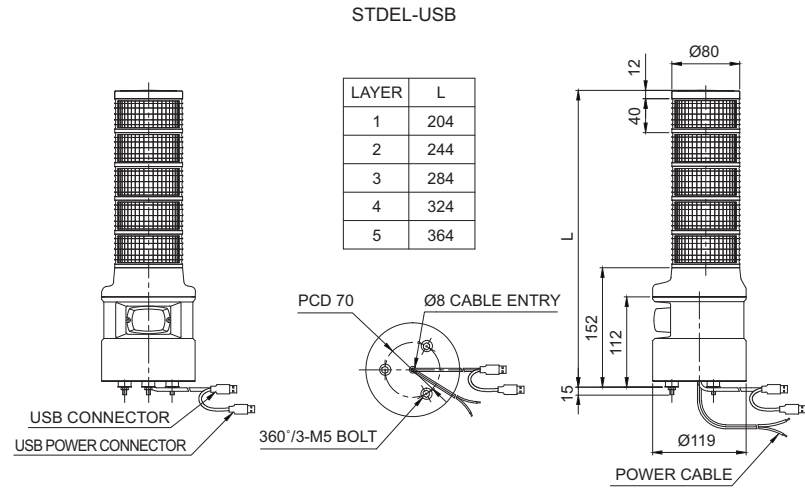
STDEL-USB

STDEL-USB Ø80mm USB Steady/ Flashing Tower Light & Electric Combination

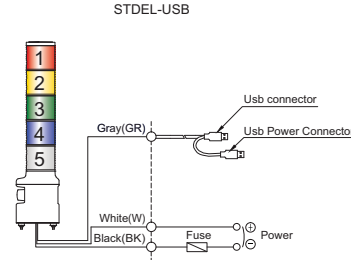
| Model number | Layer | Certificate | Color |
|--------------|------------------|-------------|---------------------------|
| STDEL-USB-WS | 5 Warning sounds | 1 layer | 1 layer : ●R |
| STDEL-USB-WM | 5 Melodies | 2 layers | 2 layers : ●R ●G |
| STDEL-USB-WA | 5 Alarms | 3 layers | 3 layers : ●R ●A ●G |
| | | 4 layers | 4 layers : ●R ●A ●G ●B |
| | | 5 layers | 5 layers : ●R ●A ●G ●B ●W |

Technical Diagram

(Units : mm)

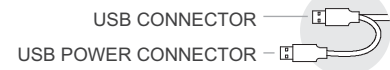


Wiring Instructions



Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- USB Cable : Connect both USB connector and USB power connector to PC



Customization

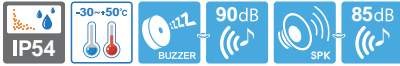
- Customized color arrangement available
- 70mm lens height(Standard : 40mm)

Ordering Specification

| STDEL-USB-WS | - | 3 | - | 24 | - | RAG |
|--|---|---|---|--|---|--|
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> STDEL-USB-WS STDEL-USB-WM STDEL-USB-WA | | <ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers | | <ul style="list-style-type: none"> 12-DC12V 24-DC24V 110-AC110V 220-AC220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

QT50(M)L-USB

Ø50mm USB LED Tower Lights



QT50(M)L-USB series

Product of LED Strobe, LED Simulated revolving module

- LED Steady/ Flashing is standard
- LED Strobe and LED Simulated revolving module are available upon request

| Type | Model number |
|-------------------------|---------------------------|
| LED Strobe | QT50MLS-USB(Direct mount) |
| | QT50LS-USB(Pole mount) |
| LED Simulated revolving | QT50MLR-USB(Direct mount) |
| | QT50LR-USB(Pole mount) |

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ18 | QL18 | SL18 | QLA18 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

QT50L-USB Ø50mm Pole Mount USB Tower Light

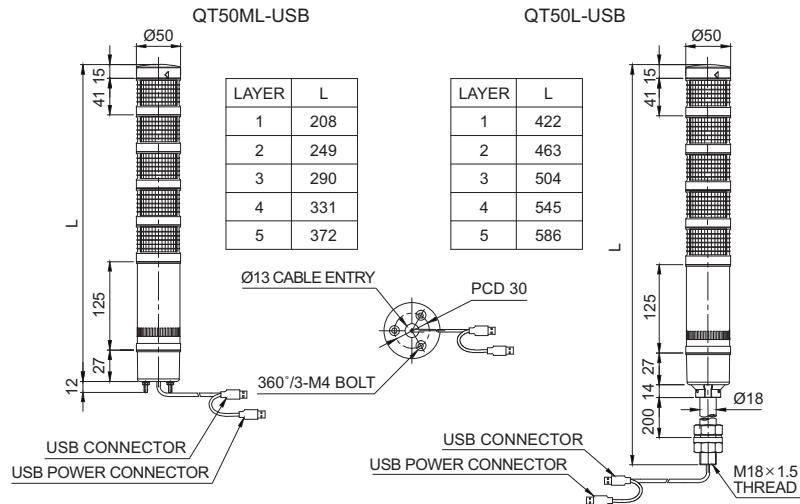
| Model number | Layer | Certificate | Color |
|--------------|------------------|-------------|---------------------------|
| QT50L-USB-BZ | 5 Buzzer sounds | 1 layer | 1 layer : ●R |
| QT50L-USB-WS | 5 Warning sounds | 2 layers | 2 layers : ●R ●G |
| QT50L-USB-WM | 5 Melodies | 3 layers | 3 layers : ●R ●A ●G |
| QT50L-USB-WA | 5 Alarms | 4 layers | 4 layers : ●R ●A ●G ●B |
| | | 5 layers | 5 layers : ●R ●A ●G ●B ●W |

• Modules : LED Module + USB Buzzer/Sound Module + Base Module(BS) + Pole Module(PB)



Technical Diagram

(Units : mm)



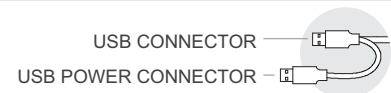
QT50ML-USB Ø50mm Direct Mount USB Tower Light

| Model number | Layer | Certificate | Color |
|---------------|------------------|-------------|---------------------------|
| QT50ML-USB-BZ | 5 Buzzer sounds | 1 layer | 1 layer : ●R |
| QT50ML-USB-WS | 5 Warning sounds | 2 layers | 2 layers : ●R ●G |
| QT50ML-USB-WM | 5 Melodies | 3 layers | 3 layers : ●R ●A ●G |
| QT50ML-USB-WA | 5 Alarms | 4 layers | 4 layers : ●R ●A ●G ●B |
| | | 5 layers | 5 layers : ●R ●A ●G ●B ●W |

• Modules : LED Module + USB Buzzer/Sound Module + Base Module(BS)



- Connect both USB connector and USB power connector to PC



Customization

- LED strobe, LED simulated revolving module are available upon request
- Customized color arrangement available
- Beige color
- Customized pole length available
- Wall mount bracket available



Ordering Specification

| | | | | | | |
|--|---|---|---|--|---|--|
| QT50L-USB-BZ | - | 3 | - | RAG | - | LB18 |
| [Model number] | | [Layer] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> • QT50L-USB-BZ • QT50L-USB-WS • QT50L-USB-WM • QT50L-USB-WA • QT50ML-USB-BZ • QT50ML-USB-WS • QT50ML-USB-WM • QT50ML-USB-WA | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

※ Mount brackets are available for the pole mount type(QT50L-USB series) only.

QT70(M)L-USB

Ø70mm USB LED Tower Lights



QT70(M)L-USB series

Product of LED Strobe, LED Simulated revolving module

- LED Steady/ Flashing is standard
- LED Strobe and LED Simulated revolving module are available upon request

| Type | Model number |
|-------------------------|---------------------------|
| LED Strobe | QT70MLS-USB(Direct mount) |
| | QT70LS-USB(Pole mount) |
| LED Simulated revolving | QT70MLR-USB(Direct mount) |
| | QT70LR-USB(Pole mount) |

Mounting Bracket

| Standard | LB24 | LW24 | QZ24 |
|----------|-------|------|-------|
| | | | |
| Steel | Steel | PC | PC |
| SZ24 | QL24 | SL24 | QLA24 |
| | | | |
| Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

QT70L-USB Ø70mm Pole Mount USB Tower Light

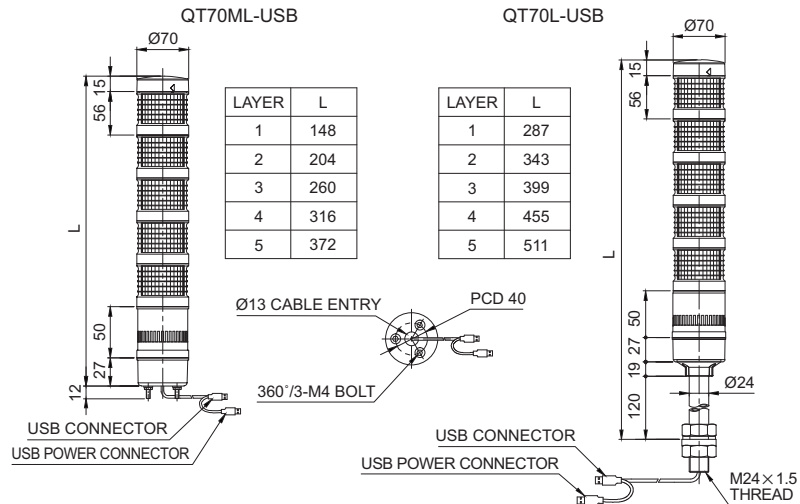
| Model number | Layer | Certificate | Color |
|--------------|------------------|-------------|---------------------------|
| QT70L-USB-BZ | 5 Buzzer sounds | 1 layer | 1 layer : ●R |
| QT70L-USB-WS | 5 Warning sounds | 2 layers | 2 layers : ●R ●G |
| QT70L-USB-WM | 5 Melodies | 3 layers | 3 layers : ●R ●A ●G |
| QT70L-USB-WA | 5 Alarms | 4 layers | 4 layers : ●R ●A ●G ●B |
| | | 5 layers | 5 layers : ●R ●A ●G ●B ●W |

• Modules : LED Module + USB Buzzer/Sound Module + Base Module(BS) + Pole Module(PB)



Technical Diagram

(Units : mm)



QT70ML-USB Ø70mm Direct Mount USB Tower Light

| Model number | Layer | Certificate | Color |
|---------------|------------------|-------------|---------------------------|
| QT70ML-USB-BZ | 5 Buzzer sounds | 1 layer | 1 layer : ●R |
| QT70ML-USB-WS | 5 Warning sounds | 2 layers | 2 layers : ●R ●G |
| QT70ML-USB-WM | 5 Melodies | 3 layers | 3 layers : ●R ●A ●G |
| QT70ML-USB-WA | 5 Alarms | 4 layers | 4 layers : ●R ●A ●G ●B |
| | | 5 layers | 5 layers : ●R ●A ●G ●B ●W |

• Modules : LED Module + USB Buzzer/Sound Module + Base Module(BS)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Customization

- LED strobe, LED simulated revolving module are available upon request
- Customized color arrangement available
- Beige color
- Customized pole length available
- Wall mount bracket available



| | | | | | | |
|--|---|---|---|--|---|--|
| QT70L-USB-WS | - | 3 | - | RAG | - | QL24 |
| [Model number] | | [Layer] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> • QT70L-USB-BZ • QT70L-USB-WS • QT70L-USB-WM • QT70L-USB-WA • QT70ML-USB-BZ • QT70ML-USB-WS • QT70ML-USB-WM • QT70ML-USB-WA | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • LB24 -LW24 • QZ24 -SZ24 • QL24 -SL24 • QLA24 |

※ Mount brackets are available for the pole mount type(QT70L-USB series) only.

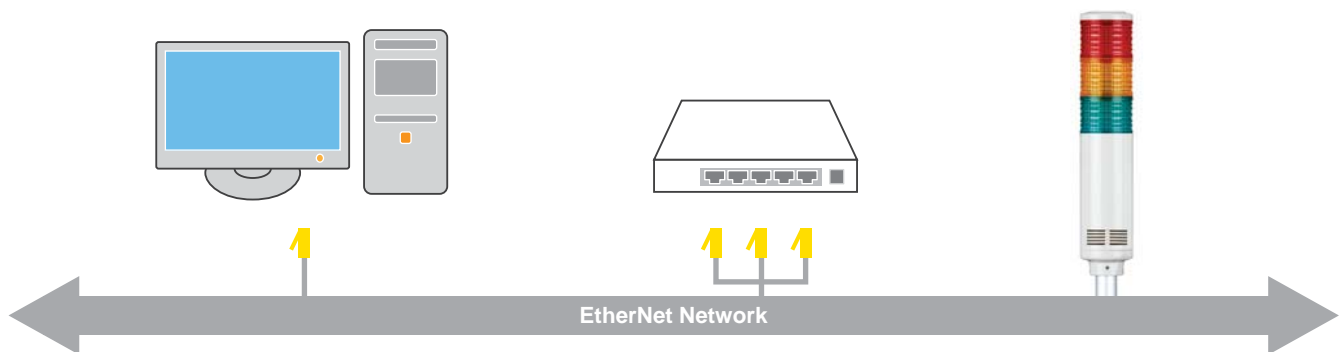
Technical Data of Ethernet LED Tower Light

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) to utilize on various applications of a PC, and a sample program (VC ++) is available for testing purpose.
- Communication speed : 10M/ half duplex method

※ The figure below shows the connection of the ETN tower light.



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.

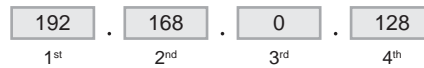
2. What is TCP/IP Protocol?

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.

Technical Data of Ethernet LED 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 host. 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.



| No. | Description | Command |
|-----------------|---|---------------------------|
| 1 st | 1 st address, Classes are A,B,C,D,E. | |
| | A CLASS : Large network | A CLASS address : 1-127 |
| | B CLASS : Large network | B CLASS address : 128-191 |
| | C CLASS : Small network(private IP) | C CLASS address : 192-223 |
| | D CLASS : Multi cast(use in designated group) | D CLASS address : 224-239 |
| | E CLASS : Stand by | E CLASS address : 240-255 |
| 2 nd | 2 nd address, Being Network ID or Host ID depending on 1 st Address | |
| 3 rd | 3 rd address, Being Network ID or Host ID depending on 1 st Address | |
| 4 th | 4 th address, Being Network ID or Host ID depending on 1 st Address | |



IP address assignment by class

| GROUP | 1 st address | 2 nd address | 3 rd address | 4 th 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 devices. 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 an 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?

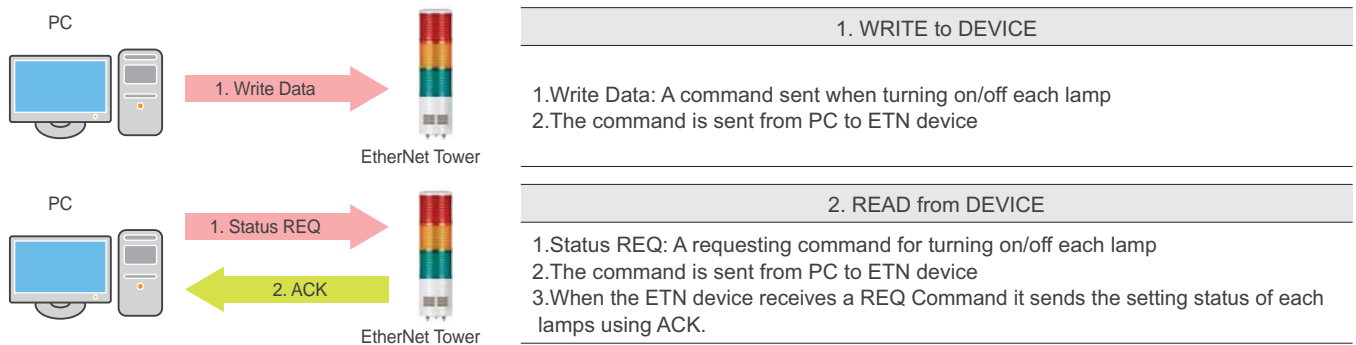
A port (noun) is a "logical connection place" and specifically, using the Internet's protocol and TCP/IP, the way a client's program specifies a particular server program on a computer in a network. Higher-level applications that use TCP/IP such as the Web protocol, Hypertext Transfer Protocol, have 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.

Technical Data of Ethernet LED Tower Light

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 are 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.

+ Technical data download

Manual
[Download](#)

technical diagram
[Download](#)

Technical diagram
 Auto CAD file
[Download](#)

PDF catalogue
[Download](#)

Test Program
[Download](#)

Manual & library
[Download](#)

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

Technical Data of Ethernet LED Tower Lamp

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 “Read” 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 button
- The port is set to “20000” 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 following below.



Test Program

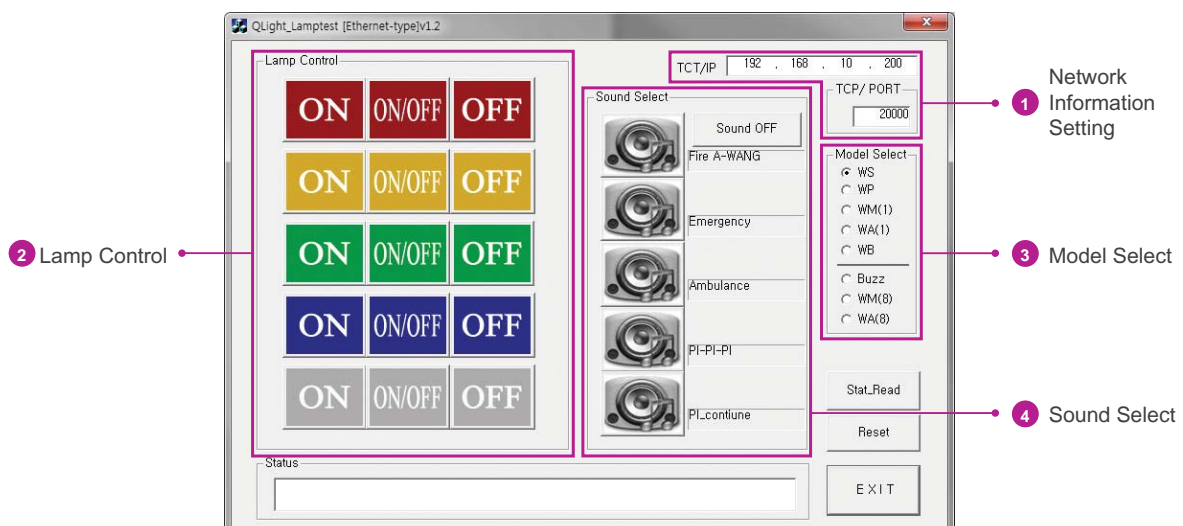


Library required for the test program

8. Run the “QLight_Lamptest_TCP” program.

| Article | Detailed specification |
|-------------------------------|---|
| 1 Network Information Setting | - Input port on TCP/PORT and IP address on TCP/IP that set on Ethernet tower lights |
| 2 Lamp Control | - ON : Click the button Lamp ON - ON/OFF : Click the button Lamp Flash - OFF : Click the button Lamp OFF |
| 3 Model Select | - WS : 5 warning sounds(mono) - WP : 5 special warning sounds(mono) - WM(1) : 5 Melodies(mono) - WA(1) : 5 alarms(mono) - WB : Software Buzzer 5 sounds(speaker type) - Buzzer : 5 Buzzer sounds - WM(8) : 5 Melodies(8 chord) - WA(8) : 5 alarms(8 chord) |
| 4 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(series) | ST45ML-ETN | ST45L-ETN | ST56MEL-ETN | ST56EL-ETN | ST80MEL-ETN | ST80EL-ETN |
|--------------------------|---|--|--|---|--|---|
| Voltage | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V | DC12V, DC24V AC110V, AC220V |
| Dimension (mm) | Diameter | Ø45 | Ø45 | Ø56 | Ø56 | Ø80 |
| | Height | 244-404 | 458-618 | 257-517 | 471-731 | 230-390 |
| | Depth | | | | | |
| Materials | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS | Lens-AS Housing-ABS |
| Layer | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | | | |
| | 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 | Max 90dB at 1m | Max 90dB at 1m |
| | 5 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, SZ18, QLA18 | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QLA24 |
| Protection rating | IP23 | IP23 | IP23 | IP23 | IP23 | IP23 |
| Certificates | - | - | CE, KCC | CE, KCC | - | - |
| Customization | Customized color arrangements, Wall mount brackets | Customized color arrangements, Customized pole length | Customized color arrangements, 70mm lens height, Wall mount brackets | Customized color arrangements, 70mm lens height, Customized pole length | Customized color arrangements, 70mm lens height, Wall mount brackets | Customized color arrangements, 70mm lens height, Customized pole length |
| Page | P131 | P131 | P132 | P132 | P133 | P133 |



| Model number(series) | QT50ML-ETN | QT50L-ETN | QT70ML-ETN | QT70L-ETN |
|--------------------------|--|---|--|---|
| Voltage | DC12V, DC24V | DC12V, DC24V | DC12V, DC24V | DC12V, DC24V |
| Dimension (mm) | Diameter | Ø50 | Ø50 | Ø70 |
| | Height | 208-372 | 422-586 | 148-372 |
| | Depth | | | |
| Materials | Lens-PC Housing-PC | Lens-PC Housing-PC | Lens-PC Housing-PC | Lens-PC Housing-PC |
| Layer | 1-5 Layers | 1-5 Layers | 1-5 Layers | 1-5 Layers |
| Light source & Operation | Bulb Steady/Flashing | | | |
| | 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 |
| | 5 Signal sounds | Max 85dB at 1m | Max 85dB at 1m | Max 90dB at 1m |
| Layer color change | Yes | Yes | Yes | Yes |
| Mount bracket | Direct mount | Pole mount | Direct mount | Pole mount |
| Bracket | TWS45, TWA45 | LB18, LW18, QZ18, SZ18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QLA24 |
| Protection rating | IP54 | IP54 | IP54 | IP54 |
| Certificates | - | - | - | - |
| Customization | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized Pole Length | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets | Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized Pole Length |
| Page | P134 | P134 | P135 | P135 |

ST45(M)L-ETN

Ø45mm Ethernet LED Tower Lights



Can Control Remotely Through Internet or Local Area Network



ST45(M)L-ETN series

Wiring Instructions

| | | |
|----------|-------|-------|
| Standard | LB18 | LW18 |
| | | |
| Steel | Steel | PC |
| QZ18 | SZ18 | QLA18 |
| | | |
| PC | AI | PC |

※ Please refer to page 162-167 for detailed dimensions.

Mounting Bracket

- Customized color arrangement available
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket TWS45

Wall Mount Bracket TWA45

Common Specifications(ST45L-ETN/ ST56EL-ETN/ ST80EL-ETN/ QT50L-ETN/ QT70L-ETN)

- Software controls the steady/flashing function
- Please refer to page 38-56 and 89-114 for detailed lamp specifications and page 160 for sound patterns
- Ethernet port and power cable are provided with product.
- Volume : Buzzer – Max 90dB at 1m/ Sounder – Max 85dB at 1m

ST45(M)L-ETN Ø45mm Pole Mount Ethernet Tower Light

| Model number | Layer | Voltage | Current | Certificate | Color |
|-------------------------|-------|------------------------------------|--------------------------------------|-------------|--|
| ST45L-ETN ST45ML-ETN | 1 | DC12V DC24V AC110V AC220V | 0.200A 0.137A 0.053A 0.027A | - | • R-Red |
| | 2 | DC12V DC24V AC110V AC220V | 0.210A 0.145A 0.056A 0.029A | | • R-Red • G-Green |
| | 3 | DC12V DC24V AC110V AC220V | 0.220A 0.153A 0.058A 0.030A | | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V AC110V AC220V | 0.230A 0.161A 0.061A 0.032A | | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V AC110V AC220V | 0.240A 0.169A 0.063A 0.033A | | • R-Red • A-Amber • G-Green • B-Blue • W-White |

Signal Sound Current (Per Layer)

| | | | | |
|---------|--------|--------|--------|--------|
| Voltage | DC12V | DC24V | AC110V | AC220V |
| Current | 0.424A | 0.271A | 0.094A | 0.048A |

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 standard : UL 1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Ordering Specification

| | | | | | | | | |
|--|---|---|---|--|---|--|---|--|
| ST45L-ETN-WS | - | 3 | - | 24 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mount bracket] |
| • ST45L-ETN-BZ • ST45L-ETN-WS • ST45L-ETN-WM • ST45L-ETN-WA • ST45ML-ETN-BZ • ST45ML-ETN-WS • ST45ML-ETN-WM • ST45ML-ETN-WA | | • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QLA18 |

※ Mount brackets are available for the pole mount type(ST45L-ETN series) only.

ST56(M)EL-ETN

Ø56mm Ethernet LED Tower Lights



Remote control through internet or local area network



ST56(M)EL-ETN series



70mm lens height model is available upon request (Model number : ST56(M)L-ETN)



Mounting Bracket

| | | |
|----------|-------|-------|
| Standard | LB18 | LW18 |
| | | |
| Steel | Steel | PC |
| QZ18 | SZ18 | QLA18 |
| | | |
| PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



ST56EL-ETN Ø56mm Pole Mount Ethernet Tower Light

• Certificates : KCC Compliant

| Model number | Layer | Voltage | Current | Certificate | Color |
|---------------------------|-------|------------------------------------|--------------------------------------|----------------|--|
| ST56EL-ETN ST56MEL-ETN | 1 | DC12V DC24V AC110V AC220V | 0.216A 0.147A 0.056A 0.031A | DC24V only | • R-Red |
| | 2 | DC12V DC24V AC110V AC220V | 0.244A 0.168A 0.063A 0.034A | | • R-Red • G-Green |
| | 3 | DC12V DC24V AC110V AC220V | 0.272A 0.189A 0.069A 0.036A | | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V AC110V AC220V | 0.300A 0.210A 0.076A 0.039A | | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V AC110V AC220V | 0.328A 0.231A 0.082A 0.041A | | • R-Red • A-Amber • G-Green • B-Blue • W-White |

Signal Sound Current (Per Layer)

| Voltage | DC12V | DC24V | AC110V | AC220V |
|---------|--------|--------|--------|--------|
| Current | 0.424A | 0.271A | 0.094A | 0.048A |



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 standard : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable



- Customized color arrangement available
- 70mm lens height(Standard : 40mm)
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45



Ordering Specification

| | | | | | | | | |
|--|---|---|---|--|---|--|---|--|
| ST56EL-ETN-WS | - | 3 | - | 220 | - | RAG | - | QZ18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mount bracket] |
| • ST56EL-ETN-BZ • ST56EL-ETN-WS • ST56EL-ETN-WM • ST56EL-ETN-WA • ST56MEL-ETN-BZ • ST56MEL-ETN-WS • ST56MEL-ETN-WM • ST56MEL-ETN-WA | | • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | • R-Red • A-Amber • G-Green • B-Blue • W-White | | • None • Standard • Bracket • LB18 -LW18 • QZ18 -SZ18 • QLA18 |

※ Mount brackets are available for the pole mount type(ST56EL-ETN series) only.

ST80(M)EL-ETN

Ø80mm Ethernet LED Tower Lights



Remote control through internet or local area network



ST80(M)EL-ETN series



70mm lens height model is available upon request (Model number : ST80(M)L-ETN)



Mounting Bracket

| Standard | LB24 | LW24 |
|----------|-------|-------|
| | | |
| Steel | Steel | PC |
| QZ24 | SZ24 | QLA24 |
| | | |
| PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



ST80EL-ETN Ø80mm Pole Mount Ethernet Tower Light

| Model number | Layer | Voltage | Current | Certificate | Color |
|---------------------------|-------|------------------------------------|--------------------------------------|-------------|--|
| ST80EL-ETN ST80MEL-ETN | 1 | DC12V DC24V AC110V AC220V | 0.228A 0.154A 0.059A 0.032A | - | R-Red |
| | 2 | DC12V DC24V AC110V AC220V | 0.258A 0.179A 0.067A 0.035A | | R-Red G-Green |
| | 3 | DC12V DC24V AC110V AC220V | 0.288A 0.204A 0.075A 0.038A | | R-Red A-Amber G-Green |
| | 4 | DC12V DC24V AC110V AC220V | 0.318A 0.229A 0.083A 0.041A | | R-Red A-Amber G-Green B-Blue |
| | 5 | DC12V DC24V AC110V AC220V | 0.348A 0.254A 0.091A 0.044A | | R-Red A-Amber G-Green B-Blue W-White |

Signal Sound Current (Per Layer)

| Voltage | DC12V | DC24V | AC110V | AC220V |
|---------|--------|--------|--------|--------|
| Current | 0.424A | 0.271A | 0.094A | 0.048A |



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 standard : UL 1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable



Customization

- Customized color arrangement available
- 70mm lens height(Standard : 40mm)
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket
TWS45



Wall Mount Bracket
TWA45



Ordering Specification

| | | | | | | | | |
|--|---|---|---|--|---|--|---|---|
| ST80EL-ETN-WS | - | 3 | - | 24 | - | RAG | - | QZ24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> • ST80EL-ETN-BZ • ST80EL-ETN-WS • ST80EL-ETN-WM • ST80EL-ETN-WA • ST80MEL-ETN-BZ • ST80MEL-ETN-WS • ST80MEL-ETN-WM • ST80MEL-ETN-WA | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | | <ul style="list-style-type: none"> • None • Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QLA24 |

※ Mount brackets are available for the pole mount type(ST80EL-ETN series) only.

QT50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Remote control through internet or local area network



QT50(M)L-ETN series

QT50L-ETN Ø50mm Pole Mount Ethernet Tower Light

| Model number | Layer | Voltage | Current | Certificate | Color |
|-------------------------|-------|----------------|------------------|-------------|--|
| QT50L-ETN QT50ML-ETN | 1 | DC12V DC24V | 0.208A 0.107A | - | • R-Red |
| | 2 | DC12V DC24V | 0.281A 0.152A | | • R-Red • G-Green |
| | 3 | DC12V DC24V | 0.354A 0.196A | | • R-Red • A-Amber • G-Green |
| | 4 | DC12V DC24V | 0.427A 0.240A | | • R-Red • A-Amber • G-Green • B-Blue |
| | 5 | DC12V DC24V | 0.501A 0.284A | | • R-Red • A-Amber • G-Green • B-Blue • W-White |

Signal Sound Current (Per Layer)

| | | |
|---------|--------|--------|
| Voltage | DC12V | DC24V |
| Current | 0.198A | 0.115A |

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 standard : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Customization

- Customized color arrangement available
- Beige color
- LED Strobe, LED simulated revolving module are available upon request
- Customized pole length available
- Wall mount bracket available



Mounting Bracket

| | | |
|----------|-------|-------|
| Standard | LB18 | LW18 |
| | | |
| Steel | Steel | PC |
| QZ18 | SZ18 | QLA18 |
| | | |
| PC | Al | PC |

* Please refer to page 162-167 for detailed dimensions.

Ordering Specification

| | | | | |
|--|---|--|--|---|
| QT50L-ETN-WS | 3 | 24 | RAG | QZ18 |
| [Model number] | [Layer] | [Voltage] | [Color] | [Mount bracket] |
| <ul style="list-style-type: none"> • QT50L-ETN-BZ • QT50L-ETN-WS • QT50L-ETN-WM • QT50L-ETN-WA • QT50ML-ETN-BZ • QT50ML-ETN-WS • QT50ML-ETN-WM • QT50ML-ETN-WA | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White | <ul style="list-style-type: none"> • None • Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QLA18 |

* Mount brackets are available for the pole mount type(QT50L-ETN series) only.

QT70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Remote control through internet or local area network



QT70(M)L-ETN series



QT70L-ETN Ø70mm Pole Mount Ethernet Tower Light

| Model number | Layer | Voltage | Current | Certificate | Color |
|-------------------------|-------|----------------|------------------|-------------|--|
| QT70L-ETN QT70ML-ETN | 1 | DC12V DC24V | 0.212A 0.113A | - | ● R-Red |
| | 2 | DC12V DC24V | 0.290A 0.160A | | ● R-Red ● G-Green |
| | 3 | DC12V DC24V | 0.378A 0.209A | | ● R-Red ● A-Amber ● G-Green |
| | 4 | DC12V DC24V | 0.466A 0.259A | | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| | 5 | DC12V DC24V | 0.554A 0.308A | | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

Signal Sound Current (Per Layer)

| | | |
|---------|--------|--------|
| Voltage | DC12V | DC24V |
| Current | 0.198A | 0.115A |



- 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 standard : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable



Customization

- Customized color arrangement available
- Beige color
- LED Strobe, LED simulated revolving module are available upon request
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket
TWS80



Wall Mount Bracket
TWA80



Mounting Bracket

| | | |
|----------|-------|-------|
| Standard | LB18 | LW18 |
| | | |
| Steel | Steel | PC |
| QZ18 | SZ18 | QLA18 |
| | | |
| PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.



Ordering Specification

| | | | | | | | | |
|--|---|---|---|--|---|--|---|--|
| QT70L-ETN-WS | - | 3 | - | 24 | - | RAG | - | QZ24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mount bracket] |
| <ul style="list-style-type: none"> • QT70L-ETN-BZ • QT70L-ETN-WS • QT70L-ETN-WM • QT70L-ETN-WA • QT70ML-ETN-BZ • QT70ML-ETN-WS • QT70ML-ETN-WM • QT70ML-ETN-WA | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QLA24 |

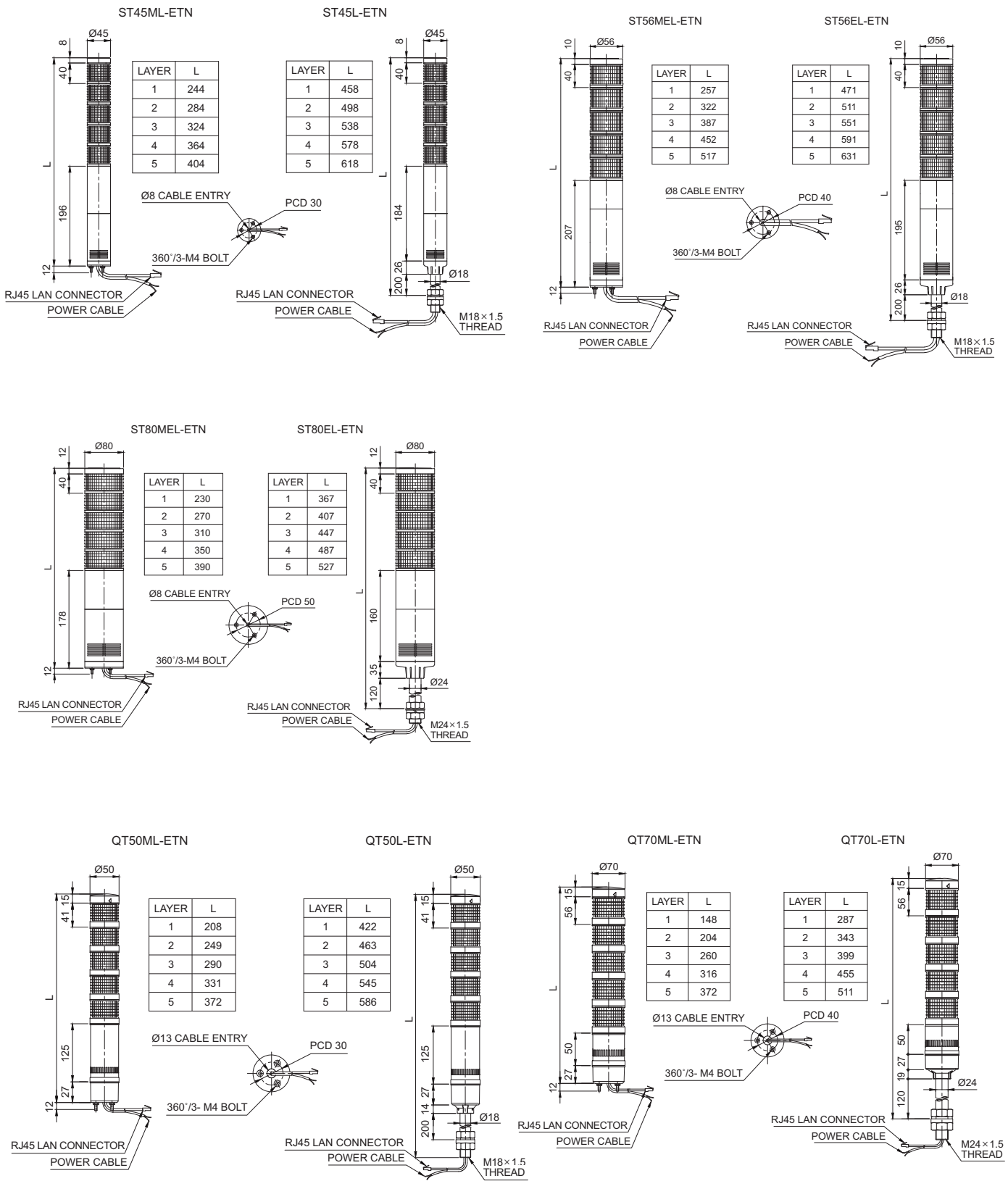
※ Mount brackets are available for the pole mount type(QT70L-ETN series) only.

ST-ETN/ QT-ETN series



Technical Diagram

(Units : mm)



CATALOGUE

Wireless Network System

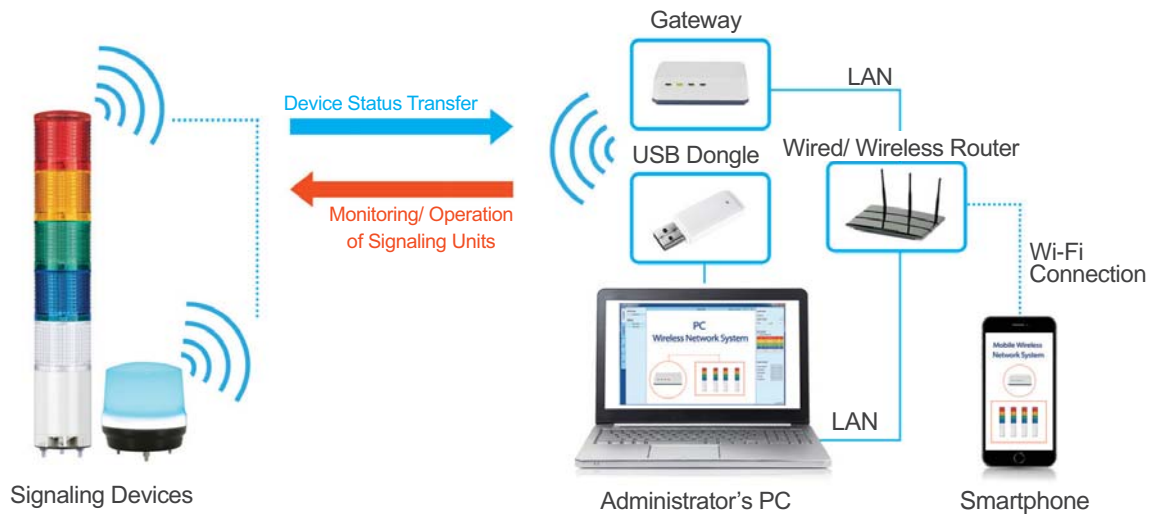
INNOVATION IN ALARM & SIGNAL



| | |
|------------------------------|-----|
| Technical Information | 138 |
| Product Specifications | 144 |
| Product Information | 145 |

Wireless Network System Features

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)
- Conform to International Standard IEEE802.15.4g

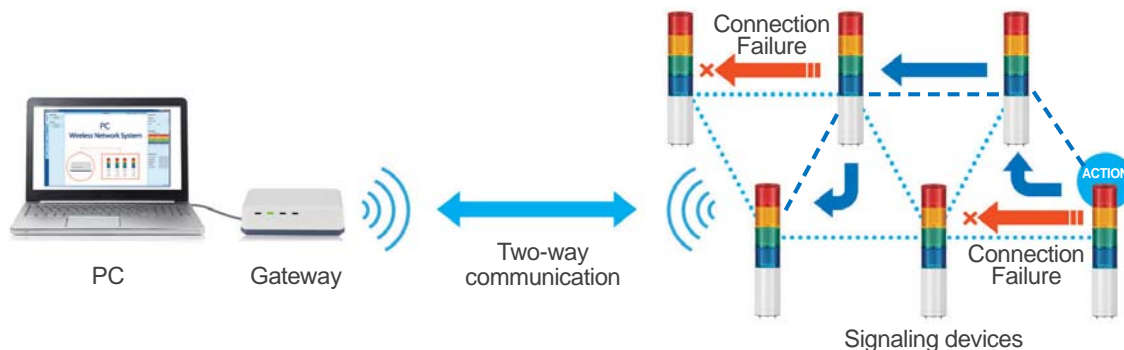
• What is ZigBee?

ZigBee is a representative technology for low-power, low-cost wireless sensor network and has standardized the top layer Protocol and Application based on the IEEE 802.15.4 working group and PHY / MAC layer in 2003. IEEE802.15.1(Bluetooth), IEEE802.15.3(UWB), IEEE802.15.4(ZigBee) are the most common standards for Wireless Personal Area Network(WPAN). ZigBee uses three types of frequency bands: 2.4GHz, 868MHz, and 915MHz, with transmission rates of 250kbps, 20kbps, and 40kbps. Qlight network products uses 2.4GHz frequency band which has the fastest transmission speed.

Wireless Network System Application

◆ 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-effective by requiring no additional cable when change the layout of production lines



Wireless Network System Concept

· Components

| Application | Gateway | USB Dongle | Signaling Devices |
|-------------|---------|------------|-------------------|
| | | | |

1. Connection Types

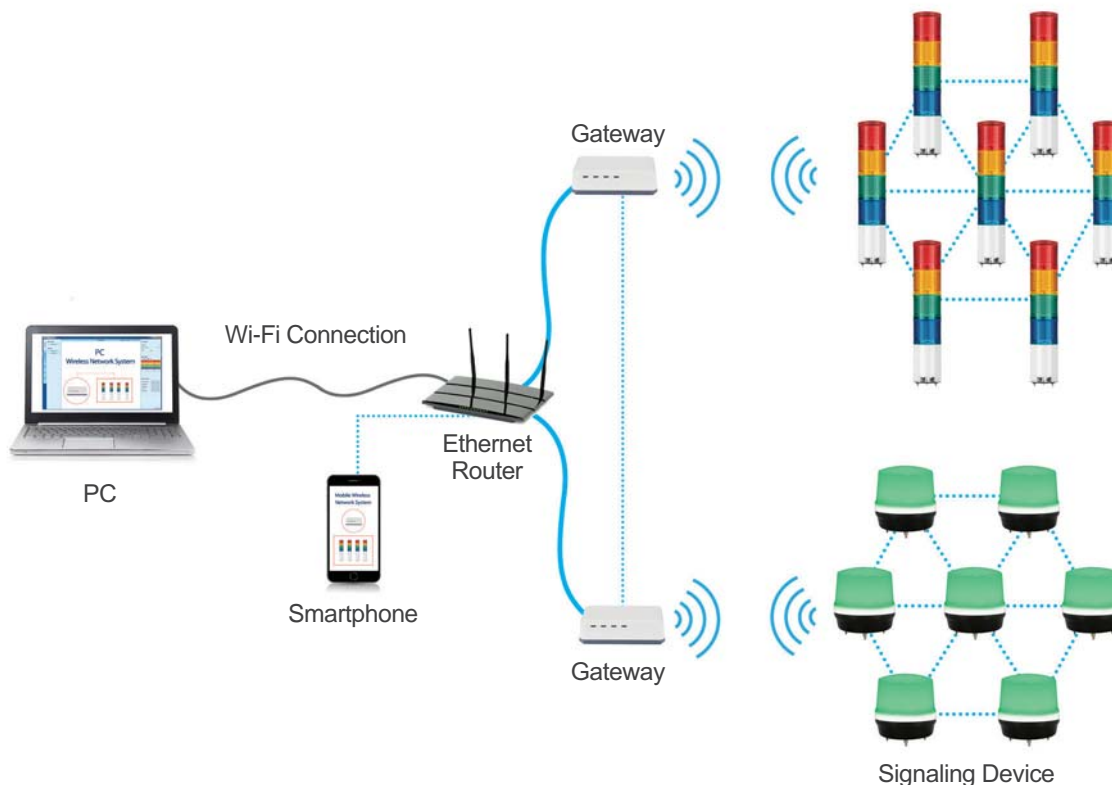
1) Connection via USB Dongle

- Easy installation and operation by plugging it to a PC, controls and monitors up to 32 wireless devices.
- Suitable for a single or small-scaled wireless network connection needs.



2) Connection via Gateway

- Connecting multiple gateways allows 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.

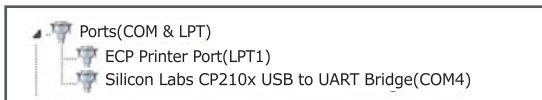


Wireless Network System Instructions

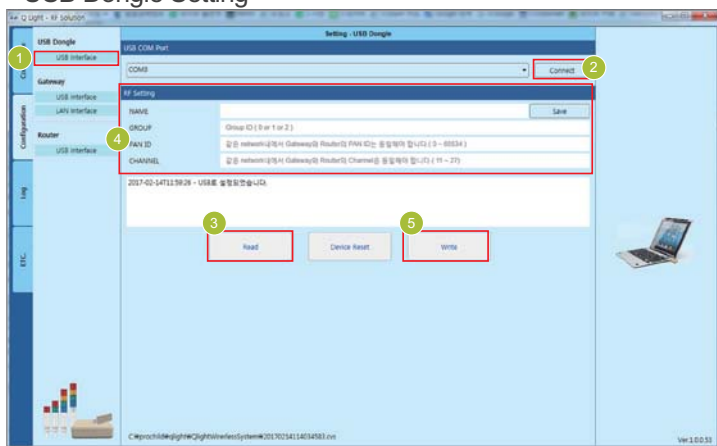
2. Connection Instructions

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)

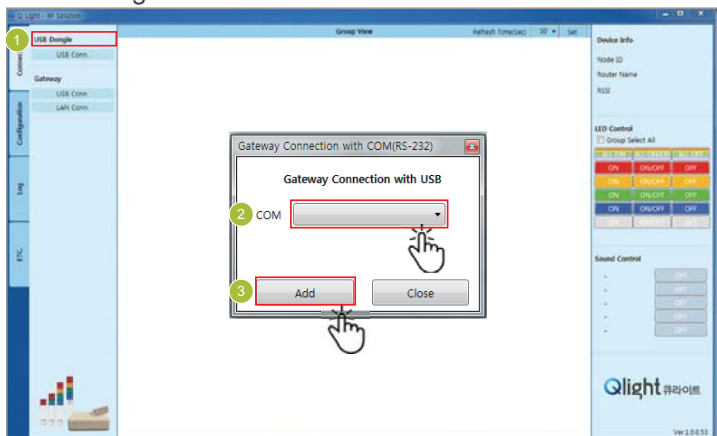


• USB Dongle Setting



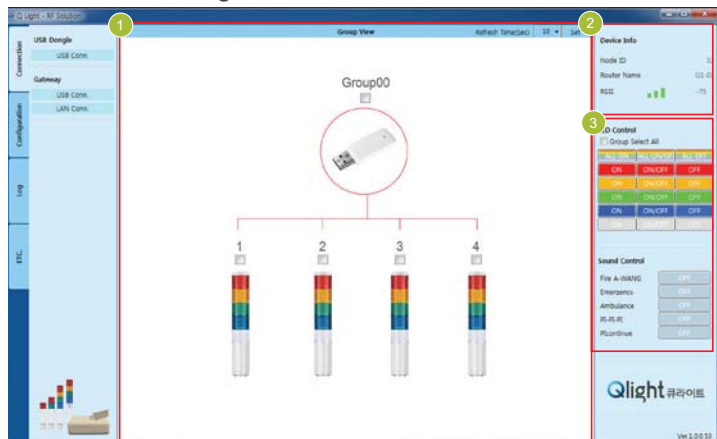
- 1 Config>USB DONGLE>Select “USB Interface”
- 2 Check the COM port of your PC and press “Connect” button to connect to the USB Dongle
- 3 Select “Read” to read RF information of the currently set USB dongle
- 4 Check and modify RF information of the USB dongle (RF info includes “NAME”, “PANID”, “CHANNEL”, “GROUP”, etc.)
- 5 Press “Write” button to save the modified information.

• USB Dongle Connection



- 1 Connection>USB DONGLE>Press “USB Interface” Button
- 2 Select COM port in the pull down window
- 3 Press “ADD” button to connect USB dongle

• Device Monitoring & Control



- 1 Identify devices that are connected wirelessly via USB dongle
- Select a connected device (can select individually or in group)
- 2 Check the information of selected device (ID, Name, Signal strength)
- 3 Can control operation of selected devices individually or in group

Wireless Network System Instructions

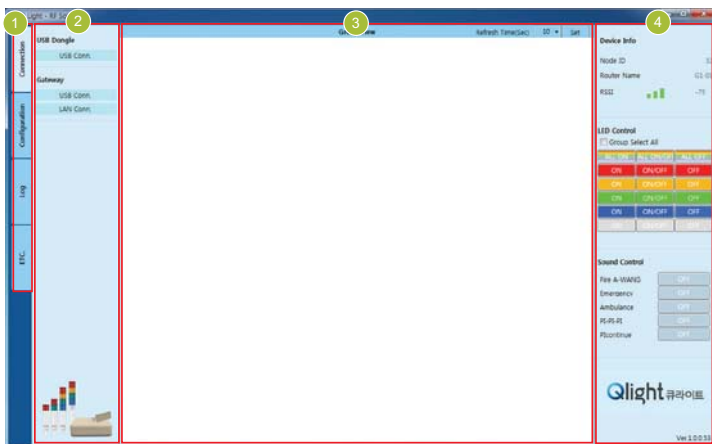
2) Gateway

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.

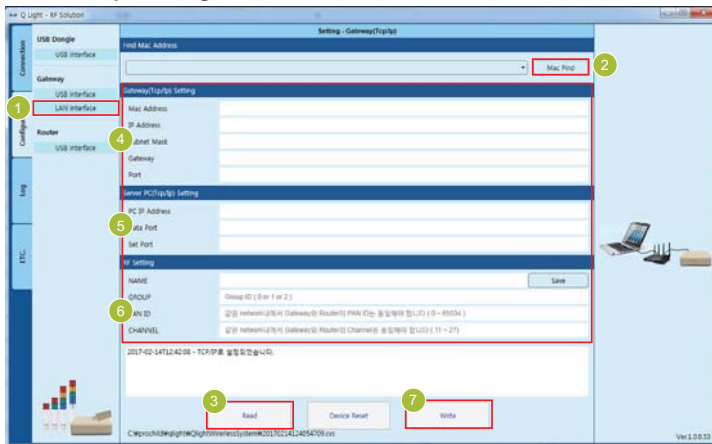
■ What is IIS? IIS stands for Microsoft's Internet information Services which is a WINDOWS service used for web service. With IIS, services such as FTP, SMTP, NNTP, and HTTP/ HTTPS are available.



- 1 Tab**
 - Connection : USB dongle, gateway connection setup
 - Configuration : USB dongle, gateway, router setup
 - Log : Stores log data and displays status of router through data viewer
 - Manual : User's guide for sample PC tool
- 2 Menu**
Provides detailed menu selections for each tab
- 3 Wireless network viewer**
Displays network status of the wireless devices
- 4 Status**
Displays the operation status and enables control of the wireless devices

※ Please refer to the separate manual for detailed settings and instruction

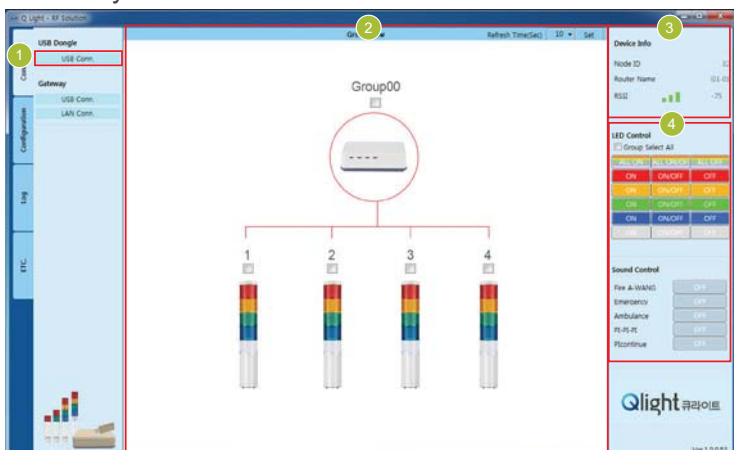
• Gateway Setting



- 1 Config>Gateway>Select "Lan Interface"**
- 2 Click "Mac Find" to search the mac address of gateway**
- 3 Press "Read" to check the current setting using the mac address of the gateway**
- 4 Check and modify the network information of the gateway**
- 5 Check and modify the network information of the PC server**
- 6 Check and modify RF information of gateway**
- 7 Save the modified settings**

Wireless Network System Instructions

• Gateway Connection



- 1 Connection>Gateway>Select "Lan Interface"
- 2 Select wireless device
 - Can select individually or in groups
 - Can check the operation status of the currently operating wireless devices
- 3 Can check the wireless setting of the selected devices
- 4 Can control selected individual device or group of devices

※ The method of USB connection using the Gateway is same with the method of USB connection using USB DONGLE

3) Smartphone

- In order to use smartphone the gateway and wired/wireless router should be connected.
- Access to the web page from smartphone using the IP address of the administrator's PC with IIS set up.
- Log into your account in the login page and select the connected Gateway.
- Monitor or control the selected device by selecting the signaling device connected to the selected gateway.



Connect to web page



Connect to web page



Select connected wireless device



Monitor or control the status of selected device

Specification List For Wireless Products

Wireless LED Tower Lights



| Model number | QTG60ML-WIZ | QTG60L-WIZ | QTG70ML-WIZ | QTG70L-WIZ |
|--------------------------|--|--|--|--|
| Voltage | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V | AC/DC12V, AC/DC24V AC110V-220V |
| Dimension (mm) | Diameter | Ø60 | Ø70 | Ø70 |
| | Height | 199-399 | 435-625 | 199-399 |
| | Depth | | | 357-557 |
| Material | 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 |
| Light source & Operation | Bulb Steady/ Flashing | | | |
| | LED Steady | • | • | • |
| | LED Steady/ Flashing | | | |
| | LED Strobe | | | |
| Sound & Volume | LED Simulated revolving | | | |
| | 1 buzzer sound | Max. 85dB at 1m | Max. 85dB at 1m | Max. 85dB at 1m |
| 5 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, SZ18, QL18, SL18, QLA18 | TWS80, TWA80 | LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24 |
| Protection rating | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) | IP54(Buzzer type), IP65(Standard) |
| Customization | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing | 2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing | 2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing |
| Transistor | NPN | NPN | NPN | NPN |
| Communication | Wireless(ZIGBEE) | Wireless(ZIGBEE) | Wireless(ZIGBEE) | Wireless(ZIGBEE) |
| Page | P145 | P146 | P147 | P148 |

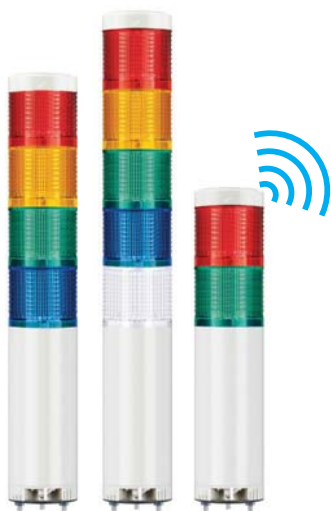
Wireless LED Signal Lights



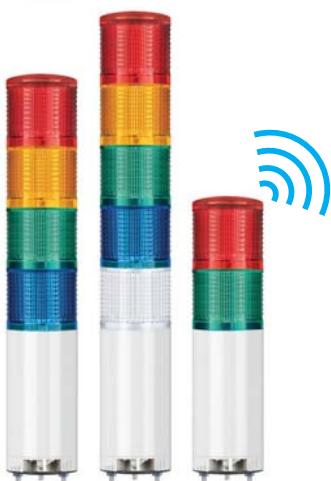
| | | |
|-------------------|------------------------|------|
| Model number | QMCL125-WIZ | |
| Voltage | DC12V, DC24V | |
| Dimension (mm) | Diameter | Ø116 |
| | Height | 110 |
| Volume | Max. 80dB at 1m | |
| Material | Lens-AS Housing-ABS | |
| Mount bracket | Self stand | |
| Protection rating | IP65 | |
| Customization | Wall mount | |
| Transistor | NPN | |
| Communication | Wireless(ZIGBEE) | |
| Page | P153 | |

QTG60ML-WIZ

Wireless LED Steady/ Flashing Tower Light



QTG60ML-WIZ series



QTGA60ML-WIZ series

• PC Connection Components

| | |
|-------------------|---|
| <p>USB Dongle</p> | <p>Suitable for single or small-scaled network Can connect up to 32 devices</p> |
| <p>Gateway</p> | <p>Suitable for large-scaled network One gateway unit is a single group, can connect up to 24 groups (each group can connect to 32 devices) * Network router is required for group communication.</p> |

Common Specifications (QTG60ML-WIZ/ QTG60L-WIZ/ QTG70ML-WIZ/ QTG70L-WIZ)

Can remotely monitor and control the status of tower lights using a PC or smartphone

- 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 standard : ZigBee(IEEE802.15.4)

QTG60ML-WIZ Ø60mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificate | Weight | Color |
|--|-------|-------------|-------------|-------------|--------|--|
| QTG60ML-WIZ Steady | 1 | AC/DC12V | 0.170A | | 0.29kg | ● R-Red |
| QTG60ML-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.100A | | 0.29kg | |
| QTG60MLF-WIZ Steady/Flashing | 2 | AC/DC12V | 0.260A | | 0.37kg | ● R-Red ● G-Green |
| QTG60MLF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.150A | | 0.37kg | |
| | 3 | AC/DC12V | 0.350A | | 0.46kg | ● R-Red ● A-Amber ● G-Green |
| | | AC/DC24V | 0.200A | | 0.46kg | |
| QTGA60ML-WIZ Steady | 4 | AC/DC12V | 0.440A | | 0.54kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| QTGA60ML-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.250A | | 0.54kg | |
| QTGA60MLF-WIZ Steady/Flashing | 5 | AC/DC12V | 0.530A | | 0.62kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| QTGA60MLF-WIZBZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.300A | | 0.62kg | |
| | | AC110V-220V | Max. 0.105A | | 0.56kg | |
| | | AC110V-220V | Max. 0.126A | | 0.64kg | |
| | | AC110V-220V | Max. 0.148A | | 0.72kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 150-152 for detailed wiring information.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



Ordering Specification

| | | | | | | |
|--|---|---|---|---|---|--|
| QTG60ML-WIZ | - | 3 | - | 110/220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTG60ML-WIZ • QTG60ML-WIZ-BZ • QTG60MLF-WIZ • QTG60MLF-WIZ-BZ • QTGA60ML-WIZ • QTGA60ML-WIZ-BZ • QTGA60MLF-WIZ • QTGA60MLF-WIZ-BZ | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |

QTG60L-WIZ

Wireless LED Steady/ Flashing Tower Light





QTG60L-WIZ series



QTGA60L-WIZ series

PC Connection Components

| | |
|--|---|
|  USB Dongle | Suitable for single or small-scaled network Can connect up to 32 devices |
|  Gateway | Suitable for large-scaled network One gateway unit is a single group, can connect up to 24 groups (each group can connect to 32 devices) ※ Network router is required for group communication. |

QTG60L-WIZ Ø60mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificate | Weight | Color |
|--|-------|-------------|-------------|-------------|--------|--|
| QTG60L-WIZ Steady | 1 | AC/DC12V | 0.170A | | 0.44kg | ● R-Red |
| QTG60L-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.100A | | 0.44kg | |
| | | AC110V-220V | Max. 0.061A | | 0.54kg | |
| QTG60LF-WIZ Steady/Flashing | 2 | AC/DC12V | 0.260A | | 0.53kg | ● R-Red ● G-Green |
| QTG60LF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.150A | | 0.53kg | |
| | | AC110V-220V | Max. 0.083A | | 0.63kg | |
| QTGA60L-WIZ Steady | 3 | AC/DC12V | 0.350A | | 0.61kg | ● R-Red ● A-Amber ● G-Green |
| QTGA60L-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.200A | | 0.61kg | |
| | | AC110V-220V | Max. 0.105A | | 0.56kg | |
| QTGA60LF-WIZ Steady/Flashing | 4 | AC/DC12V | 0.440A | | 0.70kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| QTGA60LF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | 0.70kg | |
| | | AC110V-220V | Max. 0.126A | | 0.80kg | |
| QTGA60LF-WIZBZ Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.530A | | 0.78kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.300A | | 0.78kg | |
| | | AC110V-220V | Max. 0.148A | | 0.88kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- ※ Please refer to page 150-152 for detailed wiring information.



| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|---|---|---|--|---|---|---|---|
|  |  |  |  |  |  |  |  |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Customization

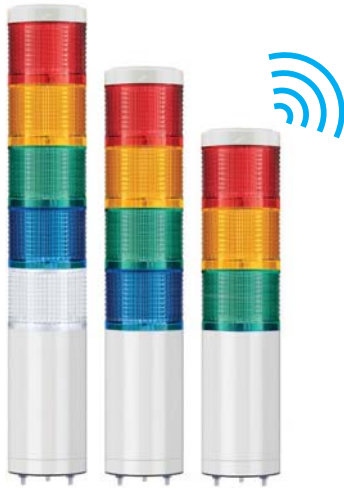
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

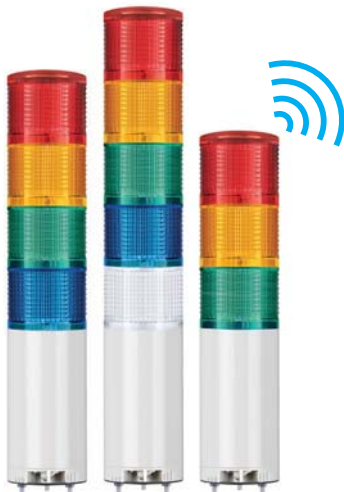
| | | | | | | | | |
|--|---|---|---|---|---|--|---|---|
| QTG60L-WIZ | - | 3 | - | 110/220 | - | RAG | - | LW18 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTG60L-WIZ • QTG60L-WIZ-BZ • QTG60LF-WIZ • QTG60LF-WIZ-BZ • QTGA60L-WIZ • QTGA60L-WIZ-BZ • QTGA60LF-WIZ • QTGA60LF-WIZ-BZ | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V | | <ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White | | <ul style="list-style-type: none"> • None-Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18 |

QTG70ML-WIZ

Wireless LED Steady/ Flashing Tower Light



QTG70ML-WIZ series



QTGA70ML-WIZ series

QTG70ML-WIZ Ø70mm Direct Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificate | Weight | Color |
|---|-------|-------------|-------------|-------------|--------|--|
| QTG70ML-WIZ Steady | 1 | AC/DC12V | 0.170A | | 0.45kg | ● R-Red |
| QTG70ML-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.100A | | 0.45kg | |
| QTG70MLF-WIZ Steady/Flashing | 2 | AC/DC12V | 0.260A | | 0.59kg | ● R-Red ● G-Green |
| QTG70MLF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.150A | | | |
| QTGA70ML-WIZ Steady | 3 | AC/DC12V | 0.350A | | - | 0.80kg |
| QTGA70ML-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.200A | 0.80kg | | |
| QTGA70MLF-WIZ Steady/Flashing | 4 | AC/DC12V | 0.440A | 0.95kg | | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| QTGA70MLF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | | |
| QTGA70MLF-WIZ-BZ | 5 | AC/DC12V | 0.530A | 1.10kg | | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| QTGA70MLF-WIZ-BZ | | AC/DC24V | 0.300A | | 1.10kg | |
| QTGA70MLF-WIZ-BZ | | AC110V-220V | Max. 0.148A | | 1.20kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor

* Please refer to page 150-152 for detailed wiring information.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 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 mount



PC Connection Components

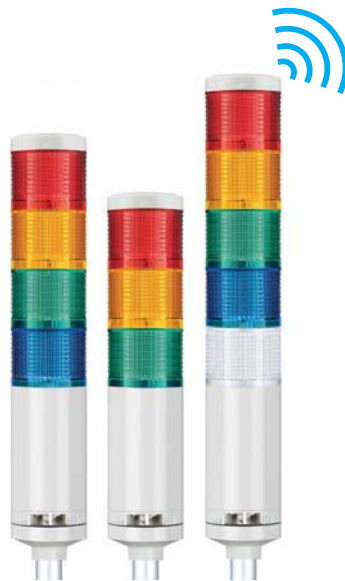
| | |
|-------------------|---|
| <p>USB Dongle</p> | <p>Suitable for single or small-scaled network Can connect up to 32 devices</p> |
| <p>Gateway</p> | <p>Suitable for large-scaled network One gateway unit is a single group, can connect up to 24 groups (each group can connect to 32 devices) * Network router is required for group communication.</p> |

Ordering Specification

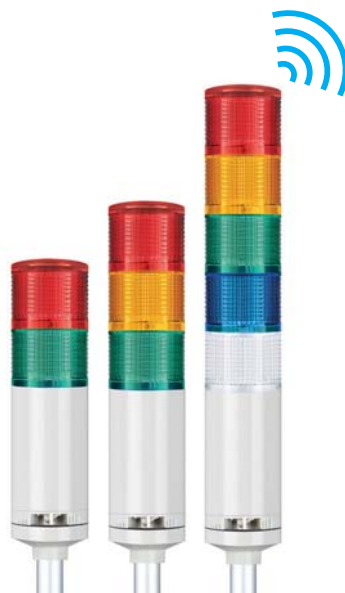
| | | | | | | |
|--|---|---|---|---|---|--|
| QTG70ML-WIZ | - | 3 | - | 110/220 | - | RAG |
| [Model number] | | [Layer] | | [Voltage] | | [Color] |
| <ul style="list-style-type: none"> • QTG70ML-WIZ • QTG70ML-WIZ-BZ • QTG70MLF-WIZ • QTG70MLF-WIZ-BZ • QTGA70ML-WIZ • QTGA70ML-WIZ-BZ • QTGA70MLF-WIZ • QTGA70MLF-WIZ-BZ | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White |

QTG70L-WIZ

Wireless LED Steady/ Flashing Tower Light



QTG70L-WIZ series



QTGA70L-WIZ series

· PC Connection Components

| | |
|--|---|
| | Suitable for single or small-scaled network. Can connect up to 32 devices. |
| | Suitable for large-scaled network. One gateway unit is a single group, can connect up to 24 groups (each group can connect to 32 devices). ※ Network router is required for group communication. |

QTG70L-WIZ Ø70mm Pole Mount, LED Steady/Flashing Type

| Model number | Layer | Voltage | Current | Certificate | Weight | Color |
|--|-------|-------------|-------------|-------------|--------|--|
| QTG70L-WIZ Steady | 1 | AC/DC12V | 0.170A | | 0.57kg | ● R-Red |
| QTG70L-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.100A | | 0.57kg | |
| QTG70LF-WIZ Steady/Flashing | 2 | AC/DC12V | 0.260A | | 0.69kg | ● R-Red ● G-Green |
| QTG70LF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.150A | | 0.79kg | |
| QTGA70L-WIZ Steady | 3 | AC/DC12V | 0.350A | - | 0.84kg | ● R-Red ● A-Amber ● G-Green |
| QTGA70L-WIZ-BZ Steady /w built-in buzzer | | AC/DC24V | 0.200A | | 0.94kg | |
| QTGA70LF-WIZ Steady/Flashing | 4 | AC/DC12V | 0.440A | | 0.99kg | ● R-Red ● A-Amber ● G-Green ● B-Blue |
| QTGA70LF-WIZ-BZ Steady/Flashing /w built-in buzzer | | AC/DC24V | 0.250A | | 1.09kg | |
| QTGA70LF-WIZ-BZ Steady/Flashing /w built-in buzzer | 5 | AC/DC12V | 0.530A | | 1.23kg | ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White |
| | | AC/DC24V | 0.300A | | 1.23kg | |
| | | AC110V-220V | Max. 0.148A | | 1.32kg | |

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

Wiring Instructions

- External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
- Signal line standard : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- ※ Please refer to page 150-152 for detailed wiring information.

Mounting Bracket

| Standard | LB18 | LW18 | QZ18 | SZ18 | QL18 | SL18 | QLA18 |
|----------|-------|------|------|------|------|------|-------|
| | | | | | | | |
| Steel | Steel | PC | PC | Al | PC | Al | PC |

※ Please refer to page 162-167 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights

Ordering Specification

| | | | | | | | | |
|--|---|---|---|---|---|--|---|---|
| QTG70L-WIZ | - | 3 | - | 110/220 | - | RAG | - | LW24 |
| [Model number] | | [Layer] | | [Voltage] | | [Color] | | [Mounting bracket] |
| <ul style="list-style-type: none"> • QTG70L-WIZ • QTG70L-WIZ-BZ • QTG70LF-WIZ • QTG70LF-WIZ-BZ • QTGA70L-WIZ • QTGA70L-WIZ-BZ • QTGA70LF-WIZ • QTGA70LF-WIZ-BZ | | <ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers | | <ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V | | <ul style="list-style-type: none"> • ● R-Red • ● A-Amber • ● G-Green • ● B-Blue • ● W-White | | <ul style="list-style-type: none"> • None-Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18 |

QTG-WIZ series

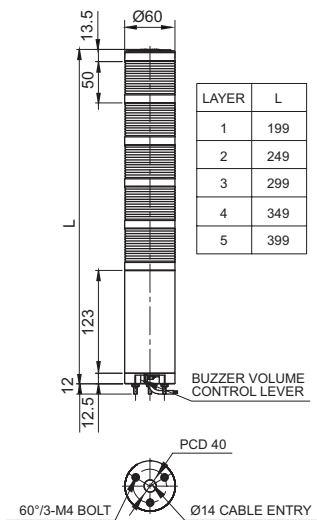
Wireless LED Steady/ Flashing Tower Light



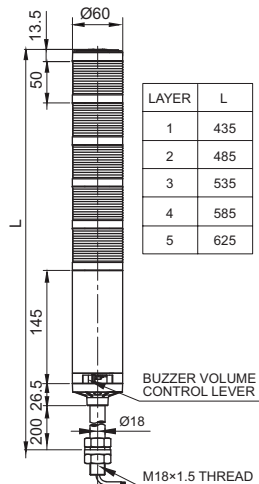
Technical Diagram

(Units : mm)

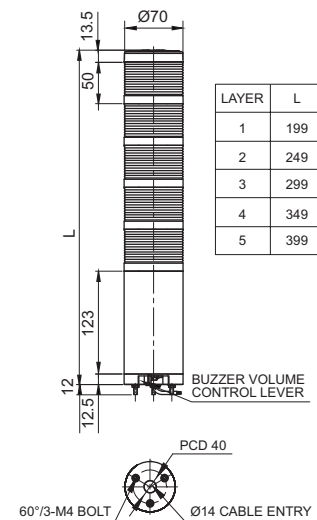
QTG60ML(F)-WIZ-Series



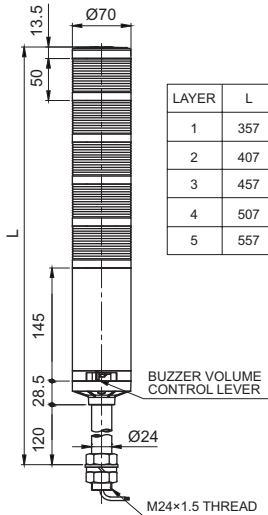
QTG60L(F)-WIZ-Series



QTG70ML(F)-WIZ-Series



QTG70L(F)-WIZ-Series



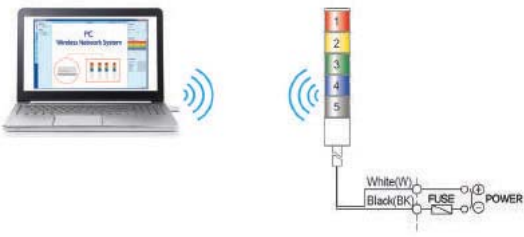



QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

• Please wire the product as followings when control via wireless network

| Applied products | Connection by USB | |
|---|--|--|
| AC/DC Steady/ Flashing QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Connection via USB Dongle</p>  </div> <div style="text-align: center;"> <p>Connection via Gateway</p>  </div> </div> <p style="text-align: center;">Suitable for single or small-scaled network Can connect up to 32 devices</p> | |
| Applied products | Connection by Ethernet | |
| AC/DC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Ethernet connection via Gateway</p>  </div> <div style="text-align: center;"> <p>Connection via Gateway and Ethernet Router</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>Suitable for single or small-scaled network Can connect up to 32 devices</p> </div> <div style="text-align: center;"> <p>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)</p> </div> </div> | |

• AC Steady type, AC/DC Steady/ Flashing type : External power line standard : UL1015 AWG18(0.75sq)×2C 400mm

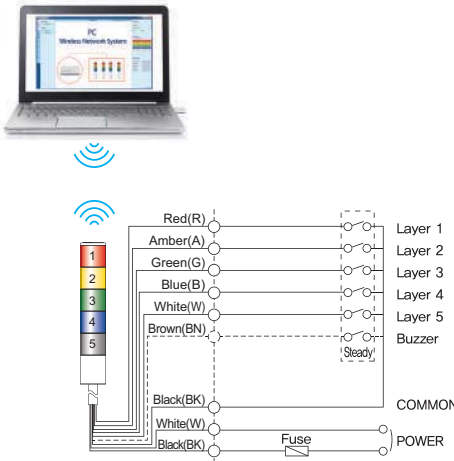
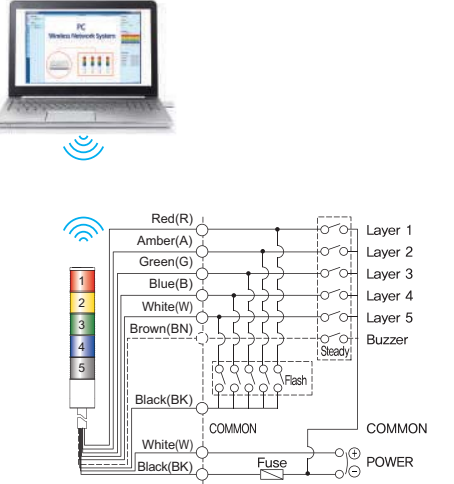
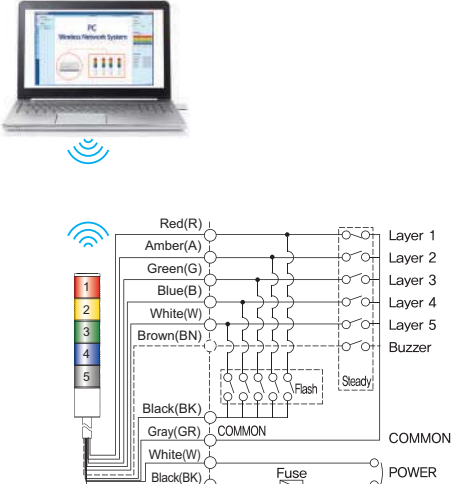
QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

- Please wire the product by referring below instruction.
- You can monitor status of tower light and control them via wireless network.

| Applied products | External Contact | |
|--|--|---|
| AC/DC Steady/ Flashing QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ |  <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L | |
| AC/DC Steady/ Flashing |  <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L | AC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ |
| | |  <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L |

- DC Steady type External power line & Signal line standard : UL1007 AWG22(0.3sq) 400mm
- AC Steady, AC/DC Steady/ Flashing type External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
 signal line standard : UL1007 AWG22(0.3sq) 400mm

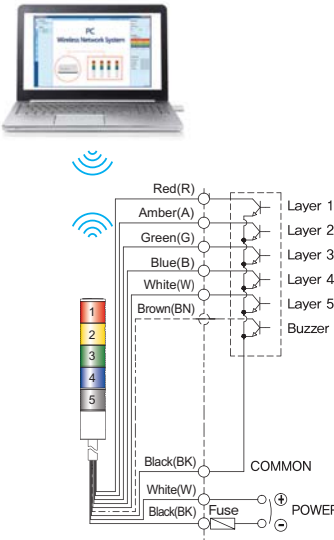
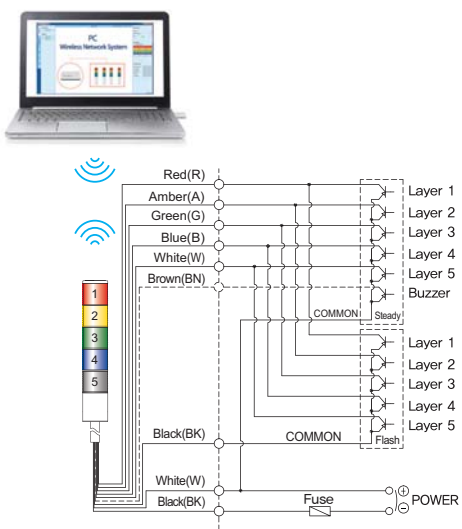
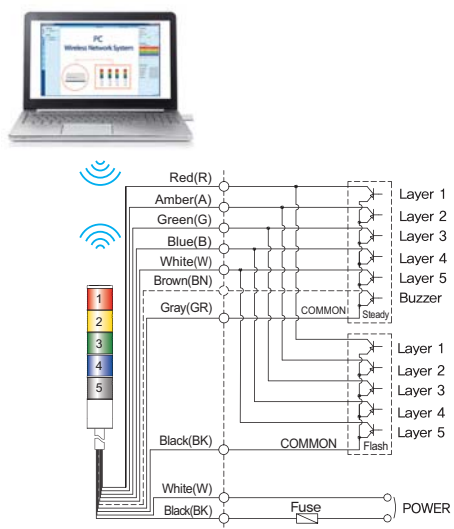
QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

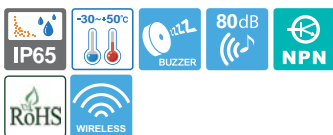
• Wiring to transistor, use the NPN transistor. Please wire properly based on wiring instructions below.

| Applied products | External Contact | |
|--|---|--|
| <p>AC/DC Steady/ Flashing</p> <p>QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ</p> |  <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L | |
| <p>AC/DC Steady/ Flashing</p> <p>QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ</p> | <p>AC Steady/ Flashing</p>  <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L | <p>AC Steady/ Flashing</p>  <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L |

- DC Steady type External power line & Signal line standard : UL1007 AWG22(0.3sq) 400mm
- AC Steady, AC/DC Steady/ Flashing type External power line standard : UL1015 AWG18(0.75sq)×2C 400mm
signal line standard : UL1007 AWG22(0.3sq) 400mm

QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



QMCL125-WIZ



Common Specifications

Can remotely monitor and control the status of light units using a PC or smartphone

- 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 standard : 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
- Materials : Lens-AS, Body-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP65
- Certificates : CE Compliant
- Compliant with RoHS directive



QMCL125-WIZ Ø125mm Wireless Multiple Color LED Steady Signal Lights

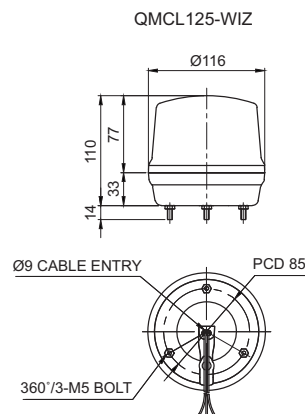
| | Voltage | AC/DC12V | AC/DC24V |
|-------------|-------------------------------|----------|----------|
| QMCL125-WIZ | Signal Line Power Consumption | 0.320A | 0.170A |
| | Buzzer Line Power Consumption | 0.020A | 0.020A |

| Model number | Voltage | Current | Certificate | Weight | Color |
|--------------|---------|---------|-------------|--------|---------|
| QMCL125-WIZ | DC12V | 0.320A | - | 0.34kg | 7 Color |
| | DC24V | 0.170A | | | |



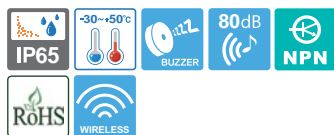
Technical Diagram

(Units : mm)



QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



QMCL125-WIZ

Wiring Instructions

- External signal line standard : 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
- ※ Please refer to page 155 for detailed wiring information.

Mounting Options

- Wall mounting bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

| | | | | |
|--------------------|---|---|---|--------------------------|
| QMCL125-WIZ | - | BZ | - | 24 |
| [Model number] | | [Buzzer option] | | [Voltage] |
| | | | | |
| • QMCL125-WIZ | | • None - No buzzer • BZ- Built-in buzzer | | • 12-DC12V • 24-DC24V |

| | |
|--|---|
| | Suitable for single or small-scaled network Can connect up to 32 devices |
| | Suitable for large-scaled network One gateway unit is a single group, can connect up to 24 groups (each group can connect to 32 devices) ※ Network router is required for group communication. |

QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



Wiring Instructions

• Please refer to Wiring Instructions diagram to properly configure wireless network option.

| Applied products | Connection by USB |
|------------------|---|
| QMCL125-WIZ | |
| Applied products | Connection by Ethernet |
| QMCL125-WIZ | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Ethernet connection via Gateway</p> </div> <div style="text-align: center;"> <p>Connection via Gateway and Ethernet Router</p> </div> </div> |

• Please refer to below wiring Instructions diagram to properly configure external contact and transistor options.

| Applied products | External Contact | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|-------------------------|-------|--------|---|-----|--------|---|-------|----------|---|------|---------|---|-------|-----------------|---|------|------------------|---|--------|----------------|---|-------|-------------------------|
| QMCL125-WIZ | <table border="1" style="margin-left: 20px;"> <caption>< Wiring Configuration for Signal Color ></caption> <thead> <tr> <th>No.</th> <th>Color</th> <th>Wiring</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Red</td> <td>1(Red)</td> </tr> <tr> <td>2</td> <td>Green</td> <td>2(Green)</td> </tr> <tr> <td>3</td> <td>Blue</td> <td>3(Blue)</td> </tr> <tr> <td>4</td> <td>Amber</td> <td>1(Red)+2(Green)</td> </tr> <tr> <td>5</td> <td>Cyan</td> <td>2(Green)+3(Blue)</td> </tr> <tr> <td>6</td> <td>Purple</td> <td>1(Red)+3(Blue)</td> </tr> <tr> <td>7</td> <td>White</td> <td>1(Red)+2(Green)+3(Blue)</td> </tr> </tbody> </table> | 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) |
| 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) | | | | | | | | | | | | | | | | | | | | | | | |
| Applied products | External Transistor | | | | | | | | | | | | | | | | | | | | | | | | |
| QMCL125-WIZ | <table border="1" style="margin-left: 20px;"> <caption>< Wiring Configuration for Signal Color ></caption> <thead> <tr> <th>No.</th> <th>Color</th> <th>Wiri</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Red</td> <td>1(Red)</td> </tr> <tr> <td>2</td> <td>Green</td> <td>2(Green)</td> </tr> <tr> <td>3</td> <td>Blue</td> <td>3(Blue)</td> </tr> <tr> <td>4</td> <td>Amber</td> <td>1(Red)+2(Green)</td> </tr> <tr> <td>5</td> <td>Cyan</td> <td>2(Green)+3(Blue)</td> </tr> <tr> <td>6</td> <td>Purple</td> <td>1(Red)+3(Blue)</td> </tr> <tr> <td>7</td> <td>White</td> <td>1(Red)+2(Green)+3(Blue)</td> </tr> </tbody> </table> | No. | Color | Wiri | 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) |
| No. | Color | Wiri | | | | | | | | | | | | | | | | | | | | | | | |
| 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) | | | | | | | | | | | | | | | | | | | | | | | |

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

Qlight quality assurance systems have been certified by ISO by applying the ISO 9001:2008, KS Q ISO 9001:2009 regulation.



IECEX International Explosion Proof Certification (IECEX)

Certified that Qlight's products are being manufactured and managed according to international standards.



ATEX The European Regulatory Framework of Manufacture, Installation and Use of Equipment in Explosive Atmospheres

Qlight explosion proof products comply with ATEX Directives 94/9/EC.



NEPSI National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation

Qlight's design and manufacturing system meets the People's Republic of China National explosion proof Standard. (Chinese Standard-GB3836/GB12476)



KGS Korea Gas Safety Corporation

Approved from "Korea Gas Safety Corporation" that Qlight's design and manufacturing system meets the standard of KGS.



KOSHA Korea Occupational Safety and Health Agency

Approved by the "Korea Occupational Safety and Health Agency" that Qlight's design and manufacturing system meets the standard of KOSHA.



ABS American Bureau of Shipping



LR Lloyd's Register

Qlight design and quality assurance system has been certified from Lloyd's Register.



CCS China Classification Society

Qlight design and quality assurance system has been certified by the China Classification Society.



Russian Maritime Register of Shipping

Qlight design and quality assurance system has been certified from Russian Maritime Register of Shipping.



KR Korean Register of Shipping

Qlight design and quality assurance system has been certified by the Korean Register of Shipping.



CE European Commission

Qlight has been certified by the European Commission.



UL Underwriters Laboratories

Qlight design and quality assurance system has been certified from UL to ensure the stability of consumption goods and to protect consumers.



KC Korea Safety Certification

Qlight products are certified by KC for preventing accident caused by fire.



CCC China Compulsory Certificate

Qlight has obtained CCC which guarantees safety, protection against fraud, environment, etc.



ICAO International Civil Aviation Organization

Qlight guarantees our products satisfy the criteria regulated by the International Civil Aviation Organization (ICAO, FAA).



E-mark Commission Directive Regarding Vehicle Industry

EU mark for approved vehicles and vehicle components sold into the EU (EEA: European Economic Area)



RoHS Restriction of Hazardous Substances Directive

Qlight complies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.

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 | T16×28 9S | 110V | 0.042A | S50, ST45 |
| | 4 | 240V 5W | T16×28 9S | 220V | 0.021A | |
| | 5 | 14V 5W | T16×35 15S | 12V | 0.357A | S60 S80, SR SJ, SJD |
| | 6 | 27V 5W | T16×35 15S | 24V | 0.185A | |
| | 7 | 120V 5W | T16×35 15D | 110V | 0.042A | S60 |
| | 8 | 240V 5W | T16×35 15D | 220V | 0.021A | |
| | 9 | 14V 10W | T16×35 15S | 12V | 0.714A | S100 S125 SE ST56 ST80 |
| | 10 | 27V 10W | T16×35 15S | 24V | 0.370A | |
| | 11 | 52V 10W | T16×35 15S | 48V | 0.192A | |
| | 12 | 120V 10W | T16×35 15S | 110V | 0.083A | S100 S125 ST56 ST80 |
| | 13 | 240V 10W | T16×35 15S | 220V | 0.042A | |
| | 14 | 52V 10W | T16×35 15D | 48V | 0.192A | S100E S125E |
| | 15 | 120V 10W | T16×35 15D | 110V | 0.083A | |
| | 16 | 240V 10W | T16×35 15D | 220V | 0.042A | |
| | 17 | 14V 15W | G23 15S | 12V | 1.071A | SK S150, SH1 SH2, SED SD, SHD SHD2 SMD, SESA SEBA, SEA |
| | 18 | 27V 15W | G23 15S | 24V | 0.556A | |
| | 19 | 52V 15W | G23 15S | 48V | 0.288A | |
| | 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 SD, SHD SHD2 SMD, SESA SEBA, SEA |
| | 23 | 240V 15W | G23 15D | 220V | 0.063A | |
| | 24 | 12V 23W | S25 15S | 12V | 1.916A | S150, SH2 SD, SMD SESA SEBA, SEA |
| | 25 | 24V 23W | S25 15S | 24V | 0.958A | |
| | 26 | 52V 25W | T23×62 15D | 48V | 0.481A | S150, SH2 SD, SMD SESA SEBA, SEA |
| | 27 | 120V 25W | T23×62 15D | 110V | 0.208A | |
| | 28 | 240V 25W | T23×62 15D | 220V | 0.104A | |
| | 29 | 14V 35W | RP35 15S | 12V | 2.500A | S180 |
| | 30 | 27V 35W | RP35 15S | 24V | 1.296A | |

| Layout | Part# | Feature | Spec | Voltage | Current | Product |
|--------|-------|---------------|---|---------|---------|--|
| | 31 | 120V 35W | RP35 15S | 110V | 0.292A | S180 |
| | 32 | 240V 35W | RP35 15S | 220V | 0.146A | |
| | 33 | 110V 60W | E26 ES | 110V | 0.545A | S150, SH2 SD, SMD SESA, SE SEBA, SEA |
| | 34 | 220V 60W | E26 ES | 220V | 0.272A | |
| | 35 | 12V 30W | A60 E26 | 12V | 2.500A | S150, SH2 SD, SMD |
| | 36 | 24V 60W | A60 E26 | 220V | 2.500A | |
| | 37 | 110V 60W | A60 E26 | 110V | 0.545A | S150, SH2 SD, SMD |
| | 38 | 220V 60W | A60 E26 | 220V | 0.272A | |
| | 39 | 14V 35W | 15S Halogen | 12V | 2.500A | SKH |
| | 40 | 27V 35W | 15S Halogen | 24V | 1.296A | |
| | 41 | 120V 35W | 15D Halogen | 110V | 0.292A | S150, SH2 SD, SMD SESA, SE SEBA, SEA |
| | 42 | 240V 35W | 15D Halogen | 220V | 0.146A | |
| | 43 | 14V 55W | 15S Halogen | 12V | 3.929A | S150, SH2 SD, SMD SESA, SE SEBA, SEA |
| | 44 | 27V 55W | 15S Halogen | 24V | 2.037A | |
| | 45 | 120V 55W | 15D Halogen | 110V | 0.458A | S150, SH2 SD, SMD SESA, SE SEBA, SEA |
| | 46 | 240V 55W | 15D Halogen | 220V | 0.229A | |
| | 47 | 220V -350V | BGA2120 -BBC I Type xenon lamp | | 4W | S80S, S80AS |
| | 48 | 200V -550V | EUB0641 -1A(G) U Type xenon lamp | | 6W | S100S, S125S S150S, SJS SH1S, SH2S SEDS, SDS SHDS, SHD2S SMDs, SCDWS, SNE-S, SNES-S SESAS, SE-S SEBAS, SEAS ELMS, ELRS, ELPS |
| | 49 | 280V -400V | BH0647(G) W Type xenon lamp | | 16W | S125HS, S150HS S180US, S180UHS SH1HS, SH2HS SEDHS, SDHS SHDHS, SHD2HS SMDHS SESAHS, SEAHS ELVS |

Light Source of Warning Light/ Signal Light

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.
- The selection of signaling device can be different depending on the situation and environment. The convenience and efficiency of maintenance should also be considered.

*** Factors to consider in signal selection**

1. Purpose
2. Signal transmission
3. Environment
4. Budget
5. Ease of maintenance

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. If the input voltage decreases more than 10% of the rated voltage, the bulb life increases four times than before, and the power consumption is reduced by 85%.
2. On the other hand, If input voltage is 10% higher than the rated voltage, the life of the bulb is shortened by about 30% and the power consumption increases about 16%, and the brightness is increased by about 40%. The standard service life of a normal bulb is about 1,000 - 1,500 hours.

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.

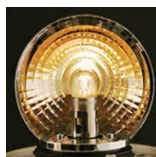
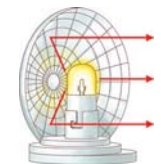
The lamp is filled with xenon(Xe) gas due to the convenience of the production(choice of materials), its use, xenon lamp was named after the xenon gas that it uses. xenon lamps are also resistant to vibration due to its mounting method. In addition, it is visible even in bright environments not only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



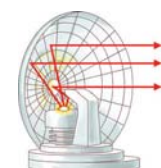
Bulb Steady/ Flashing Type

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



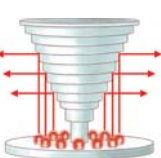
Bulb Revolving Type

- 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



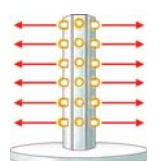
LED Revolving Type

- The combination of an LED and a reflector creates a parallel light beam with a rotating cycle
- Our LED revolving model is patented for emitting light with the same level of uniformity and brightness compared to the bulb reflecting type



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

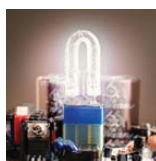


LED Strobe-Type

- 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 Simulated Revolving Type



Xenon Lamp Strobe-Type

- The strobe type model uses a xenon lamp that instantly emits a high brightness light by supplying large energy
- Requires more power than other flashing type models, and the flash is brighter in comparison
- Has excellent vibration resistance compared to regular light bulbs but is not superior to LEDs
- Can spread strong light signals in all directions because of the light projecting structure

Pre-recorded Sound Tone and Sound Combination Chart

■ 20 pre-recorded sound tones for standard type products

| Sound Number | Sound Tone | Sound Number | Sound Tone |
|--------------|-------------------------|--------------|-------------------|
| SND01 | Fire.A-ANG | SND11 | Piano Sonata |
| SND02 | Emergency WA-U(Yelp) | SND12 | Turkish March |
| SND03 | Ambulance PI-PO(Hi-low) | SND13 | Magic Flute |
| SND04 | Abandon Alarm | SND14 | Badinerie |
| SND05 | Machinery Fault | SND15 | Pine Apple Rag |
| SND06 | High Expansion | SND16 | Beep Intermittent |
| SND07 | 7 Short Pl. / 1 Long | SND17 | Door Chime |
| SND08 | Sweet Home | SND18 | Phone Ring |
| SND09 | For Elise | SND19 | PI.PI.PI Short |
| SND10 | Cuckoo's Waltz | SND20 | Tripping Beat |

• Standard sound combination for WS/ WP type products

ON = 1 / OFF = 0

7 sounds per combination can be selected according to your preference.
8 combinations are available.

| No. | 1 | 2 | 3 | Ch1 | Ch2 | Ch3 | Ch4 | Ch5 |
|-----|---|---|---|----------------------|-----------------------|-----------------------|-----------------------|----------------------------|
| 1 | 1 | 0 | 0 | SND01 Fire.A-ANG | SND02 Emergency WA-U | SND03 Ambulance PI-PO | SND05 Machinery Fault | SND06 High Expansion |
| 2 | 0 | 1 | 0 | SND01 Fire.A-ANG | SND04 Abandon Alarm | SND05 Machinery Fault | SND06 High Expansion | SND07 7 Short Pl. / 1 Long |
| 3 | 1 | 1 | 0 | SND01 Fire.A-ANG | SND02 Emergency WA-U | SND04 Abandon Alarm | SND05 Machinery Fault | SND06 High Expansion |
| 4 | 0 | 0 | 1 | SND01 Fire.A-ANG | SND03 Ambulance PI-PO | SND05 Machinery Fault | SND06 High Expansion | SND07 7 Short Pl. / 1 Long |
| 5 | 1 | 0 | 1 | SND02 Emergency WA-U | SND03 Ambulance PI-PO | SND04 Abandon Alarm | SND05 Machinery Fault | SND06 High Expansion |
| 6 | 0 | 1 | 1 | SND01 Fire.A-ANG | SND02 Emergency WA-U | SND03 Ambulance PI-PO | SND04 Abandon Alarm | SND07 7 Short Pl. / 1 Long |
| 7 | 1 | 1 | 1 | SND01 Fire.A-ANG | SND03 Ambulance PI-PO | SND04 Abandon Alarm | SND06 High Expansion | SND07 7 Short Pl. / 1 Long |
| 8 | 0 | 0 | 0 | SND02 Emergency WA-U | SND03 Ambulance PI-PO | SND04 Abandon Alarm | SND05 Machinery Fault | SND07 7 Short Pl. / 1 Long |

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

• Standard sound combination for WM/ WA type products

ON = 1 / OFF = 0

13 sounds per combination can be selected according to your preference.
8 combinations are available.

| No. | 1 | 2 | 3 | Ch1 | Ch2 | Ch3 | Ch4 | Ch5 |
|-----|---|---|---|-------------------------|---------------------|-------------------------|-------------------------|----------------------|
| 1 | 1 | 0 | 0 | SND08 Sweet Home | SND09 For Elise | SND10 Cuckoo's Waltz | SND11 Piano Sonata | SND12 Turkish March |
| 2 | 0 | 1 | 0 | SND16 Beep Intermittent | SND17 Door Chime | SND18 Phone Ring | SND19 PI.PI.PI Short | SND20 Tripping Beat |
| 3 | 1 | 1 | 0 | SND08 Sweet Home | SND11 Piano Sonata | SND13 Magic Flute | SND17 Door Chime | SND19 PI.PI.PI Short |
| 4 | 0 | 0 | 1 | SND13 Magic Flute | SND14 Badinerie | SND15 Pine Apple Rag | SND08 Sweet Home | SND09 For Elise |
| 5 | 1 | 0 | 1 | SND10 Cuckoo's Waltz | SND11 Piano Sonata | SND17 Door Chime | SND18 Phone Ring | SND20 Tripping Beat |
| 6 | 0 | 1 | 1 | SND08 Sweet Home | SND12 Turkish March | SND16 Beep Intermittent | SND17 Door Chime | SND18 Phone Ring |
| 7 | 1 | 1 | 1 | SND08 Sweet Home | SND11 Piano Sonata | SND12 Turkish March | SND17 Door Chime | SND19 PI.PI.PI Short |
| 8 | 0 | 0 | 0 | SND11 Piano Sonata | SND12 Turkish March | SND13 Magic Flute | SND16 Beep Intermittent | SND18 Phone Ring |

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

Pre-recorded Sound Tone and Sound Combination Chart

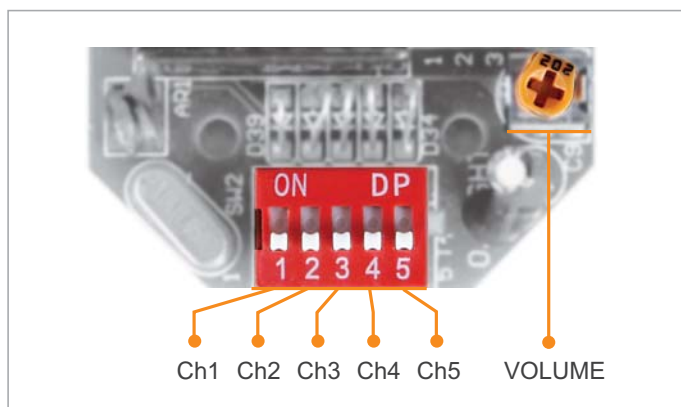
■ Sound tone combinations for standard type products

For standard type products, user can select from a variety of 5 pre-recorded sound combinations including 5 warning sounds, 5 special warning sounds, 5 melodies, 5 alarms, and 5 customizable sound.

| | Sound Category | Channel | Sound Tone | Sound Combination # |
|----|--------------------------|---------------------------------|---|---------------------|
| WS | 5 warning sounds | Ch1 Ch2 Ch3 Ch4 Ch5 | Fire.A-ANG Emergency WA-U(Yelp) Ambulance PI-PO(Hi-low) Machinery Fault High Expansion | WS/ WP No.1 |
| WP | 5 special warning sounds | Ch1 Ch2 Ch3 Ch4 Ch5 | Fire.A-ANG Abandon Alarm Machinery Fault High Expansion 7 Short Pl. / 1 Long | WS/ WP No.2 |
| WM | 5 melodies | Ch1 Ch2 Ch3 Ch4 Ch5 | Sweet Home For Elise Cuckoo's Waltz Piano Sonata Turkish March | WM/ WA No.1 |
| WA | 5 alarms | Ch1 Ch2 Ch3 Ch4 Ch5 | Beep Intermittent Door Chime Phone Ring PI.PI.PI Short Tripping Beat | WM/ WA No.2 |
| WV | 5 customizable sound | Ch1 Ch2 Ch3 Ch4 Ch5 | <ol style="list-style-type: none"> Voice messages are pre-recorded and provided from factory upon user's request Each channel has recording space for 16 sec 5 channels available When only one channel is used, maximum recordable space is 80 sec | - |

※ Please refer to page 160 for detailed information about selectable sound patterns.

■ Sound Selection of Signal Sounds



Standard specification : Use internal switches



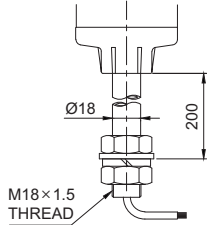
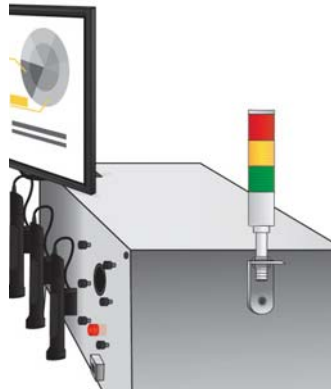

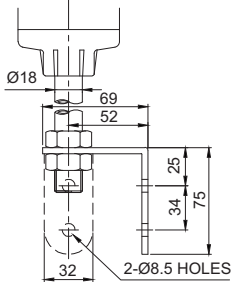

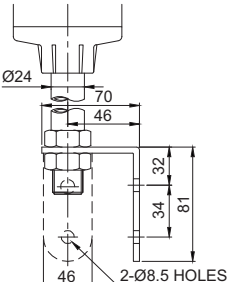
Turn on dip switches of each channel, designated sound will be played.

Tower Light Mounting Brackets

Tower Light Mounting Brackets



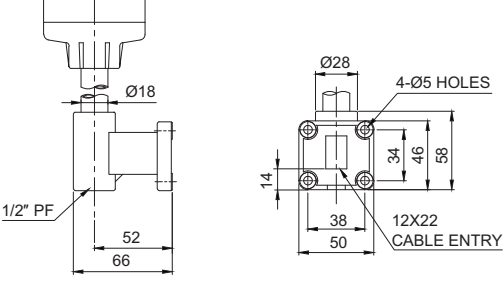


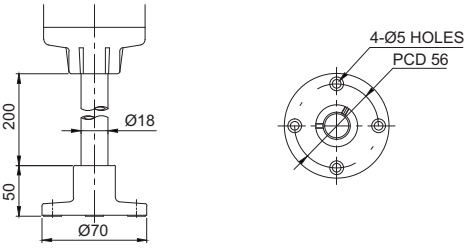

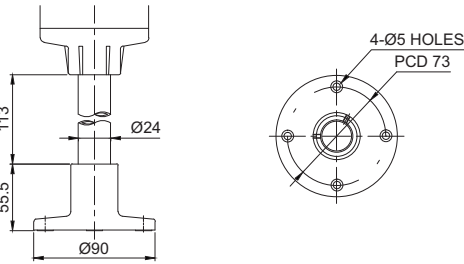
User can select from a variety of mounting brackets options depending on their application conditions.

(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|--|---|--|
| <p>Standard type pole mount installation. There is a screw at the end of the pole and it is equipped with nut for installation.</p> <p>Material : Steel</p>  |  <p>18mm SCREW & NUT (Standard Type)</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, ST45L-ETN, ST56EL-ETN, ST56L-ETN, ST45L-USB, ST56EL-USB, ST56L-USB</p> |
| <p>L-type bracket is attached to the pole mount tower light for installation to the side of the equipment.</p> <p>Material : Steel</p>  |  <p>LB18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, ST56WL, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, ST45L-ETN, ST56EL-ETN, ST56L-ETN, ST45L-USB, ST56EL-USB, ST56L-USB</p> |
| |  <p>LB24</p> |  <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR, ST80EL-ETN, ST80L-ETN, ST80EL-USB, ST80L-USB</p> |



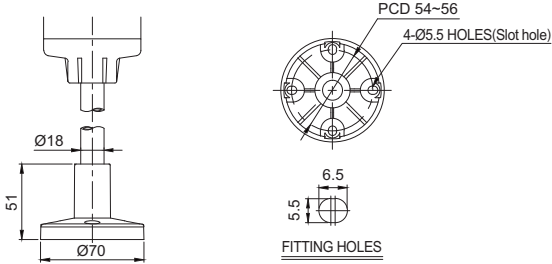


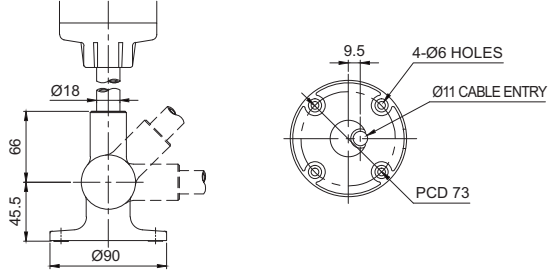

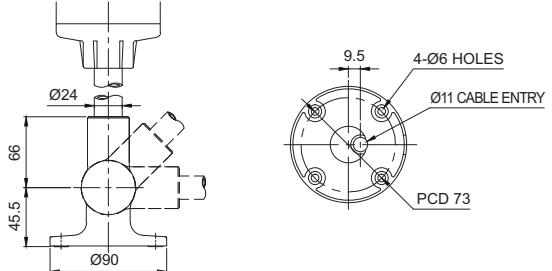
Tower Light Mounting Brackets

(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|---|---|--|
| <p>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.</p> <p>Material : PC Color : Ivory</p>  |  <p>LW18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p> |
| <p>Round-shaped bracket for horizontal surface installation.</p> <p>Material : Al Color : Silver</p>  |  <p>SZ18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG50L, STG40LF, STG50L, STG50LF</p> |
| |  <p>SZ24</p> |  <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p> |

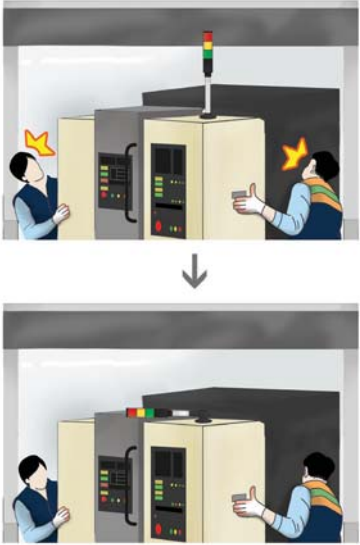

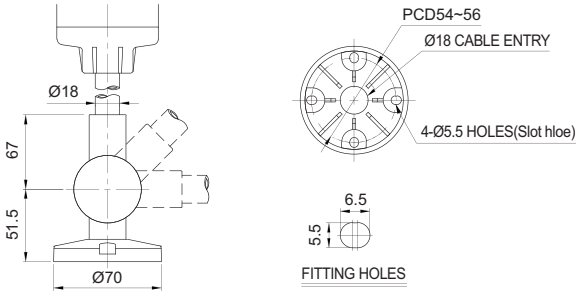



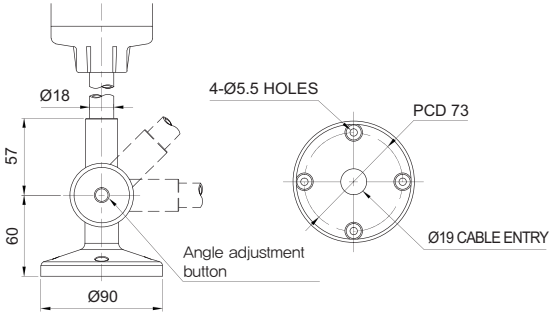
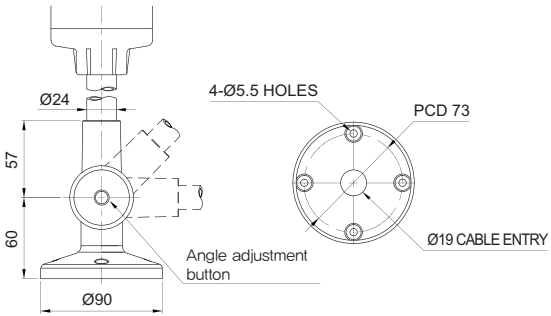
Tower Light Mounting Brackets

(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|---|---|---|
| <p>Round-shaped bracket for horizontal surface installation.</p> <p>Material : PC Color : Black</p>  |  <p>QZ18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p> |
| <p>A angle adjustable bracket (15 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.</p> <p>Material : Al Color : Silver</p>  |  <p>SL18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p> |
| |  <p>SL24</p> |  <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p> |



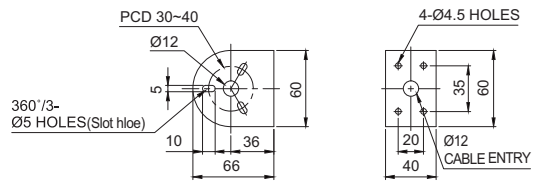


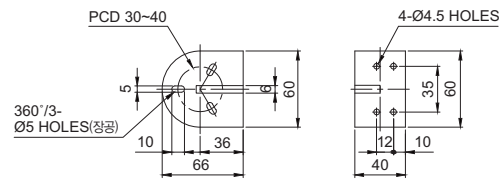

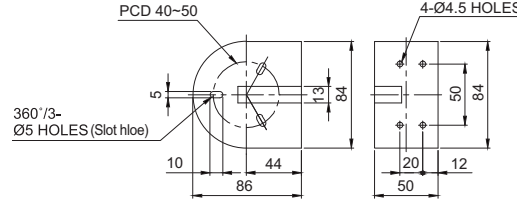
Tower Light Mounting Brackets

(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|--|---|---|
| <p>A angle adjustable bracket (5 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.</p> <p>Material : PC Color : Black</p>  |  <p style="text-align: center;">QL18</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p> |
| <p>QLA bracket is angle-adjustable with the adjustment button located on the side. It enables 3 angle adjustments at 0, 45, 90 degrees.</p> <p>Material : PC Color : Black</p>  |  <p style="text-align: center;">QLA18</p>  <p style="text-align: center;">QLA24</p> |  <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, STG40L, STG40LF, STG50L, STG50LF</p>  <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p> |



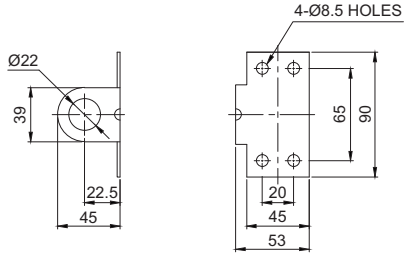

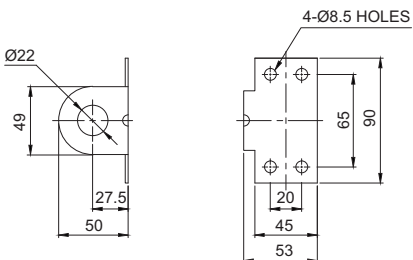
Tower Light Mounting Brackets

(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|--|--|--|
| <p>Bracket options for direct mount tower light installation.</p> <p>Material : Steel Color : Silver, Ivory</p>  |  <p>TWS45</p> |  <p>ST45MB, ST45MBF, ST45ML, ST45MLF, ST56MB, ST56MBF, ST56ML, ST56MLF, ST56MEL, ST56MELF, STG40ML, STG40MLF, STG50ML, STG50MLF, STC45ML, STC45MLF, STC56ML, STC56MLF, STC56MEL, STC56MELF, QTG50ML, QTG50MLF, QTG60ML, QTG60MLF, QTC50ML, QTC50MLF, QTC60ML, QTC60MLF, QTR50ML, QTR50MLF, QTR60ML, QTR60MLF, QT50ML, QT50MLF, QT50MLS, QT50MLR</p> |
| <p>High-end bracket options for direct mount tower light installation. Bracket structure allows for contained and tidy wiring with no exposed wires.</p> <p>Material : PC Color : Black, Ivory</p>  |  <p>TWA45</p> |  <p>ST45MB, ST45MBF, ST45ML, ST45MLF, ST56MB, ST56MBF, ST56ML, ST56MLF, ST56MEL, ST56MELF, STG40ML, STG40MLF, STG50ML, STG50MLF, STC45ML, STC45MLF, STC56ML, STC56MLF, STC56MEL, STC56MELF, QTG50ML, QTG50MLF, QTG60ML, QTG60MLF, QTC50ML, QTC50MLF, QTC60ML, QTC60MLF, QTR50ML, QTR50MLF, QTR60ML, QTR60MLF, QT50ML, QT50MLF, QT50MLS, QT50MLR</p>  <p>TWA80</p>  <p>ST80MB, ST80MBF, ST80ML, ST80MLF, STC80ML, STC80MLF, QTG70ML, QTG70MLF, QTC70ML, QTC70MLF, QTR70ML, QTR70MLF, QT70ML, QT70MLF, QT70MLS, QT70MLR</p> |

Tower Light Mounting Brackets










(Units : mm)

| Features | Product Image | Technical Diagram for Applicable Models |
|---|---|--|
| <p>Bracket options for installation of the direct mount slim tower light to the side of equipment.</p> <p>Material : Steel Color : Silver, Ivory</p>  |  <p>STAWB25</p> |  <p>STAWB25</p> <p>STA25SLM, STA35SL, STA35SLM</p> |
| |  <p>STAWB45</p> |  <p>STAWB45</p> <p>STA45SLM</p> |








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 | Operating Mode | Icon | Operating Mode |
|---|----------------|---|----------------|
|  | Buzzer |  | Speaker |
|  | Horn |  | Bell |
|  | Motor siren |  | MP3 |
|  | Decibel | | |

Specifications Icons

| Icon | Operating Mode | Icon | Operating Mode |
|---|---------------------|---|-------------------------------|
|  | Magnet type |  | Ambient operating temperature |
|  | NPN type transistor |  | PNP type transistor |
|  | IP rating |  | Wireless Network |

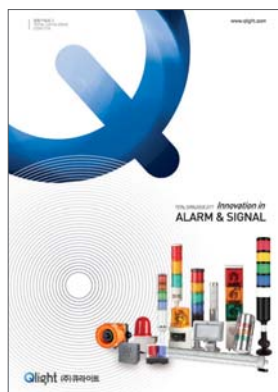
Detail Icons

| Icon | Operating Mode | Icon | Operating Mode |
|---|----------------------|---|-----------------------|
|  | Common specification |  | External view drawing |
|  | Wiring |  | Mounting |
|  | User specifications |  | Model selection |

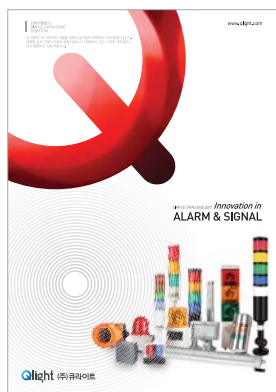
Qlight Catalogue Introduction

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.

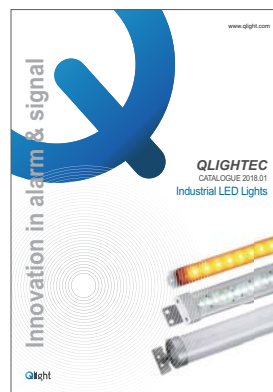
There are warning/signal lights, electric signal horns, signal tower lights, warning light bars, PC control tower lights, industrial LED lights, aviation obstruction lights, and limit switches.



Total Catalogue



Simple Catalogue



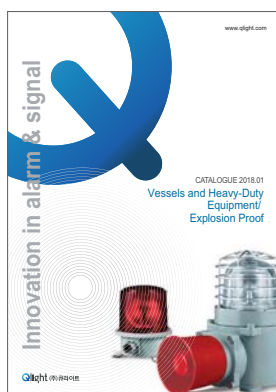
Industrial LED Lights



Signal Tower Lights



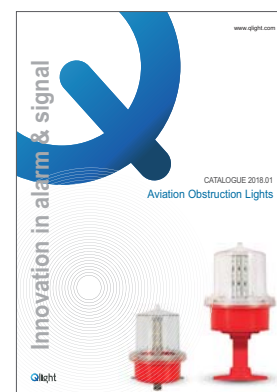
Warning/ Signal/ Signal & Electric Horn



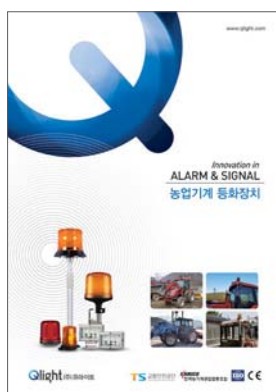
Vessels and Heavy-Duty Equipment/ Explosion Proof



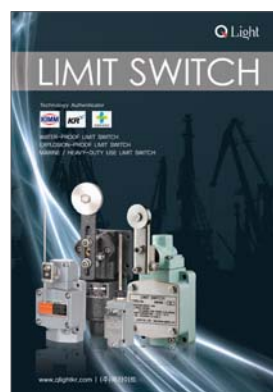
Aviation Obstruction Lights



Wireless Network System



Agriculture Machine Warning Light



Limit Switch



For Steel Manufacturing Facilities



FOR YOUR
SAFETY

Specification and dimensions listed in this catalogue are subject to change without prior notice for product quality improvement. The newest product information is available on our web site. (www.qlight.com) Please read the Instruction Manual attached to the product carefully before installation and use.

Qlight Catalogue Introduction

Signal Tower Lights

Warning/ Signal & Electric Horn

Vessels and Heavy-Duty & Equipment/ Explosion Proof

Warning Light Bar

Aviation Obstruction Lights

Industrial LED Lights

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WARNING LIGHT | ELECTRONIC HORN | SIGNAL TOWER LIGHT | EMERGENCY LIGHT BAR | LED OBSTRUCTION LIGHT | LED WORK LIGHT