# Flame/ Dust Explsoion Proof LED Tower Lights

# QTEX/QTEXB





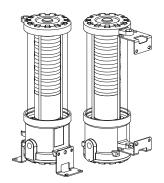












# ▲ Safety Precautions for Explosion Proof Products

Please follow the instruction below to ensure safe and correct use of explosion proof products.

- 1. Explosion proof products should be managed according to explosion proof regulations. Do not disassemble, assemble, alter or repair the product arbitrarily.
- 2. The temperature rating of the product is the temperature the product will experience at the applied rated voltage and ambient temperature indicated.
- 3. Use cable glands that satisfy the product's explosion proof grade and temperature grade.
- 4. Unused cable entries must be filled with material that meets the explosion proof grade and temperature rating.
- 5. Before installing the product, please make sure all cautions indicated on the labels, packaging, and operation manual of the product are fully understood.
- 6. Installation, maintenance and repair of the product must be performed by experts in the explosion proof field, or persons who have received relevant training.
- 7. For safety, the product should be installed and operated in environments that avoid high temperature and high pressure.
- 8. Please follow general safety precautions and avoid installing the product in locations that may generate excessive heat.
- 9. When installing the product in places where chemicals are located, please make sure that the environment does not have two or more incompatible chemicals mixed. For safety, please read the instruction manual carefully and be mindful of the chemical compositions where the product is used.
- 10. This product requires grounding.
- 11. Please note that special conditions shall be applied if the sign "X" is placed after the certificate number.
  - 1) For safe use, regular overpressure test must be carried out in accordance with EN 60079-1, clause 15.2.3.
  - 2) For safe use, tempered glass must be protected from strong impact
- 12. When using NPT cable glands (plugs), it is recommended to use them after applying non-hardening grease to maintain protective performance.

### Precaution for Safety

Failure to follow the instructions below may cause a loss of life or serious physical injury.

- 1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.)
- 2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated for each product. (Failure to follow these instructions may cause a fire to the product, electric shock, physical injury, malfunction or damage to the product.)
- 3. Do not alter or repair this product. If maintenance or repair service is required, please contact your local Qlight contact point. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
- Please apply the correct voltage to the product. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
- 5. When the product is applied to a condition that may impact lives or property, please make sure to have a double safety device. (Failure to follow this may cause damage to property, fire, electric shock and loss of life.)

#### Precautions for Correct Use

Failure to follow the proper instructions may cause damage to property, the product, or malfunction of the product that would void the warranty.

- 1. Please remove any objects that can interrupt ventilation around the product.
- 2. Please turn off the power of the product immediately if it fails to operate properly.
- 3. Carefully wire the product according to each product's specification.
- 4. Please be careful in preventing chemicals such as thinner, benzene, etc. in contact with the surface of the product.
- 5. Do not apply excessive force/impact to the product.
- 6. Failure to follow any of the instructions above may cause malfunction or damage to the product, fire, and electric shock.



Please scan the QR code for more detailed product information.

www.qlight.com

# **Ordering Specifications**

| QTEX           | - | 3                             | - | 12                    | - | RAG     |
|----------------|---|-------------------------------|---|-----------------------|---|---------|
| [Model number] |   | [Layer count]                 |   | [Voltage]             |   | [Color] |
| 1              |   | 1                             |   | 1                     |   | 1       |
| • QTEX         |   | • 1-1Layer                    |   | • 12-DC12V            |   | R-Red   |
| • QTEXB        |   | <ul> <li>2-2Layers</li> </ul> |   | • 24-DC24V            |   | A-Amber |
|                |   | <ul> <li>3-3Layers</li> </ul> |   | • 110/220-AC110V-220V |   | G-Green |
|                |   | <ul> <li>4-4Layers</li> </ul> |   |                       |   | B-Blue  |
|                |   | <ul> <li>5-5Layers</li> </ul> |   |                       |   | W-White |

# **Product Specifications**

#### **■** Explosion Proof Specifications

|                               | QTEXB  |  |  |  |
|-------------------------------|--|--|--|--|
| Model number                  | QTEX   |  |  |  |
| Range for                     | AC/DC 12V to 24V   |  |  |  |
| operating voltage             | AC 110V to 220V  |  |  |  |
| Ex mark                       | IECEX - Ex db IIC T6 Gb Ex tb IIIC T85°C Db ATEX - ( ) II2G Ex db IIC T6 Gb ( ) II2D Ex tb IIC T85°C Db KCs - Ex d IIC T6 IP66 TIIS - IIC T6 Gb (QTEXB only) |  |  |  |
| Ambient operating temperature | –40°C ≤ Ta ≤ 60°C  |  |  |  |
| Explosion proof Zone          | Zone1, Zone2, Zone21, Zone22   |  |  |  |
| Protection rating             | IP66   |  |  |  |

| 7   | Zone 1     | High risk gas/vapour                        |    |       |  |  |
|---|------------|---|----|-------|--|--|
| Zone<br>definitions(Gas)                            | Zone 2     | Medium risk gas/vapour                      |    |       |  |  |
| Group<br>definitions(Gas)                           | GROUP II A | Acetone, Petrol, Methanol, Propane, Toluene |    |       |  |  |
|   | GROUP II B | Ethylene, City gas                          |    |       |  |  |
| delinitions(Gas)                                    | GROUP II C | Hydrogen, Acetylene, Carbon sulphide        |    |       |  |  |
| Maximum surface temperature of electrical equipment | T1         | 450°C                                       | T4 | 135°C |  |  |
|   | T2         | 300°C                                       | T5 | 100°C |  |  |
|   | Т3         | 200°C                                       | T6 | 85°C  |  |  |
| Zone definitions(Dust)                              | Zone 21    | High risk powder/dust                       |    |       |  |  |
|   | Zone 22    | Medium risk powder/dust                     |    |       |  |  |
| Group<br>definitions(Dust)                          | GROUP II A | Ignitible fibers/flyings(more than 0.5mm)   |    |       |  |  |
|   | GROUP II B | Non-conductive dusts                        |    |       |  |  |
|   | GROUP II C | Conductive dusts                            |    |       |  |  |

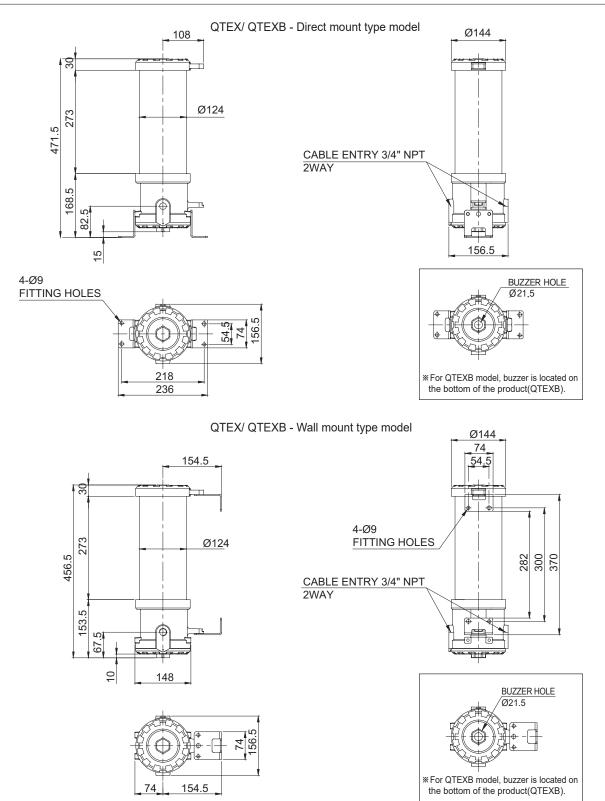
#### ■ General Product Specifications

| Model<br>number               | Layer count | Voltage         | Current        | Certificate | Weight | Color   |
|-------------------------------|-------------|-----------------|----------------|-------------|--------|---|
|                               | 1           | AC/DC12V        | 0.085A         | EX<br>ATEX  | 4.01kg | R-Red   |
|                               |             | AC/DC24V        | 0.064A         |             | 4.01kg |   |
|                               |             | AC<br>110V-220V | Max.<br>0.052A |             | 4.02kg |   |
|                               |             | AC/DC12V        | 0.150A         |             | 4.15kg | R-Red<br>G-Green  |
|                               | 2           | AC/DC24V        | 0.099A         |             | 4.15kg |   |
|                               | _           | AC<br>110V-220V | Max.<br>0.067A |             | 4.16kg |   |
| OTEV                          | 3           | AC/DC12V        | 0.210A         |             | 4.31kg | R-Red<br>A-Amber<br>G-Green   |
| QTEX<br>(Steady/<br>Flashing) |             | AC/DC24V        | 0.129A         |             | 4.31kg |   |
|                               |             | AC<br>110V-220V | Max.<br>0.083A |             | 4.32kg |   |
|                               | 4           | AC/DC12V        | 0.270A         |             | 4.46kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |
| _                             |             | AC/DC24V        | 0.159A         |             | 4.46kg |   |
|                               |             | AC<br>110V-220V | Max.<br>0.098A |             | 4.47kg |   |
|                               | 5           | AC/DC12V        | 0.330A         |             | 4.61kg |   |
|                               |             | AC/DC24V        | 0.189A         |             | 4.61kg |   |
|                               |             | AC<br>110V-220V | Max.<br>0.113A |             | 4.62kg |   |

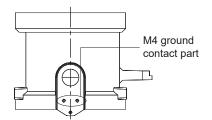
| Model<br>number                | Layer count | Voltage         | Current        | Certificate            | Weight | Color   |
|--------------------------------|-------------|-----------------|----------------|------------------------|--------|---|
|                                | 1           | AC/DC12V        | 0.175A         | IEĈEX<br>ATEX<br>TIIIS | 4.11kg | R-Red   |
|                                |             | AC/DC24V        | 0.134A         |                        | 4.11kg |   |
|                                |             | AC<br>110V-220V | Max.<br>0.077A |                        | 4.12kg |   |
|                                | 2           | AC/DC12V        | 0.240A         |                        | 4.25kg | R-Red<br>G-Green  |
|                                |             | AC/DC24V        | 0.169A         |                        | 4.25kg |   |
| QTEXB<br>(Steady/<br>Flashing) |             | AC<br>110V-220V | Max.<br>0.092A |                        | 4.26kg |   |
|                                | 3           | AC/DC12V        | 0.300A         |                        | 4.41kg | R-Red<br>A-Amber<br>G-Green   |
|                                |             | AC/DC24V        | 0.199A         |                        | 4.41kg |   |
|                                |             | AC<br>110V-220V | Max.<br>0.106A |                        | 4.42kg |   |
|                                | 4           | AC/DC12V        | 0.360A         |                        | 4.56kg | R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>R-Red<br>A-Amber<br>G-Green<br>B-Blue<br>W-White |
|                                |             | AC/DC24V        | 0.229A         |                        | 4.56kg |   |
|                                |             | AC<br>110V-220V | Max.<br>0.121A |                        | 4.57kg |   |
|                                | 5           | AC/DC12V        | 0.430A         |                        | 4.71kg |   |
|                                |             | AC/DC24V        | 0.259A         |                        | 4.71kg |   |
|                                |             | AC<br>110V-220V | Max.<br>0.135A |                        | 4.72kg |   |

<sup>•</sup> Protection rating : IP66

**Dimensions** (Units : mm)



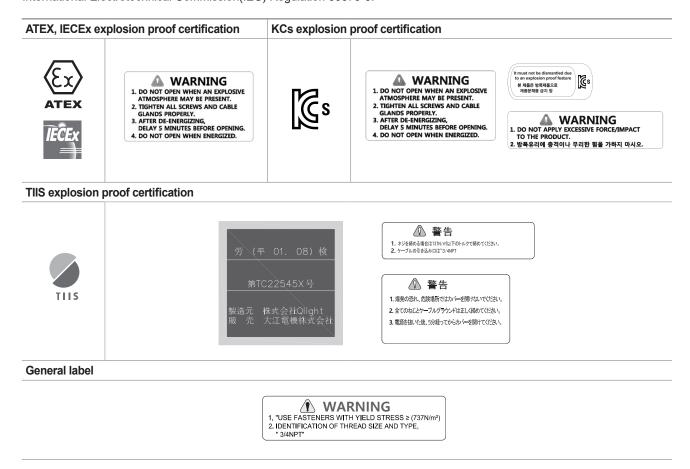
### **Grounding Instructions**



- Please use an M4 bolt at the location marked in the diagram above to ground the product.
- When connecting the grounding cable, please use a ring terminal.
- Please use a grounding cable with a diameter greater than 4mm.
- Please make sure to ground the common line(-) of the product.

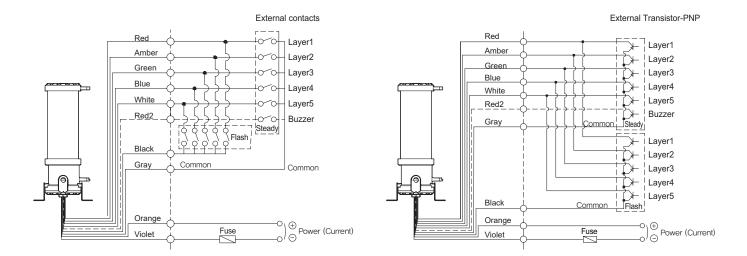
### **Explosion proof product label**

• All equipment that are used in explosive environment must have a label showing on following details in accordance with International Electrotechnical Commission(IEC) Regulation 60079-0.

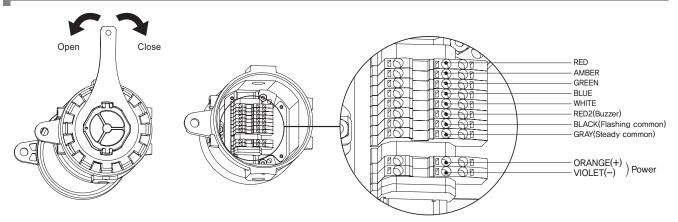


### **Wiring Instructions**

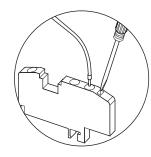
- QTEX/ QTEXB model can be wired with either external contact and transistor.
- When wiring with transistor, please make sure to use PNP transistor and follow the wiring instructions in the diagram below.



#### **Terminal Block Wiring Instructions**



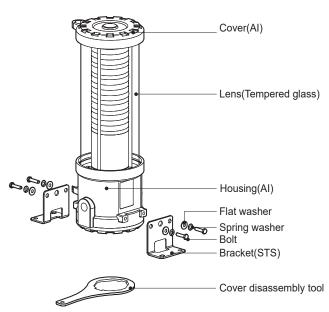
- Disassemble the terminal block cover by turn the terminal block cover in the CCW direction using the QTEX (B) cover disassembly tool.
- QTEX model features a terminal block located inside of the housing for easy wiring. For detailed wiring instructions, please refer to the wiring Instructions above.
- After wiring, place the cover around the top of product and turn the cover in the CW direction using the QTEX (B) cover disassembly tool.
- \*\* Please make sure to close the terminal block cover completely to prevent failure in waterproofing.
- \* Applicable cable range: AWG14-AWG24



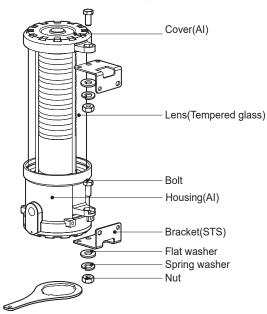
- When wiring, please insert the wires while pushing down on the lever of each terminal box wiring port using a terminal block screw driver(-).
- When removing the wiring, please pull on the wire while simultaniously pushing down on the lever of each terminal box wiring port.
- If wires are removed while the lever of the terminal box wiring port is not pushed down, it may cause damage to the contact point of the terminal box.

### **Parts Definition/Installation**

#### QTEX/ QTEXB Direct mount type model



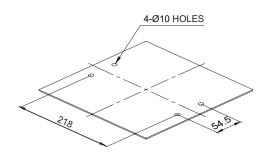
#### QTEX/ QTEXB Wall mount type model



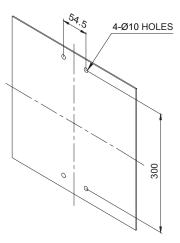
- First, machine taps or holes on the mounting surface.
- The mounting hole of this product is 9mm in diameter.
- When machining taps, fasten the bolt through the mounting hole of the product.
- · When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side of the mounting surface.
- Based on your application needs, use a wall mount or direct mount bracket to secure the product's cover or body to the desired mounting surface.

# **Mounting Hole Specifications**

• Machine holes on the mounting surface referring to the diagram below.



QTEX/ QTEXB Direct mount type model



QTEX/ QTEXB Wall mount type model

## **Installation Environment and Protection Rating**

- This product is designed for use with non-sparking explosion proof structure.
- · Please make sure to use the prduct in a environment where satisfies regulated explosion proof grading.
- For further information, please visit our website (www.qlight.com).

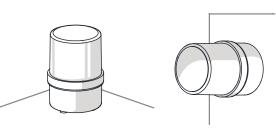
# **Product installation direction**

■ Install the product in accordance with the manual. Otherwise rainwater or moisture may penetrate into the product.

#### · BEACON/SIGNALING LIGHT

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

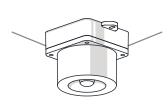
Power cord inlet part shall not be facing the sky.

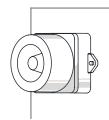




#### · ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.







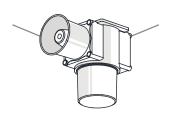


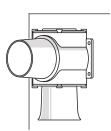




#### · HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

Sounder part shall not be facing the sky.



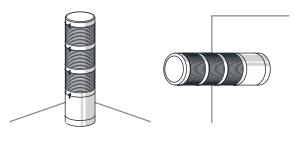




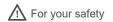
#### · SIGNAL TOWER LIGHTS

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

Power cord inlet part shall not be facing the sky.







Specification and dimensions listed in this catalogue subject to change without notice for product quality improvement. The newest product information is available on our website.(www.qlight.com)

Please read the instruction manual attached to the product carefully before installation and use.

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You can expect prompt service if you have exact information such as model name, symptom, telephone number and address.

\*\*ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE

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