

# 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.(Only direct mounting installation is supported.)



### QTR60L-IOL Ø60mm 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 Ø70mm 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

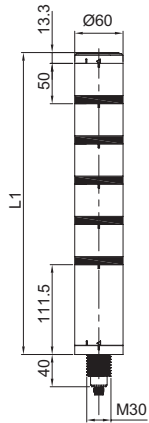
QTR60L-IOL	-	3	-	24	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
QTR60L-IOL		1-1Layer		24-DC24V		● R-Red
QTR60L-IOL-HBZ		2-2Layers				● A-Amber
QTR60L-IOL-WBZ		3-3Layers				● G-Green
QTR70L-IOL		4-4Layers				● B-Blue
QTR70L-IOL-HBZ		5-5Layers(Excluding HBZ, WBZ)				○ W-White
QTR70L-IOL-WBZ						

# QTR-IOL Series

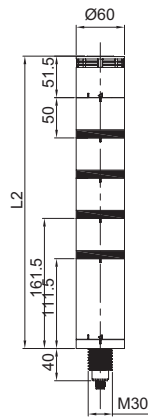
## Technical Diagram

Units: mm

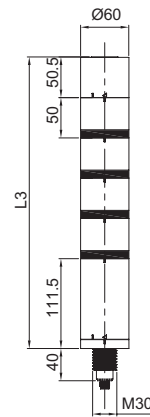
·QTR60L-IOL



·QTR60L-IOL-HBZ

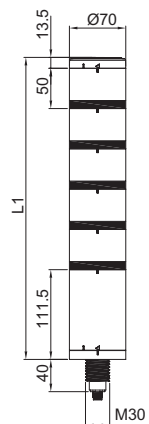


·QTR60L-IOL-WBZ

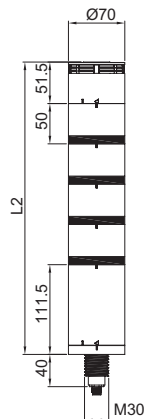


LAYER	L1	L2	L3
1	175	213	212
2	225	263	262
3	275	313	312
4	325	363	362
5	375	-	-

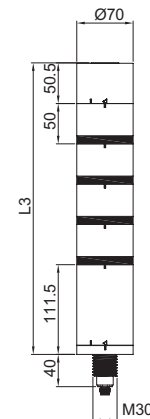
·QTR70L-IOL



·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	-	-

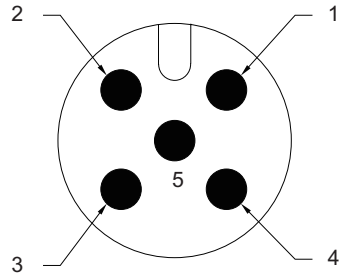


## Wiring Instructions

· 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)