

INNOVATION in
ALARM & SIGNAL

IO-Link Product

CATALOG 2026



Signal Tower Lights
Signal Beacons and Sounders
Heavy-Duty and Explosion Proof Signalings
Warning Light Bars
Aviation Obstruction Lights
Smart Factory Products
Industrial LED Lights
Performance Line - E Series
IO-Link Product



Qlight

Gives you a
Brighter
Future

Qlight Gives You a Brighter Future!

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



Qlight is a representative of signaling device in Korea.

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

1986 - 1995

Business foundation and consolidation

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

1996 - 2005

Growing as a signal transmission device specialist

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



- 2004 ISO 9001:2000 certificates acquired

2006 - 2017

Mission device specialist A great leap forward & business reconstruction

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



History of Change & Innovation

2018 to Present

New engines for growth

2019 Established Qidong factory



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

2020 Selected as a small giants company by Small and Medium Business Administration(SMBA)

2021 Selected as a youth-friendly small giants company

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

The 2nd growth and globalization

Qlight, the best professional company

Leading the **improvement of industrial efficiency**

1 | Aiming for the first-class

Aiming to become a first-class specialized company by contributing to industrial efficiency and safety through core competencies in systems, variety, and high-quality.

40 | A Legacy of Continuous Growth

Qlight has been continuously growing for nearly 40 years since its establishment and is recognized for quality and technology based on the business culture of partnership and management of sharing

80 | Global networks in 80 countries

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

450 | Multi-variety production

Meeting diverse customer needs through a systematic and customized production system, offering over 450 products.

Quick

Prompt customer satisfaction and real time enterprise(RTE)

Quality

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

Question

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

Qualified

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



Core Competency



System

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



Broad-line

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



Supreme Quality

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

How Qlight works

















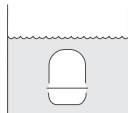
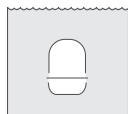
Waterproof and Dustproof Protection Structure



Comparing waterproof & dustproof protection structure

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

IP 6 7

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

NEMA SIZE

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

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

NEMA Ratings and IP Ratings Equivalency Chart

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

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

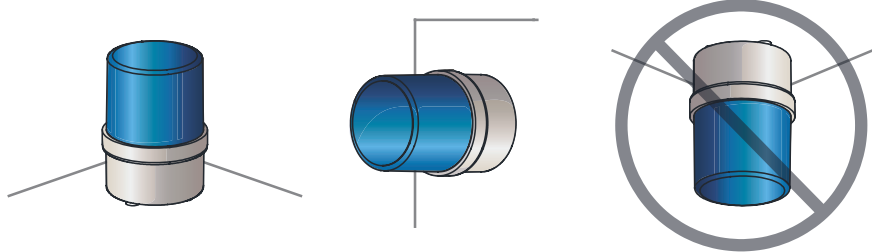
PRODUCT INSTALLATION DIRECTION



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

• BEACON/SIGNALING LIGHT

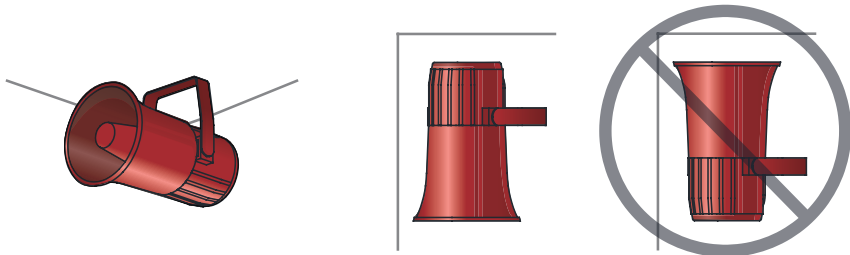
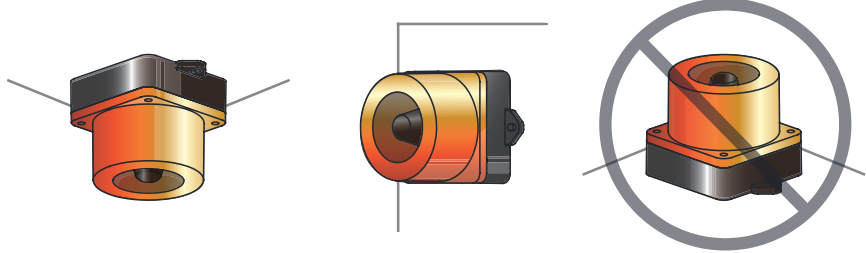
Power cord inlet part shall not be facing the sky.



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

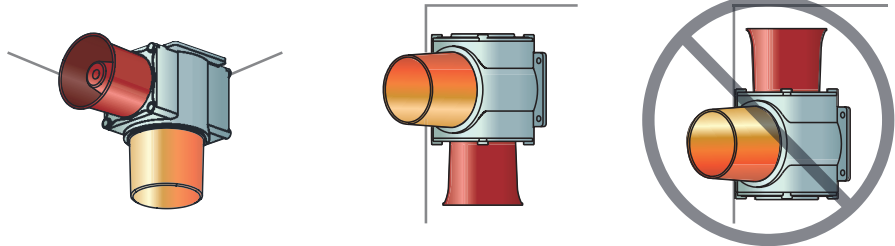
• ELECTRONIC SOUNDER / SIGNAL HORN

Sounder part shall not be facing the sky.



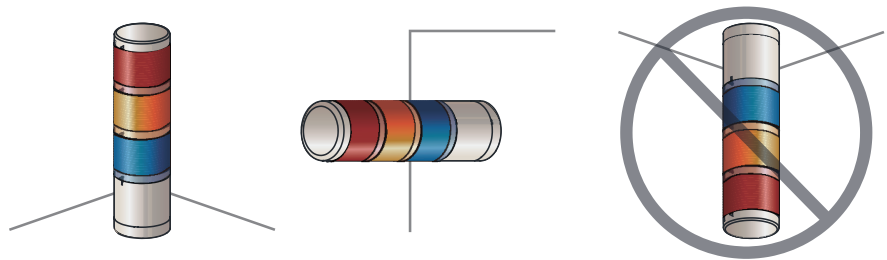
• **HEAVY-DUTY & EXPLOSION
PROOF SIGNALINGS**

Sounder part shall not be facing the sky.



• **SIGNAL TOWER LIGHTS**

Power cord inlet part shall not be facing the sky.












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








Icon Description

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








Light Source and Operating Mode Icons

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

Acoustic Signal Icons

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

Specifications Icons

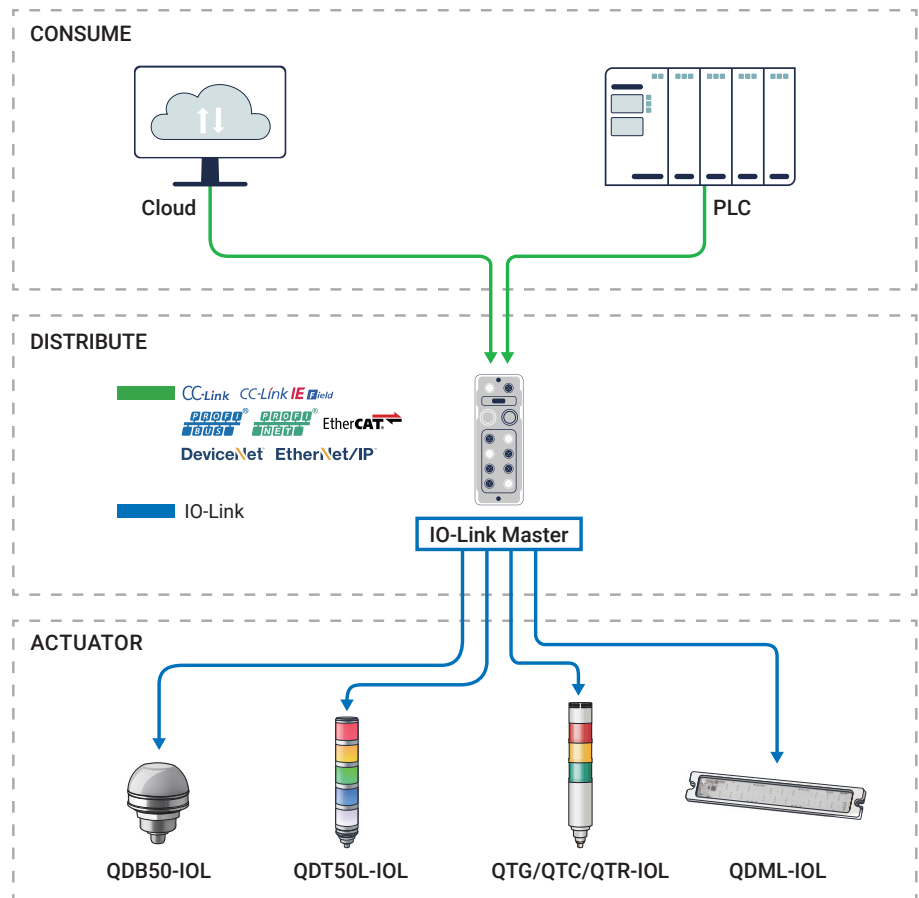
Icon	Specification	Icon	Specification
	Magnet type		Ambient operating temperature
	NPN type transistor		PNP type transistor
	IP rating		Wireless Network
	RoHS		

IO-Link Product



IO-Link Product System Application

1. What is IO-Link



1) Serial Bidirectional Point-to-Point Connection

- IO-Link enables direct communication between sensors/actuators and the IO-Link master, simultaneously handling both signal transmission and power supply. No separate bus system is required.

2) Operation Modes Supported

- IO-Link devices support both trigger (standard I/O) mode and IO-Link mode, offering flexible application across diverse operational environments. (Note: QT(G/C/R)-IOL series does not support trigger mode.)

3) Data Transmission Speed: 38,400 bps (COM2)

4) Connection Cables

- IO-Link uses standard unshielded industrial cables with M12 plug connectors, allowing easy installation and maintenance without the need for special cables.

5) Intelligent Diagnostics and Maintenance

- Predictive Maintenance: Real-time monitoring of device status allows for early failure warnings.
- Event logging in millisecond resolution enables rapid and accurate fault tracing.

6) Economic Efficiency

- IO-Link communication can reduce setup and operation costs by approximately 30–50% compared to analog communication. Its standardized specifications also help minimize \ maintenance time and expenses.

2. Benefits of IO-Link

Digital Communication

Bi-directional communication is enabled through a simple three-wire cable consisting of power, ground, and signal lines.

Parameterization and Diagnostic Functions

IO-Link enables detailed parameter configuration of sensors and actuators, and provides diagnostic data such as device status and fault information.

Integration with Industrial Ethernet

IO-Link can be flexibly integrated with higher-level communication protocols such as PROFINET, EtherNet/IP, and Modbus TCP/IP.

Enhanced Flexibility and Efficiency

Smart sensors and actuators can be seamlessly integrated into the Industrial Internet of Things (IIoT) environment, enabling data-driven analysis and predictive maintenance.

3. USE IO-Link & Application Report

IO-Link provides a global communication standard designed to enhance equipment efficiency in manufacturing facilities worldwide, enabling the construction of a cost-effective and standardized system.

1) Simplified Wiring and Cost Reduction

- Use of Standard Cables: IO-Link uses standardized unshielded 3- or 4-wire cables with M12 connectors, allowing for easier installation and maintenance.
- Reduced Control Cabinet Space: IP67-rated decentralized master modules can be installed directly on the production floor, eliminating the need for large control cabinets.
- Integration of Existing Devices: Existing digital sensors and actuators can be integrated into the IO-Link system using I/O hubs, streamlining system expansion and reducing wiring complexity.

2) Bidirectional Communication and Data Transparency

- Global Standard Protocol: IO-Link complies with the IEC 61131-9 international standard and supports point-to-point digital communication between sensors/actuators and PLCs. This allows bidirectional transmission of switching signals, parameters, and diagnostic data.
- Multiple Data Types: IO-Link supports the separate handling of cyclic data (e.g., real-time process values) and acyclic data (e.g., configuration information, event logs), enabling transparent and structured data exchange.

3) Flexible System Integration

- IO-Link offers flexible integration with higher-level fieldbus systems such as PROFINET, EtherCAT, EtherNet/IP, and Modbus TCP, making it highly compatible with a wide range of industrial automation systems.

4) Enabler for Digital Transformation and Industry 4.0

- IO-Link provides a standardized data communication method that enables seamless connectivity with higher-level systems, including MES and cloud-based analytics platforms. This supports the realization of Industry 4.0 by enabling process optimization, energy efficiency, and quality improvement.

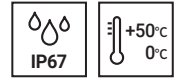
Product Specification for IO-Link Product



Model number	QDML-IOL	QDT50L-IOL	QDB50-IOL	QTG60L-IOL	QTG70L-IOL
Voltage	DC24V	DC24V	DC24V	DC24V	DC24V
Dimension (mm)	Length	125-910	Ø51	Ø50	Ø60
	Width	10	-	-	-
	Height	40	165-278	20	-
Material	Housing-AL Lens-PU	Housing-AL Lens-PC	Housing-AL Lens-PC	Housing-ABS Lens-PC	Housing-ABS Lens-PC
Layers		3 Layers, 5 Layers		1-5 Layers	1-5 Layers
Lamp & Operation	LED Steady/ Flashing	●	●	●	●
Sound & Volume	buzzer sound	-	Max.80dB at 1m	-	Max.100dB at 1m (High-volume buzzer), Max.85dB at 1m (Waterproof buzzer)
Mount bracket	Magnetic Holder Mounting bracket	Direct mount, Wall mount Pole mount	Mounting bracket	Wall mount	Wall mount
Bracket	-	QZ30, QZ302, LB35	-	LB32	LB32
Protection rating	IP67	IP65/IP20	IP67	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)
Certificates	IO-Link, CE, UKCA	IO-Link, CE, UKCA	IO-Link, CE, UKCA	IO-Link, CE, UL	IO-Link, CE, UL
Customization					
Page	P15	P17	P19	P20-22	P20-22



Model number	QTC60L-IOL	QTC70L-IOL	QTR60L-IOL	QTR70L-IOL
Voltage	DC24V	DC24V	DC24V	DC24V
Dimension (mm)	Length	Ø60	Ø70	Ø60
	Width	-	-	-
	Height	-	-	-
Material	Housing-ABS, Inner Lens-PC Lens-PC	Housing-ABS, Inner Lens-PC Lens-PC	Housing-ABS Lens-PC	Housing-ABS Lens-PC
Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Lamp & Operation	LED Steady/ Flashing	●	●	●
Sound & Volume	buzzer sound	Max.100dB at 1m (High-volume buzzer), Max.85dB at 1m (Waterproof buzzer)	Max.100dB at 1m (High-volume buzzer), Max.85dB at 1m (Waterproof buzzer)	Max.100dB at 1m (High-volume buzzer), Max.85dB at 1m (Waterproof buzzer)
Mount bracket	Wall mount	Wall mount	Wall mount	Wall mount
Bracket	LB32	LB32	LB32	LB32
Protection rating	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)	IP65(Standard, Waterproof buzzer) Non-Waterproof (Standard buzzer, High-volume buzzer)
Certificates	IO-Link, CE, UL	IO-Link, CE, UL	IO-Link, CE, UL	IO-Link, CE, UL
Customization				
Page	P23-25	P23-25	P26-29	P26-29



PRODUCT SPECIFICATION

QDML-IOL

Materials Housing-Al, Lens-PU
Ambient operating temperature 0°C to +50°C
Protection rating IP67



QDML-IOL

- State-of-the-art multi colored LED Work Light with IO-Link technology
- Signaling device optimized for Industry 4.0
- Plug & play technology applied for immediate operation when mounted on an international standard M12 connector
- 8 types of preset color modes and user-defined settings
- Convenient environment setting possible via IO-Link
- Available in a variety of lengths from 125mm to 900mm, allowing customers can choose an appropriate options
- High protection rating of IP67 allows use in various environments
- IO-Link Version: V1.1
- Data Transmission Rate: 38,400 bps (COM2)

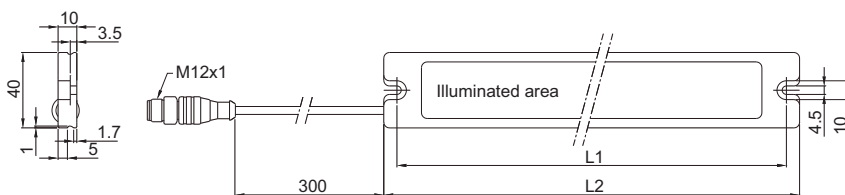
QDML-IOL Multi-Segment IOL Signal Lighting

Optics Specifications					
Model number	QDML-IOL-125	QDML-IOL-250	QDML-IOL-480	QDML-IOL-700	QDML-IOL-910
Lens Color	Transparent				
Light color	Red, Green, Yellow, Blue, White, Orange, Pink, Customization				
Deflection angle FWHM	120°				
Specifications					
Model number	QDML-IOL-125	QDML-IOL-250	QDML-IOL-480	QDML-IOL-700	QDML-IOL-910
Voltage	DC24V				
Range for operation voltage	DC18V-DC30V (Supply Class 2)				
Power consumption	3W	5W	9.1W	13.4W	17.5W
Insulation resistance	Min. 100MΩ(500V DC mega ohm meter)				
Withstanding voltage	DC: 500VAC, 60Hz, 1 minute/AC: 1,500VAC, 60Hz, 1 minute				
Operating temperature	0°C to +50°C				
Protection rating	IP67				
Materials	Housing-Al, Lens-PU				
Certification	IO-Link CE UK CA				
Weight(Approx.)	0.115kg	0.21kg	0.39kg	0.55kg	0.70kg

Technical Diagram

Units: mm

QDML



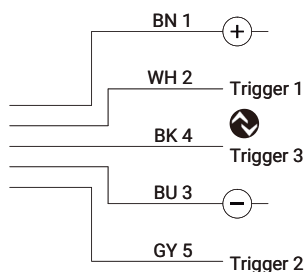
Model	L1	L2
QDML-IOL-125	115	125
QDML-IOL-250	240	250
QDML-IOL-480	466	480
QDML-IOL-700	686	700
QDML-IOL-910	896	910

Multiple Color Programmable LED Work Light with IO-Link Technology

QDML-IOL

Wiring Instructions

·QDML-IOL



Operating mode: External trigger

TRIG 1	TRIG 2	TRIG 3	Pre-set	Factory setting	
				Var.125	Var.250-910
0	0	0	1	<input type="checkbox"/> Off	<input type="checkbox"/> Off
1	0	0	2	<input checked="" type="checkbox"/> Red	<input checked="" type="checkbox"/> Red
0	1	0	3	<input checked="" type="checkbox"/> Green	<input checked="" type="checkbox"/> Green
1	1	0	4	<input checked="" type="checkbox"/> Yellow	<input checked="" type="checkbox"/> Yellow
0	0	1	5	<input checked="" type="checkbox"/> Blue	<input checked="" type="checkbox"/> Blue
1	0	1	6	<input type="checkbox"/> Red	<input checked="" type="checkbox"/> Red
0	1	1	7	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Green
1	1	1	8	<input checked="" type="checkbox"/> Red Cycling	<input type="checkbox"/> Yellow

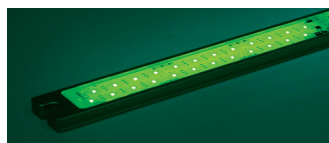
All Trigger Inputs have a delay -50 ms.

Pre-sets can be defined via IO-Link.

Signal Color Options



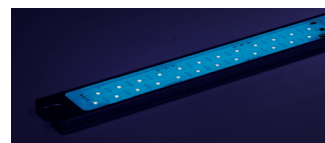
Red



Green



Yellow



Blue



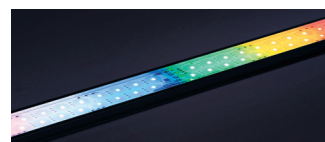
White



Orange



Pink



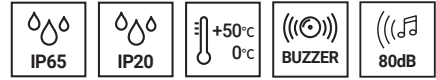
Customization

Ordering Specification

QDML-IOL	-	480	-	24
[Model number] QDML-IOL		[Product length] 125-125mm 250-250mm 480-480mm 700-700mm 910-910mm		[Voltage] 24-DC24V

Ø50mm Multiple Color Programmable LED Tower Light with IO-Link Technology

QDT50L-IOL



PRODUCT SPECIFICATION

QDT50L-IOL

Materials Housing-Al, Lens-PC
Ambient operating temperature 0°C to +50°C
Volume Max. 80dB at 50cm
Protection rating
 Standard type-IP65, Built-in buzzer type-IP20

- State-of-the-art multi colored LED Signal Tower Light with IO-Link technology
- Signaling device optimized for Industry 4.0
- Plug & play technology applied for immediate operation when mounted on an international standard M12 connector
- 8 types of preset color modes and user-defined settings
- Optional 80dB built-in buzzer available
- Convenient environment setting possible via IO-Link
- IO-Link Version: V1.1
- Data Transmission Rate: 38,400 bps (COM2)



QDT50L

QDT50L-IOL Multi-Segment IOL Signal Columns

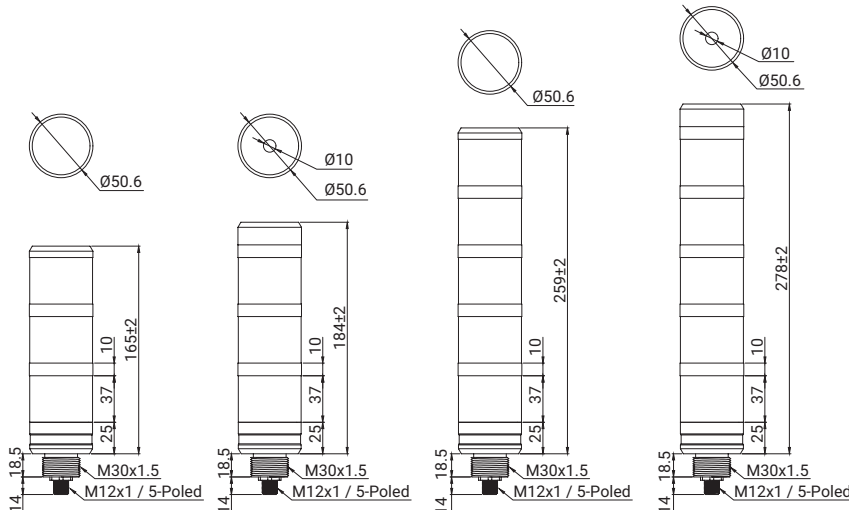
Model number	Layers	Voltage	Certificates	Weight	Color
QDT50L-IOL Standard	3	DC24V		0.27kg	● R-Red
QDT50L-IOL-BZ Buzzer type	5			0.31kg	● G-Green
				0.35kg	● Y-Yellow
				0.39kg	● B-Blue
					○ W-White
					● O-Orange
					● P-Pink
					● Custom

Technical Diagram

Units: mm

·QDT50L-IOL-3
 ·QDT50L-IOL-BZ-3

·QDT50L-IOL-5
 ·QDT50L-IOL-BZ-5



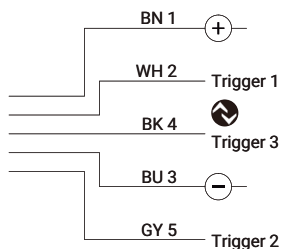
Mounting bracket & Pole

QZ30	QZ302	LB35	R25	PE35-100 PE35-400
Aluminum	Aluminum	Stainless Steel	Aluminum	Aluminum

QDT50L-IOL

Wiring Instructions

- QDT50L-IOL
- QDT50L-IOL-BZ



- Legend
- >RT< = flashing red slowly
 - >>RT<< = rapidly flashing red
 - >BUZ< = Buzzer intermittent (1Hz)
 - >>BUZ<< = Buzzer intermittent (2.5Hz)

All Trigger Input have a delay ~50 ms
Pre-sets can be defined via IO-Link.

3 Layers

TRIG 1	TRIG 2	TRIG 3	Pre-set	Factory setting (Layer 1 / Layer 2 / Layer 3 / Buz)					
				Var. 3			Var.BZ-3		
0	0	0	1	--	--	--	--	--	--
1	0	0	2	--	--	RT	--	--	RT
0	1	0	3	GN	--	--	GN	--	--
1	1	0	4	--	YE	--	--	YE	--
0	0	1	5	BU	--	--	BU	--	--
1	0	1	6	WH	--	--	WH	--	--
0	1	1	7	--	--	>RT<	--	--	>RT< >BUZ<
1	1	1	8	--	--	>>RT<<	--	--	>>RT<< >>BUZ<<

5 Layers

TRIG 1	TRIG 2	TRIG 3	Pre-set	Factory setting (Layer 1 / Layer 2 / Layer 3 / Layer 4 / Buz)										
				Var. 5					Var.BZ-5					
0	0	0	1	--	--	--	--	--	--	--	--	--	--	--
1	0	0	2	--	--	--	--	RT	--	--	--	--	RT	--
0	1	0	3	--	--	GN	--	--	--	--	GN	--	--	--
1	1	0	4	--	--	--	YE	--	--	--	--	YE	--	--
0	0	1	5	--	BU	--	--	--	--	BU	--	--	--	--
1	0	1	6	WH	--	--	--	--	WH	--	--	--	--	--
0	1	1	7	--	--	--	--	>RT<	--	--	--	--	>RT<	>BUZ<
1	1	1	8	--	--	--	--	>>RT<<	--	--	--	--	>>RT<<	>>BUZ<<

Signal Color Options

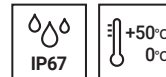


Ordering Specification

QDT50L-IOL	-	3	-	24
[Model number] QDT50L-IOL QDT50L-IOL-BZ		[Layers] 3-3 Layers 5-5 Layers		[Voltage] 24-DC24V

Multiple Color Programmable LED Signal Beacon Light with IO-Link Technology

QDB50-IOL



PRODUCT SPECIFICATION

QDB50-IOL

Materials Housing-Al, Lens-PC
Ambient operating temperature 0°C to +50°C
Protection rating IP67

- State-of-the-art multi colored LED Signal Beacon Light with IO-Link technology
- Signaling device optimized for Industry 4.0
- Plug & play technology applied for immediate operation when mounted on an international standard M12 connector
- 8 types of preset color modes and user-defined settings
- Convenient environment setting possible via IO-Link
- High protection rating of IP67 allows use in various environments
- IO-Link Version: V1.1
- Data Transmission Rate: 38,400 bps (COM2)



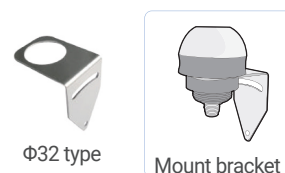
QDB50

QDB50 1-Segment IOL Lights

Model number	Voltage	Certificates	Weight	Color
QDB50-IOL Steady	DC24V	 	0.12kg	<ul style="list-style-type: none"> ● R-Red ● G-Green ● Y-Yellow ● B-Blue ○ W-White ● O-Orange ● P-Pink ● Custom

Bracket

It can be installed on the wall by adopting wall mounting type bracket.



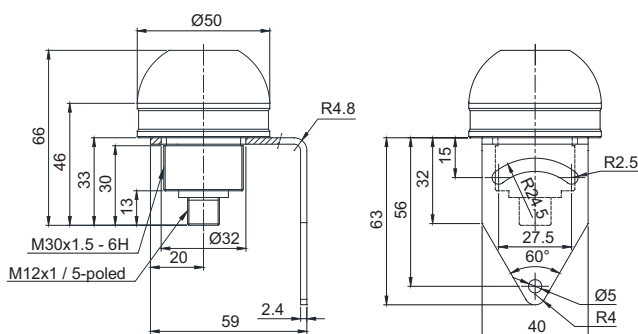
Φ32 type

Mount bracket

Technical Diagram

Units : mm

·QDB50-IOL

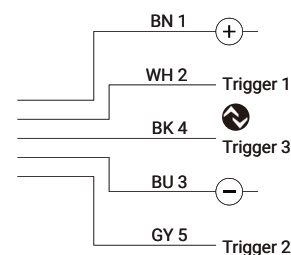


Ordering Specification

QDB50-IOL	-	24
[Model number]		[Voltage]
QDB50-IOL		24-DC24V

Wiring Instructions

·QDB50



Operating mode: External trigger

TRIG 1	TRIG 2	TRIG 3	Pre-set	Factory setting
0	0	0	1	Off
1	0	0	2	Red
0	1	0	3	Green
1	1	0	4	Yellow
0	0	1	5	Blue
1	0	1	6	Red blinking
0	1	1	7	Green blinking
1	1	1	8	Yellow blinking

All Trigger Inputs have a delay-50 ms.
Pre-sets can be defined via IO-Link.

Signal Color Options



Red

Green

Blue

Yellow

White

Orange

Pink

QTG-IOL Series

PRODUCT SPECIFICATION

QTG60L-IOL | QTG70L-IOL

Materials Housing-ABS, Lens-PC
Ambient operating temperature 30°C to +50°C
Sound volume High-volume buzzer Max.100dB at 1m
 Waterproof buzzer Max.85dB at 1m
Protection rating
 Standard/Waterproof Buzzer-IP65
 High-Volume Buzzer-Non-Waterproof



- Modular LED steady/flashing type signal tower lights
- Excellent visibility from a distance with the use of a special color diffusing lens
- Can select from size selections of 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
- Advanced LED signal tower light integrated with IO-Link technology
- Ideal for next-generation smart manufacturing systems (Industry 4.0)
- Plug & Play functionality enabled by international standard M12 connector
- IO-Link Version: V1.1
- Data transmission speed: 38,400 bps (COM2)
- Connector: M12-5Pin(Male)-Class A

Each modular color lens can be added without additional tools



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



- 1 High volume buzzer(100dB) option can be fitted to the top of the product**
 High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted.)
- 2 Waterproof buzzer (85dB) option can be fitted to the top of the product**
 Waterproof 85dB buzzer module fastened to the top of the product features an IP65-rated sealed structure and offers improved sound dispersion compared to conventional front-directional buzzers.
- 3 Excellent visibility from a distance with the use of a special color diffusing lens**
 Color arrangement changes and module additions can be easily made without the use of tools by adopting a lock-type structure between lenses.
- 4 M12 connector attached type**
 The application of the IO-Link standard M12 connector allows for convenient installation and maintenance.



QTG60L-IOL Ø60mm IO-Link Programmable LED Tower Light

Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.25kg	● R-Red
QTG60L-IOL Steady/Flashing	2			0.33kg	● R-Red ● G-Green
QTG60L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	IO-Link CE	0.41kg	● R-Red ● A-Amber ● G-Green
QTG60L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4		UL	0.49kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.57kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.

QTG70L-IOL Ø70mm IO-Link Programmable LED Tower Light

Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.37kg	● R-Red
QTG70L-IOL Steady/Flashing	2			0.52kg	● R-Red ● G-Green
QTG70L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	IO-Link CE	0.67kg	● R-Red ● A-Amber ● G-Green
QTG70L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4		UL	0.82kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.97kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.

Light source/buzzer current of QTG60L-IOL and QTG70L-IOL (based on 1 layer)

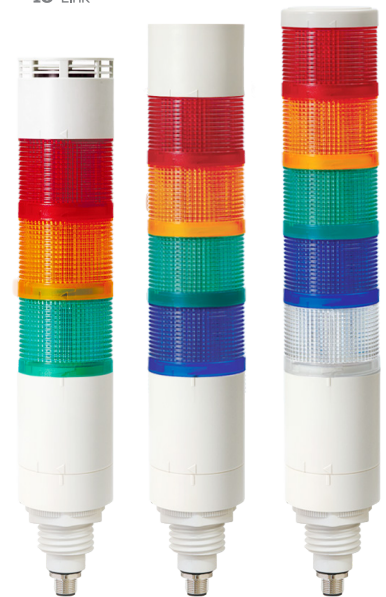
Voltage	Light source current (1 layer)	High volume buzzer current	Waterproof buzzer current
DC24V	70mA	90mA	90mA

Ordering Specification

QTG60L-IOL	-	3	-	24	-	RAG	-	LB32
[Model number]		[Layer]		[Voltage]		[Color]		[Bracket]
QTG60L-IOL		1-1Layer		24-DC24V		● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White		· None · Standard · Bracket · LB32
QTG60L-IOL-HBZ		2-2Layers						
QTG60L-IOL-WBZ		3-3Layers						
QTG70L-IOL		4-4Layers						
QTG70L-IOL-HBZ		5-5Layers(Excluding HBZ,						
QTG70L-IOL-WBZ		WBZ)						



QTG60L-IOL



QTG70L-IOL

Bracket

· It can be installed on the wall by adopting wall mounting type bracket.



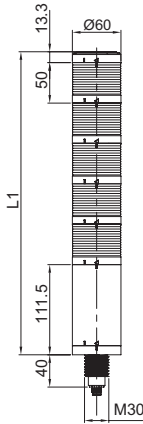
Wall mount bracket
LB32

QTG-IOL Series

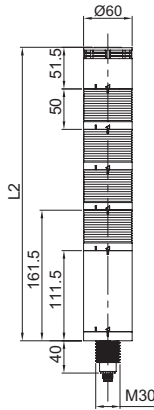
Technical Diagram

Units: mm

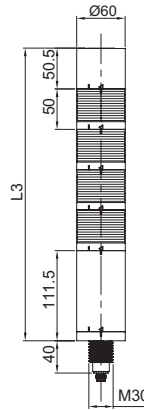
·QTG60L-IOL



·QTG60L-IOL-HBZ

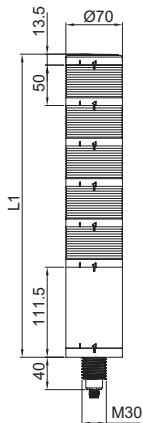


·QTG60L-IOL-WBZ

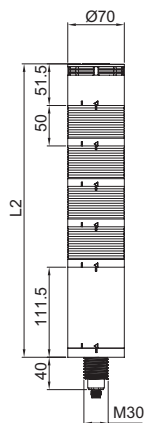


LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

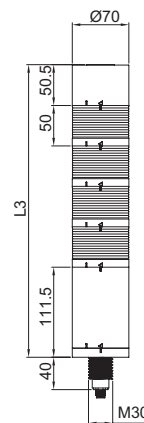
·QTG70L-IOL



·QTG70L-IOL-HBZ



·QTG70L-IOL-WBZ



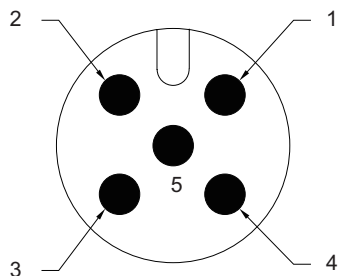
LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

Wiring Instructions

· Please follow the IO-Link M12 wiring standard.

M12 connector PIN-MAP

QTG60L-IOL
QTG70L-IOL



PIN	DESCRIPTION
1	Brown(L+)
2	White(NC)
3	Light Blue(L-)
4	Black(C/Q)
5	Gray(NC)

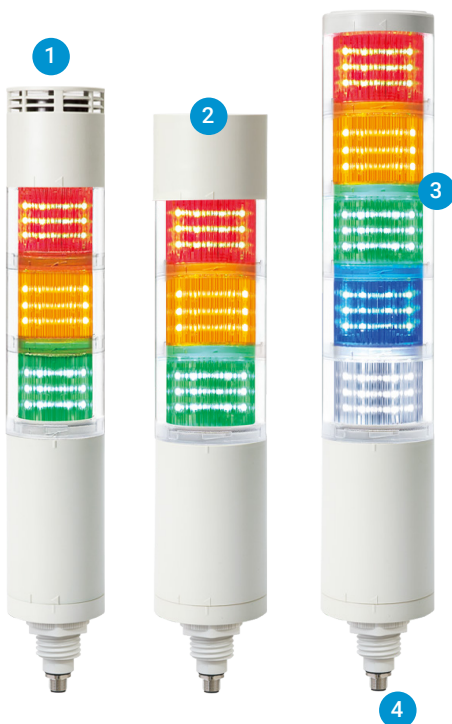
QTC-IOL Series

PRODUCT SPECIFICATION

QTC60L-IOL | QTC70L-IOL

Materials Housing-ABS, Filter lens-PC, Lens-PC
Ambient operating temperature 30°C to +50°C
Sound volume High-volume buzzer Max.100dB at 1m
 Waterproof buzzer Max.85dB at 1m
Protection rating
 Standard/Waterproof Buzzer-IP65
 High-Volume Buzzer-Non-Waterproof

- Modular LED steady/flashing type 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 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
- When turned off, the translucent filter provides comfortable viewing for the operator at close range
- Advanced LED signal tower light integrated with IO-Link technology
- Ideal for next-generation smart manufacturing systems (Industry 4.0)
- Plug & Play functionality enabled by international standard M12 connector
- IO-Link Version: V1.1
- Data transmission speed: 38,400 bps (COM2)
- Connector: M12-5Pin(Male)-Class A



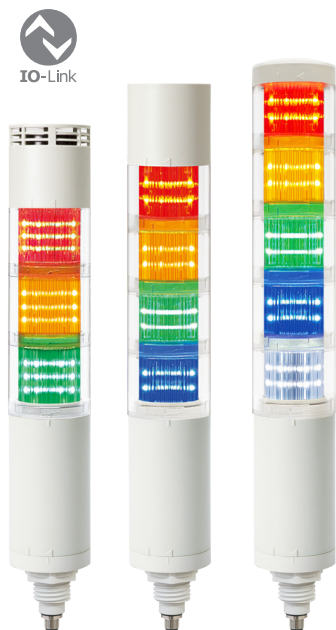
Each modular color lens can be added without additional tools



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

- 1 High volume buzzer(100dB) option can be fitted to the top of the product**
 High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted.)
- 2 Waterproof buzzer (85dB) option can be fitted to the top of the product**
 Waterproof 85dB buzzer module fastened to the top of the product features an IP65-rated sealed structure and offers improved sound dispersion compared to conventional front-directional buzzers. (White light module cannot be applied when using the waterproof buzzer type.)
- 3 QTC Series Special Lens**
 QTC Series added a separate color filter lens inside the outer lens to help provide a clear signal.
- 4 M12 connector attached type**
 The application of the IO-Link standard M12 connector allows for convenient installation and maintenance.

QTC-IOL Series



QTC60L-IOL

QTC60L-IOL Ø60mm IO-Link Programmable LED Tower Light

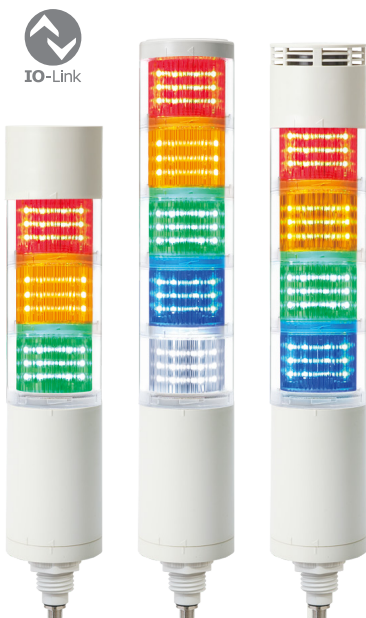
Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.25kg	● R-Red
QTC60L-IOL Steady/Flashing	2			0.33kg	● R-Red ● G-Green
QTC60L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	IO-Link CE	0.41kg	● R-Red ● A-Amber ● G-Green
QTC60L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4		UL	0.49kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.57kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.

QTC70L-IOL Ø70mm IO-Link Programmable LED Tower Light

Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.37kg	● R-Red
QTC70L-IOL Steady/Flashing	2			0.52kg	● R-Red ● G-Green
QTC70L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	IO-Link CE	0.67kg	● R-Red ● A-Amber ● G-Green
QTC70L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4		UL	0.82kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.97kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.



QTC70L-IOL

Light source/buzzer current of QTC60L-IOL and QTC70L-IOL (based on 1 layer)

Voltage	Light source current (1 layer)	High volume buzzer current	Waterproof buzzer current
DC24V	70mA	90mA	90mA

Ordering Specification

QTC60L-IOL	-	3	-	24	-	RAG	-	LB32
[Model number]		[Layer]		[Voltage]		[Color]		[Bracket]
QTC60L-IOL		1-1Layer		24-DC24V		● R-Red		· None
QTC60L-IOL-HBZ		2-2Layers				● A-Amber		· Standard
QTC60L-IOL-WBZ		3-3Layers				● G-Green		· Bracket
QTC70L-IOL		4-4Layers				● B-Blue		· LB32
QTC70L-IOL-HBZ		5-5Layers(Excluding HBZ,				○ W-White		
QTC70L-IOL-WBZ		WBZ)						

Bracket

· It can be installed on the wall by adopting wall mounting type bracket.

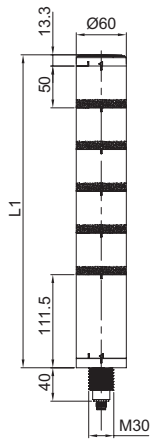


Wall mount bracket LB32

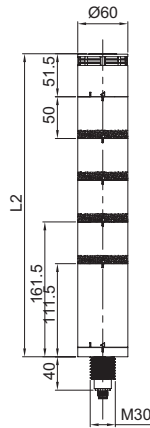
Technical Diagram

Units: mm

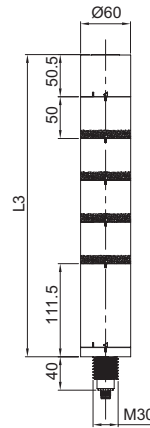
·QTC60L-IOL



·QTC60L-IOL-HBZ

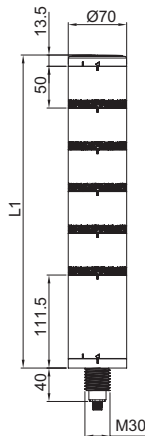


·QTC60L-IOL-WBZ

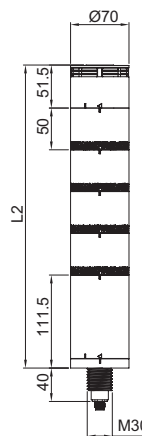


LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

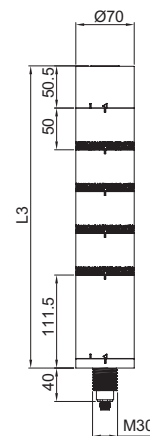
·QTC70L-IOL



·QTC70L-IOL-HBZ



·QTC70L-IOL-WBZ



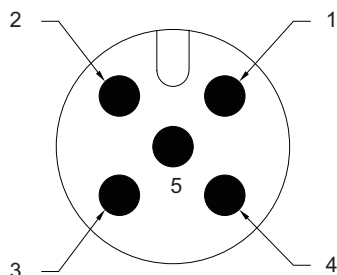
LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

Wiring Instructions

· Please follow the IO-Link M12 wiring standard.

M12 connector PIN-MAP

QTC60L-IOL
QTC70L-IOL



PIN	DESCRIPTION
1	Brown(L+)
2	White(NC)
3	Light Blue(L-)
4	Black(C/Q)
5	Gray(NC)

QTR-IOL Series

PRODUCT SPECIFICATION

QTR60L-IOL | QTR70L-IOL

Materials Housing-ABS, Lens-PC
Ambient operating temperature 30°C to +50°C
Sound volume High-volume buzzer Max.100dB at 1m
 Waterproof buzzer Max.85dB at 1m
Protection rating
 Standard/Waterproof Buzzer-IP65
 High-Volume Buzzer-Non-Waterproof

- Modular LED steady/flashing type signal tower lights
- Soft and comfortable signal light emitted through the translucent lens
- When turned off, the translucent filter provides comfortable viewing for the operator at close range
- Can select from size selections of 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
- Advanced LED signal tower light integrated with IO-Link technology
- Ideal for next-generation smart manufacturing systems (Industry 4.0)
- Plug & Play functionality enabled by international standard M12 connector
- IO-Link Version: V1.1
- Data transmission speed: 38,400 bps (COM2)
- Connector: M12-5Pin(Male)-Class A



Each modular color lens can be added without additional tools



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

- 1 High volume buzzer(100dB) option can be fitted to the top of the product**
 High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted.)
- 2 Waterproof buzzer (85dB) option can be fitted to the top of the product**
 Waterproof 85dB buzzer module fastened to the top of the product features an IP65-rated sealed structure and offers improved sound dispersion compared to conventional front-directional buzzers. (White light module cannot be applied when using the waterproof buzzer type.)
- 3 QTR Series special lens**
 QTR Series provides soft and comfortable signal light emitted through the translucent lens.
- 4 M12 connector attached type**
 The application of the IO-Link standard M12 connector allows for convenient installation and maintenance.



QTR60L-IOL \varnothing 60mm IO-Link Programmable LED Tower Light

Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.25kg	● R-Red
QTR60L-IOL Steady/Flashing	2			0.33kg	● R-Red ● G-Green
QTR60L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	 	0.41kg	● R-Red ● A-Amber ● G-Green
QTR60L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4			0.49kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.57kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.



QTR60L-IOL

QTR70L-IOL \varnothing 70mm IO-Link Programmable LED Tower Light

Model number	Layers	Voltage	Certificates	Weight	Color
	1			0.37kg	● R-Red
QTR70L-IOL Steady/Flashing	2			0.52kg	● R-Red ● G-Green
QTR70L-IOL-HBZ Steady/Flashing w/ built-in high volume buzzer	3	DC24V	 	0.67kg	● R-Red ● A-Amber ● G-Green
QTR70L-IOL-WBZ Steady/Flashing w/ built-in waterproof buzzer	4			0.82kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5			0.97kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White

※ Simultaneous use of the white color LED module with high volume buzzer (HBZ) or waterproof buzzer (WBZ) is not supported.



QTR70L-IOL

Light source/buzzer current of QTR60L-IOL and QTR70L-IOL (based on 1 layer)

Voltage	Light source current (1 layer)	High volume buzzer current	Waterproof buzzer current
DC24V	70mA	90mA	90mA

Ordering Specification

QTR60L-IOL	-	3	-	24	-	RAG	-	LB32
[Model number]		[Layer]		[Voltage]		[Color]		[Bracket]
QTR60L-IOL		1-1Layer		24-DC24V		● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White		· None · Standard · Bracket · LB32
QTR60L-IOL-HBZ		2-2Layers						
QTR60L-IOL-WBZ		3-3Layers						
QTR70L-IOL		4-4Layers						
QTR70L-IOL-HBZ		5-5Layers(Excluding HBZ,						
QTR70L-IOL-WBZ		WBZ)						

Bracket

· It can be installed on the wall by adopting wall mounting type bracket.



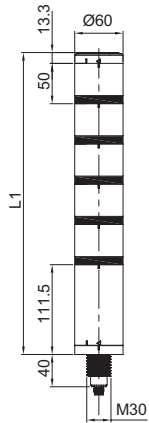
Wall mount bracket
LB32

QTR-IOL Series

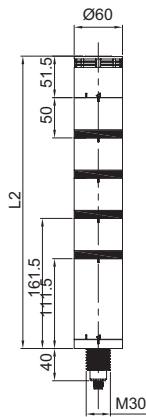
Technical Diagram

Units: mm

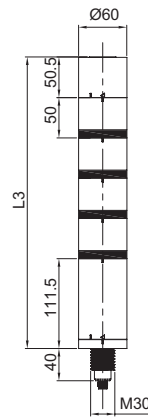
·QTR60L-IOL



·QTR60L-IOL-HBZ

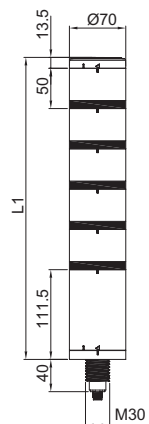


·QTR60L-IOL-WBZ

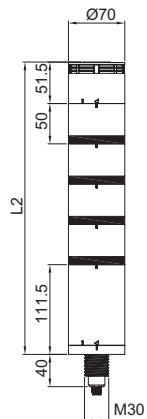


LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

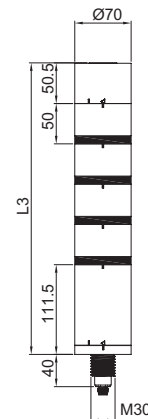
·QTR70L-IOL



·QTR70L-IOL-HBZ



·QTR70L-IOL-WBZ



LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

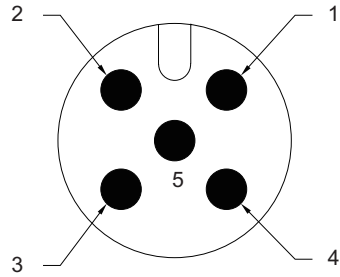


Wiring Instructions

· Please follow the IO-Link M12 wiring standard.

M12 connector PIN-MAP

QTR60L-IOL
QTR70L-IOL



PIN	DESCRIPTION
1	Brown(L+)
2	White(NC)
3	Light Blue(L-)
4	Black(C/Q)
5	Gray(NC)



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Qlight Clients

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

SAMSUNG

HYUNDAI

KIA

POSCO

COUPANG

SK hynix

LG Chem

SK innovation

HYUNDAI STEEL

KSOE KOREA STEEL PROCESSING & EQUIPMENT ENGINEERING

SAMSUNG HEAVY INDUSTRIES

HYUNDAI CONSTRUCTION EQUIPMENT

DOOSAN

EXxonMobil

gm

Q.M.B.K.

FOXCONN

HUAWEI

Honeywell

L'ORÉAL PARIS

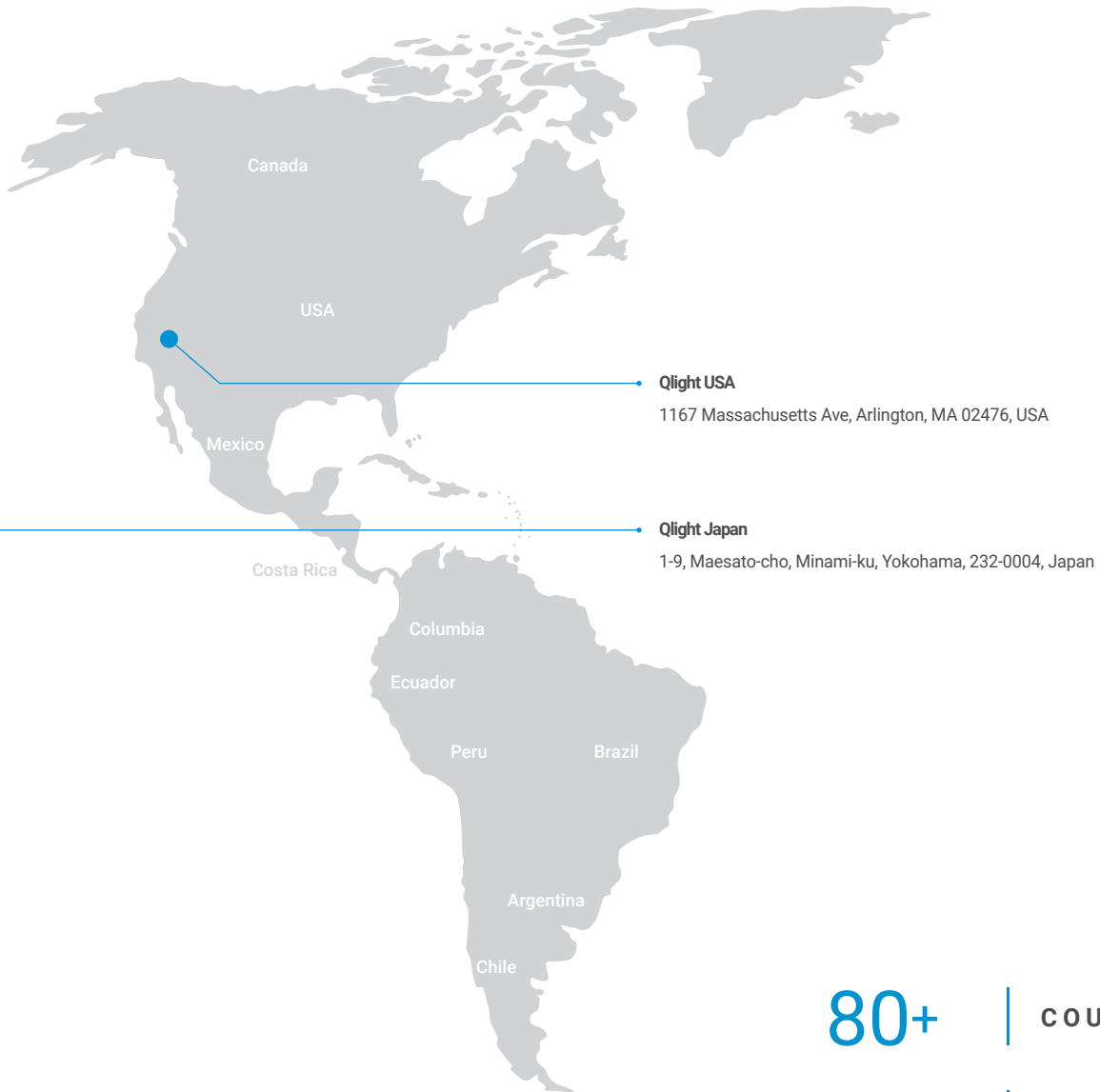
ISUZU

أدنوك ADNOC

KONECRANES

Kulicke & Soffa

Qlight products have been exported all over the world in recognition of excellent technical capabilities and exceptional quality. Qlight products are going to be distributed a lot more countries in the future.



80+ | COUNTRIES
250+ | DISTRIBUTORS



Gimhae Production Headquarters

Seoul Global Headquarters

Busan Business Center

Qlight China Factory

Technical Certification

Qlight products are designed to meet strict quality and technical standards. Thus, the Qlight brand is widely recognized for its high quality and technical innovations from leading institutions around the world.



ISO
International Organization for Standardization



IECEX
International Explosion Proof Certification(IECEX)



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



NEPSI
National Center for Explosion Protection and Safety of Instrumentation



NRTL
Certified by designated U.S. laboratory
Intertek



KCs
Korea safety Certification



TIIS
Technology Institution of Industrial Safety



CCS
China Classification Society



TS
Industrial Safety Technology Institute of Taiwan



FCC
Federal Communications Commission



S-mark
Safety Certification



KC
Korea Certification Mark



CCC
China Compulsory Certificate



CCCF
China Certification Center for Security & Protection



UL
Underwriters Laboratories



CE
European Commission



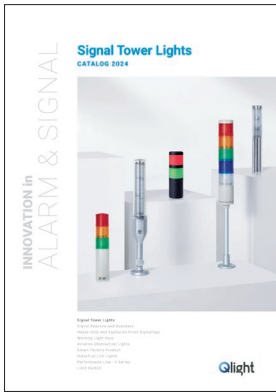
ICAO
International Civil Aviation Organization



RoHS2
Restriction of Hazardous Substances Directive

Qlight Catalog Introduction

Qlight produces a wide variety of product categories which offers the customer the ability to select the suitable device for their application needs and environments. There are signal tower lights, Signal Beacons and Sounders, Heavy-Duty and Explosion Proof Signalings, Warning light bars, Aviation Obstruction Lights, Smart Factory Products, Industrial LED lights, Performance Line - E Series, and IO-Link Product.



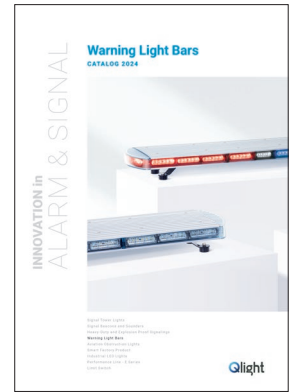
Signal Tower Lights



Signal Beacons and Sounders



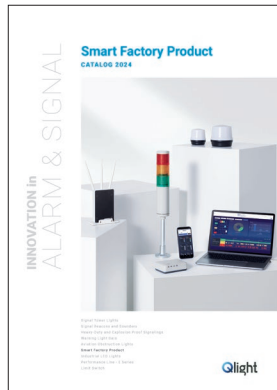
Heavy-Duty and Explosion Proof Signalings



Warning Light Bars



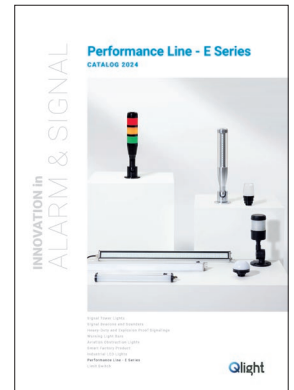
Aviation Obstruction Lights



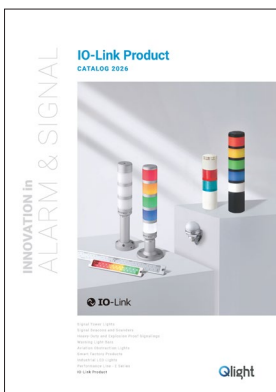
Smart Factory Products



Industrial LED Lights



Performance Line - E Series



IO-Link Product

You could download and find the latest Catalog on the Qlight website.

* The latest product information could be accurately checked on the Qlight website (www.qlight.com). Please refer to the user manual attached with the product before installation and use.



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