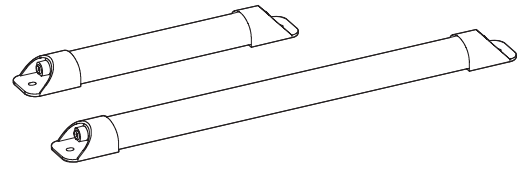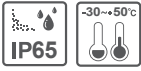# General Waterproof LED Light Bars
# QPL/ QPHL

IP65  -30~+50℃

Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.

## ⚠ Precautions 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.)
4. 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.

## Ordering Specifications

| QPL | - | 200 | - | 24 |
|---|---|---|---|---|
| [Model number] | | [Product length] | | [Voltage] |

- QPL - Translucent lens
- QPLC - Transparent lens
- QPHL - High brightness translucent lens
- QPHLC - High brightness transparent lens

- 200 - 200mm
- 300 - 300mm
- 400 - 400mm
- 500 - 500mm

- 24 – DC24V
- 110 – AC110V
- 220 – AC220V

# Product Specifications

## ■ QPL – Optics Specifications

| Model number | | QPL-200 | QPLC-200 | QPL-300 | QPLC-300 | QPL-400 | QPLC-400 | QPL-500 | QPLC-500 |
|---|---|---|---|---|---|---|---|---|---|
| Lens color | | Translucent | Transparent | Translucent | Transparent | Translucent | Transparent | Translucent | Transparent |
| Light color (Standard) | | Cool daylight | | | | | | | |
| Color temperature (Standard) | | 6,000-7,000K | | | | | | | |
| Luminous flux | DC | 187lm | 248lm | 309lm | 387lm | 436lm | 515lm | 587lm | 587lm |
| | AC | - | 381lm | 433lm | 527lm | 600lm | 696lm | 792lm | 792lm |
| Illumination (at 1m) | DC | 65Lux | 80Lux | 100Lux | 120Lux | 145Lux | 160Lux | 195Lux | 195Lux |
| | AC | - | 100Lux | 120Lux | 175Lux | 210Lux | 255Lux | 305Lux | 265Lux |

## ■ QPL – General Product Specifications

| Model number | QPL-200/ QPLC-200 | QPL-300/ QPLC-300 | QPL-400/ QPLC-400 | QPL-500/ QPLC-500 |
|---|---|---|---|---|
| Rated voltage | DC24V | DC24V | DC24V | DC24V |
| | | AC110V / 220V | AC110V / 220V | AC110V / 220V |
| Range for operation voltage | DC21.5V-26.5V | DC21.5V-26.5V / AC98V-121V / AC198V-245V | | |
| Power consumption | 4W | 4W | 5.5W | 7.5W |
| | | 3.5W / 5.5W | 6W / 7.5W | 9W / 11W |
| Insulation resistance | Min. 100MΩ(500V DC mega ohm meter) | | | |
| Withstanding voltage | DC : 500VAC, 60Hz, 1 minute / AC : 1,500VAC, 60Hz, 1 minute | | | |
| Operating temperature | -30°C to +50°C | | | |
| Protection rating | IP65 | | | |
| Materials | Lens : PC, Side cover : ABS, Heat sink : Al | | | |
| Certificate | CE DC24V, AC220V Only / (UL) DC24V Only | | | |
| Weight(approx.) | 0.13kg | 0.15kg | 0.21kg | 0.24kg |

## ■ QPHL – Optics Specifications

| Model number | | QPHL-200 | QPHLC-200 | QPHL-300 | QPHLC-300 | QPHL-400 | QPHLC-400 | QPHL-500 | QPHLC-500 |
|---|---|---|---|---|---|---|---|---|---|
| Lens color | | Translucent | Transparent | Translucent | Transparent | Translucent | Transparent | Translucent | Transparent |
| Light color (Standard) | | Cool daylight | | | | | | | |
| Color temperature (Standard) | | 6,000-7,000K | | | | | | | |
| Luminous flux | DC | 289lm | 344lm | 460lm | 529lm | 668lm | 768lm | 803lm | 907lm |
| | AC | - | - | 505lm | 582lm | 714lm | 814lm | 927lm | 1,094lm |
| Illumination (at 1m) | DC | 80Lux | 100Lux | 120Lux | 150Lux | 190Lux | 230Lux | 250Lux | 310Lux |
| | AC | - | - | 125Lux | 150Lux | 210Lux | 255Lux | 290Lux | 355Lux |

## ■ QPHL – General Product Specifications

| Model number | QPHL-200/ QPHL-C200 | QPHL-300/ QPHLC-300 | QPHL-400/ QPHLC-400 | QPHL-500/ QPHLC-500 |
|---|---|---|---|---|
| Rated voltage | DC24V | DC24V | DC24V | DC24V |
| | | AC110V / 220V | AC110V / 220V | AC110V / 220V |
| Range for operation voltage | DC21.5V-26.5V | DC21.5V-26.5V / AC98V-121V / AC198V-245V | | |
| Power consumption | 4W | 5.5W | 8.5W | 12W |
| | | 4W / 6.5W | 7W / 9W | 10W / 12W |
| Insulation resistance | Min. 100MΩ(500V DC mega ohm meter) | | | |
| Withstanding voltage | DC : 500VAC, 60Hz, 1 minute / AC : 1,500VAC, 60Hz, 1 minute | | | |
| Operating temperature | -30°C to +50°C | | | |
| Protection rating | IP65 | | | |
| Materials | Lens : PC, Side cover : ABS, Heat sink : Al | | | |
| Certificate | - | CE DC24V, AC220V Only / (UL) DC24V Only | | |
| Weight(approx.) | 0.13kg | 0.22kg | 0.31kg | 0.41kg |
| | | 0.23kg | 0.32kg | 0.42kg |

# Dimensions

QPL/ QPHL-200/ 300/ 400/ 500
QPLC/ QPHLC-200/ 300/ 400/ 500

2-Ø5.2 HOLES

A
C
39.4

7
5.2

FITTING HOLES

B
24.4
2.5
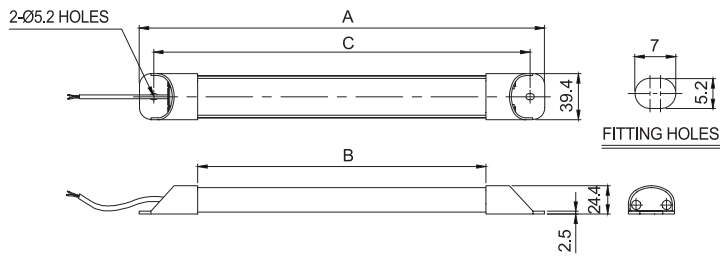
| MODEL | A | B | C |
|---|---|---|---|
| QPL/ QPHL/ QPLC/ QPHLC 200 | 200 | 100 | 175 |
| QPL/ QPHL/ QPLC/ QPHLC 300 | 300 | 200 | 275 |
| QPL/ QPHL/ QPLC/ QPHLC 400 | 400 | 300 | 375 |
| QPL/ QPHL/ QPLC/ QPHLC 500 | 500 | 400 | 475 |

# Wiring Instructions

DC

White
Black
Fuse
Power

AC

Blue
Brown
Fuse
Power
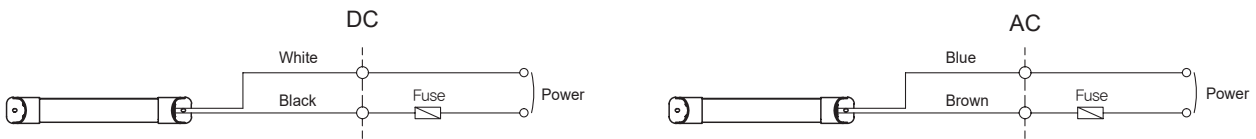
- DC steady type cable specification : External power line - UL2464 AWG22(0.3sq) x 2C 450mm
  AC steady type cable specification : External power line - VCTFK(0.75sq) x 2C 450mm
- DC type product can be wired regardless of polarity.

# Parts Definition/ Installation

■ **Parts Definition**

QPL/ QPHL/ QPLC/ QPHLC

Side cover(ABS)     Lens(PC)     Side cover(ABS)
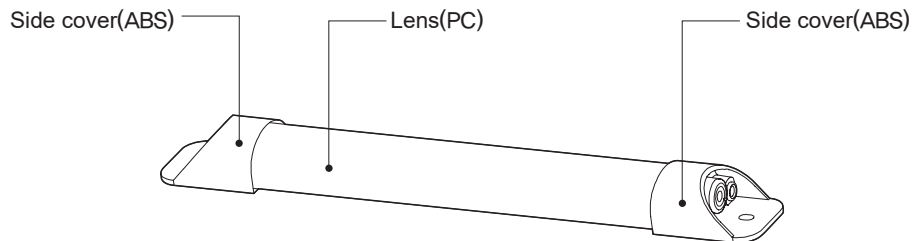
# Installation/ Mounting Hole Specifications

■ **Installation**

- First, machine taps or holes on the mounting surface ①.
- The mounting hole of this product is 5.2mm in diameter(long hole).
- 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.
  (When assembling using bolt and nut, please make sure to use flat washer and spring washer.)

①

3
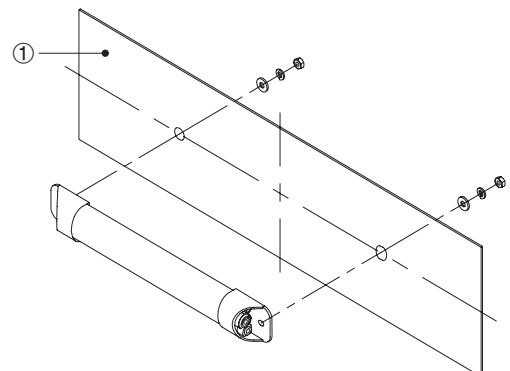
## Mounting Hole Specifications

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



2-Ø6 HOLES
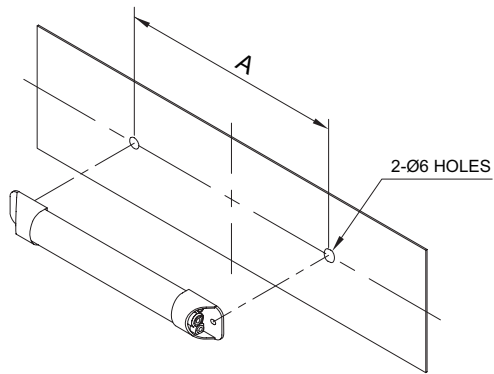
| MODEL | A |
|---|---|
| QPL/ QPHL/ QPLC/ QPHLC-200 | 175 |
| QPL/ QPHL/ QPLC/ QPHLC-300 | 275 |
| QPL/ QPHL/ QPLC/ QPHLC-400 | 375 |
| QPL/ QPHL/ QPLC/ QPHLC-500 | 475 |

QPL/ QPHL/ QPLC/ QPHLC-200/ 300/ 400/ 500

## Installation Environment and Protection Rating

• This product is designed for use with protection rating of IP65.
• If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated(IP65), it may cause malfunction or damage to the product.
• For further information, please visit our website(www.qlight.com).

# 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 manage according to international standards.

**ATEX** The European Regulatory Framework or Manufacture, Installation and Use of Equipment in Explosive Atmospheres

Qlight's 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)

**KCs** Explosion Proof Device Safety Certification System

The safety performance of machines and equipment subject to safety certification and Technical capability and production system have been certified safety certification standards.

**TIIS** Japan Explosion-proof Certification

TIIS is a Japanes explosion proof test and certification system accordance with the Ministry of Health, Labour and Welfare Notice and the explosion proof guidelines for factory electrical equipment. Qlight's explosion proof products hasve been tested and certified by TIIS.

**CCS** China Classification Society

Qlight's design and quality assurance system has been certified by the China Classification Society.

**RMRS** Russian Maritime Register of Shipping

Qlight's design and quality assurance system has been certified from Russian Maritime Register of Shipping.

**LR** Lloyd's Register

Qlight's design and quality assurance system has been certified from Lloyd's Register.

**KR** Korean Register of Shipping

Qlight's design and quality assurance system has been certified by the Korean Register of Shipping.

**KC** Korea Safety Certification

Qlight's products are certified by KC for preventing accident caused by fire.

**E-mark** Commission Directive Regarding Vehicle Industry

Qlight has obtained EU mark for approved vehicles and vehicle components sold into the EU(EEA : European Economic Area)

**ICAO** International Civil Aviation Organization

Qlight guarantees our products satisfy the criteria regulated by the International Civil Aviation Organization(ICAO, FAA).

**KCC** Conformity Assessment of Broadcasting Communication Equipment

Qlight has been certified to protect the electromagnetic environment that causes unwanted electromagnetic waves from the device, communication failure due to other devices or external radio waves, and malfunction of the device.

**UL** Underwriters Laboratories

Qlight's design and quality assurance system has been certified from UL to ensure the stability of consumption goods and to protect consumers.

**CCCF** China Certification Center for Security & Protection

Qlight has passed the rigorous examination process of "Passing Fire Protection Products Centering" In order to sell fire-fighting products such as fire alarm equipment to Chinese market.

**CCC** China Compulsory Certificate

Qlight's has obtained CCC which guarantees safety, protection against fraud, environment, etc.

**CE** European Commission

Qlight has been certified by the European Commission.

**RoHS2** Restriction of Hazardous Substances Directive

Qlight c omplies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.