

Innovation in alarm & signal

CATALOGUE 2022.05
Signal Tower Lights



Pacific Automation are authorised Australian distributions for the Qlight range.



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Company Introduction



Qlight Gives You a Brighter Future!

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

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

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

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



Qlight Global Networks

Country	Company name	Address	Phone
Korea	Qlight Co., Ltd.	HQ 1510, 15F, 128, Gasan digital 1-Ro, Geumcheon-Gu, Seoul, Korea	+82-80-328-2222
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China	SHANGHAI Qlight Electronics Co.,Ltd	#19, Nanda Road, Baoshan Area, Shanghai, China	+86-21-6651-7100
Japan	Qlight Japan	1-9, Maesato-cho, Minami-ku, Yokohama, 232-0004, Japan	+81-45-271-8090
Vietnam	Qlight Vietnam	S202-15A15 Vinhome Smart City Taymo- Hanoi, Vietnam	+84-24-6666-5593

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



Company History

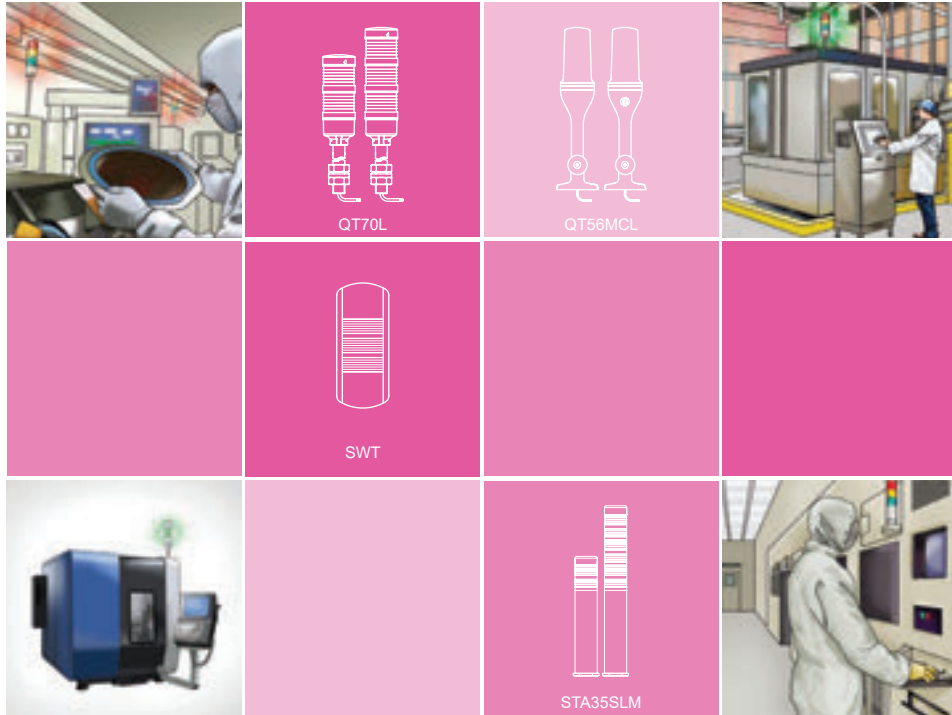
Qlight has been striving to accomplish our mission to provide visual and audible status indicating systems and solutions to enhance our customer's work safety and efficiency for the last three decades.

1986-1992	1993-2005	2006-2010	2011 to Present	- Future
Business foundation and consolidation	Growing as a signal transmission device specialist	A great leap forward & business reconstruction	New engines for growth	The 2 nd growth and globalization
				
			<p>2020 09 Selected as a global small giant company by Ministry of SMEs and Startups</p> <p>2019 09 Completed Qidong factory</p> <p>08 Explosion proof LED tower light (QTEXB) acquired TIIS mark</p> <p>Explosion proof LED work lights (SESA/ SESAL/ SESALR/ SESAS) obtained KCs certificate</p> <p>04 Launched new brand 'Qlightec' providing smart factory solutions</p> <p>01 Explosion proof LED work lights (QLEX-SLM-250(PL)) obtained KCs certificate</p> <p>2018 10 Began construction of Qidong Factory, China</p> <p>08 Explosion proof LED warning light(SNE, SNES) acquired NEPSI certificate</p> <p>07 Explosion proof LED warning light (SNEL/ SNESLR) acquired TIIS certificate</p> <p>03 Non-Sparking ex-proof LED work light (QMFL300-Ex-24) acquired NEPSI certificate</p> <p>02 Explosion proof warning lights (SNEL/ SNESL/ SESAL) acquired CCC(F) certificate</p> <p>Explosion proof LED tower light (QTEX/ QTEXB) acquired ATEX, IECEx certificate</p> <p>2017 02 ISO 14001 : 2015 certificate aquired</p> <p>Obtained ICAO certificate for SAOL1</p> <p>2016 11 Obtained the patent for "multi-functional modular signal tower light" (Patent # : 10-1676863)</p> <p>09 Obtained the patent for "Emergency Vehicle Lightbar" (Patent # : 10-1662283)</p> <p>07 Obtained UL certificate for LED signal lights Q series</p> <p>Obtained the patent for "Bar style LED work lights" (Patent # : 10-1598123)</p> <p>2015 06 Limit switch models (3 items including SW2TS) acquired certificates from RMRS</p> <p>03 LED work lights (QML150/250, QMFL 500/600) UL listed</p> <p>2014 10 Established the Qlight USA, Inc. in San Jose, CA.</p> <p>Horn which that emits light patented (Patent # : 10-1452447)</p> <p>Fan/ tilt type bracket patented (Patent # : 10-1452445)</p> <p>09 LED strobe light with multi-lens patented (Patent # : 10-1444391)</p> <p>08 Explosion proof product family including SNE, SNES, SESA, SEA, SPNA acquired IECEx certificates</p> <p>01 Non-sparking explosion proof tower lights including ST45ML and STB45ML acquired KGS and NEPSI certificates</p> <p>2013 01 Portable warning lights for agricultural machine applications patented (Patent # : 10-1226959)</p> <p>2012 12 Explosion proof warning lights (SNE, SNES) acquired CCS certificates</p> <p>LED work light with cylindrical lens attached patented (Patent # : 10-1219020)</p> <p>09 Explosion proof warning lights (SESA, SEA, SPNA) and heavy-duty warning lights (SH1, SED, SEWN30) certified by CCS</p> <p>01 LED warning light with LED reflector patented (Patent # : 10-1108102)</p> <p>2011 11 Explosion proof warning light (SNE, SNES) acquired NEPSI certificate</p> <p>08 KCC (Korea Communications Commission) certificate acquired</p> <p>07 Light equipment applying prism system patented (Patent # : 10-1051056)</p> <p>KCC certificate acquired for PC controlled tower light (ST56EL-ETN)</p> <p>ATEX(European Explosion Proof Certificate) acquired</p> <p>2010 05 QEB certified by KIMM</p> <p>LED warning light, bulb revolving warning light patented (Patent # : 10-0961472)</p> <p>2008 04 Motor drive system patented (Patent # : 20-0439536)</p> <p>03 LED revolving type lens patent acquired (patent # :10-0808669)</p> <p>2007 11 Explosion proof electric horn (SPNA) acquired NEPSI certificates</p> <p>05 Tower light models including ST45, ST56,ST80) UL listed</p> <p>2005 07 Heavy-duty products for vessel applications acquired Lloyd's (UK's Maritime Classification Society) certificates</p> <p>04 ABS certificates acquired for 18 products including SH1</p> <p>2004 06 ISO 9001:2000 certificates acquired</p> <p>2001 02 Established Shanghai Qlight Electronic Co.,Ltd. in China</p> <p>2000 07 Established Qlight Limited</p> <p>1993 11 Nominated for developing domestic explosion proof warning lights by Korean Ministry of Science & Technology</p> <p>1986 07 Established Qlight</p>	

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



Model number(series)	ST80MB	ST80B	ST45ML	ST45L	ST56MEL	ST56EL
Voltage	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V
Dimension (mm)	Diameter	Ø80	Ø80	Ø45	Ø45	Ø56
	Height	180-460	317-597	106-358	320-572	127-352
	Depth	-	-	-	-	-
Materials	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS
	Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing	•	•			
	LED Steady					
	LED Steady/Flashing			•	•	•
	LED Strobe					
Sound & Volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 signal sounds	-	-	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18
Protection rating	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)
Certificates	-	-	CE, UL	CE, UL	CE, UL	CE, UL
Customization	Wall mount bracket, 2 buzzer sounds	Pole length adjustment, 2 buzzer sounds	2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed
Transistor	-	-	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type
Page	P28	P29	P41	P42	P44	P45



Model number(series)	ST56ML	ST56L	ST80MEL	ST80EL	ST80ML	ST80L
Voltage	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V	AC/DC12V AC/DC24V AC110V, AC220V
Dimension (mm)	Diameter	Ø56	Ø56	Ø80	Ø80	Ø80
	Height	157-502	371-716	150-310	287-447	180-460
	Depth	-	-	-	-	-
Materials	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS
	Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
Sound & Volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)
Certificates	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL
Customization	2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Wall mount bracket, AC each layer power supplied, DC24V UL listed	2 buzzer sounds, Pole length adjustment, AC each layer power supplied, DC24V UL listed
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type
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References for Signal Tower Lights

Multiple Color LED Signal Tower Lights



Model number(series)	STC45ML	STC45L	STC56ML	STC56L	QT56MCL	
Voltage	AC/DC12V, AC/DC24V AC110V, AC220V	AC/DC12V, AC/DC24V AC110V, AC220V	AC/DC12V, AC/DC24V AC110V, AC220V	AC/DC12V, AC/DC24V AC110V, AC220V	DC24V	
Dimension (mm)	Diameter	Ø45	Ø45	Ø56	Ø56	Ø45
	Height	106-198	320-412	157-287	371-501	276
	Depth					
Materials	Lens-AS	Lens-AS	Lens-AS	Lens-AS	Lens-PC	
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-AI	
Layers	2-3 Colors	2-3 Colors	2-3 Colors	2-3 Colors	7 Colors	
Light source & Operation	Bulb Steady/Flashing					
	LED Steady	•	•	•	•	
	LED Steady/Flashing					
	LED Strobe					
Sound & Volume	LED Simulated revolving					
	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	
5 signal sounds						
Layer color change						
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Pole mount	
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	-	
Protection rating	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	IP23(Buzzer type), IP44(Standard)	
Certificates	CE	CE	CE	CE	CE	
Customization	2 buzzer sounds, Wall mount bracket	2 buzzer sounds, Pole length adjustment	2 buzzer sounds, Lens length 40mm, Wall mount Bracket	2 buzzer sounds, Lens length 40mm, Pole length adjustment	-	
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	PNP type	
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Model number(series)	STG40ML	STG40L	STG50ML	STG50L	MWTL	
Voltage	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	DC24V	
Dimension (mm)	Diameter	Ø40	Ø40	Ø50	Ø90(Half)	
	Height	111-339	339-567	106-314	334-542	216
	Depth					39
Materials	Lens-AS	Lens-AS	Lens-AS	Lens-AS	Lens-AS	
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	
Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	4-4 Layers	
Light source & Operation	Bulb Steady/Flashing					
	LED Steady	•	•	•	•	
	LED Steady/Flashing					
	LED Strobe					
Sound & Volume	LED Simulated revolving					
	1 buzzer sound	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	
5 signal sounds						
Layer color change	Yes	Yes	Yes	Yes	No	
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Wall mount	
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	-	
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP55	
Certificates	CE, UL	CE, UL	CE, UL	CE, UL	CE	
Customization	Wall mount bracket, 2 buzzer sounds	2 buzzer sounds, Pole length adjustment	Wall mount bracket, 2 buzzer sounds	2 buzzer sounds, Pole length adjustment	2 buzzer sounds, Transparent filter lens	
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	
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Model number(series)	QTG50ML	QTG50L	QTG60ML	QTG60L	QTG70ML	QTG70L	
Voltage	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	
Dimension (mm)	Diameter	Ø50	Ø50	Ø60	Ø60	Ø70	
	Height	116-364	344-592	126-399	352-635	126-399	274-557
	Depth						
	Materials	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS
Light source & Operation	Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
	Bulb Steady/Flashing						
	LED Steady						
	LED Steady/Flashing	•	•	•	•	•	•
	LED Strobe						
Sound & Volume	LED Simulated revolving						
	1 buzzer sound 5 signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes	
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount	
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	
Certificates	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	
Customization	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	
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Model number(series)	QTC50ML	QTC50L	QTC60ML	QTC60L	QTC70ML	QTC70L	
Voltage	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	
Dimension (mm)	Diameter	Ø50	Ø50	Ø60	Ø60	Ø70	
	Height	116-364	344-592	126-399	352-635	126-399	274-557
	Depth						
	Materials	Lens, Inner Lens -PC Housing-ABS	Lens, Inner Lens -PC Housing-ABS	Lens, Inner Lens -PC Housing-ABS	Lens, Inner Lens -PC Housing-ABS	Lens, Inner Lens -PC Housing-ABS	Lens, Inner Lens -PC Housing-ABS
Light source & Operation	Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
	Bulb Steady/Flashing						
	LED Steady						
	LED Steady/Flashing	•	•	•	•	•	•
	LED Strobe						
Sound & Volume	LED Simulated revolving						
	1 buzzer sound 5 signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes	
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount	
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	
Certificates	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	
Customization	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	
Page	P73	P74	P75	P76	P77	P78	

References for Signal Tower Lights



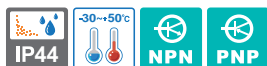
Model number(series)	QTR50ML	QTR50L	QTR60ML	QTR60L	QTR70ML	QTR70L
Voltage	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V	AC/DC12V, AC/DC24V AC110V-220V
Dimension (mm)	Diameter	Ø50	Ø50	Ø60	Ø60	Ø70
	Height	116-364	344-592	126-399	352-635	126-399
	Depth					
Materials	Lens-PC	Lens-PC	Lens-PC	Lens-PC	Lens-PC	Lens-PC
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS
Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
	LED Simulated revolving					
Sound & Volume	1 buzzer sound	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
	5 signal sounds					
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL
Customization	2 buzzer sounds, Wall mount bracket, Strong buzzer	2 buzzer sounds, Pole length adjustment, Strong buzzer	2 buzzer sounds, Wall mount bracket, Strong buzzer	2 buzzer sounds, Pole length adjustment, Strong buzzer	2 buzzer sounds, Wall mount bracket, Strong buzzer	2 buzzer sounds, Pole length adjustment, Strong buzzer
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type
Page	P81	P82	P83	P84	P85	P86



Model number(series)	QT50ML	QT50L	QT70ML	QT70L	
Voltage	DC12V, DC24V AC110V, AC220V	DC12V, DC24V AC110V, AC220V	DC12V, DC24V AC110V, AC220V	DC12V, DC24V AC110V, AC220V	
Dimension (mm)	Diameter	Ø50	Ø50	Ø70	
	Height	83-247	297-461	98-322	237-461
	Depth				
Materials	Lens-PC	Lens-PC	Lens-PC	Lens-PC	
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	
Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	
Light source & Operation	Bulb Steady/Flashing				
	LED Steady				
	LED Steady/Flashing	•	•	•	
	LED Strobe	•	•	•	
	LED Simulated revolving	•	•	•	
Sound & Volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	
	5 signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	
Layer color change	Yes	Yes	Yes	Yes	
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	
Certificates	CE	CE	CE	CE	
Customization	Beige color, Wall mount bracket, LED strobe, LED simulated revolving	Beige color, Pole length adjustment, LED strobe, LED simulated revolving	Beige color, Wall mount bracket, LED strobe, LED simulated revolving	Beige color, Pole length adjustment, LED strobe, LED simulated revolving	
Transistor	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	NPN/ PNP type	
Page	P102-104	P99-101	P112-114	P109-111	

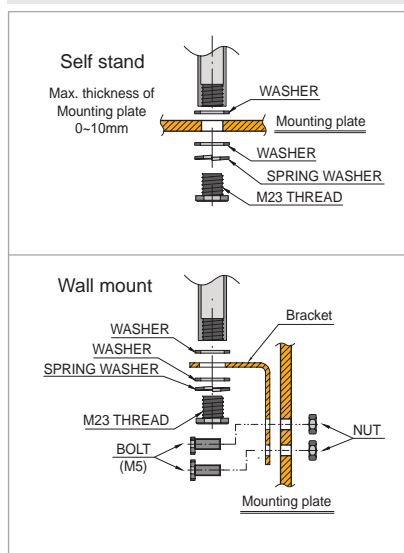
STA25SLM

Ø25mm Slim LED Tower Lights

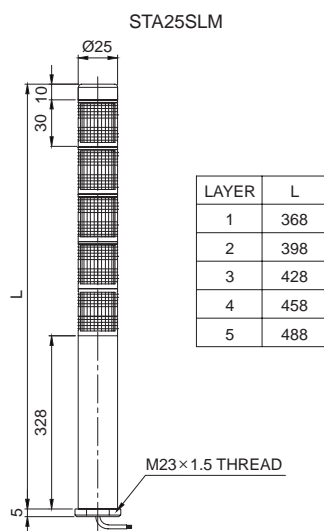


STA25SLM

Mounting Instructions



Technical Diagram (Units : mm)



STA25SLM Ø25mm Direct Mount, LED Steady

- Ø25mm direct mount tower lights
- Aesthetically pleasing design with aluminum housing
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation.
- Steady mode only with fixed user selected color arrangement (can operate flashing mode with external contact)
- Materials : Lens-AS, Housing-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP44
- Certificates : CE Compliant, UL Listed

Specifications

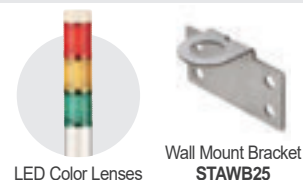
Model number	Layer	Voltage	Current	Certificates	Weight	Color
STA25SLM Steady	1	AC/DC12V AC/DC24V AC110V AC220V	0.080A 0.040A 0.020A 0.020A	 DC24V only DC24V only	0.19kg	• R-Red
	2	AC/DC12V AC/DC24V AC110V AC220V	0.160A 0.080A 0.040A 0.040A			• R-Red • G-Green
	3	AC/DC12V AC/DC24V AC110V AC220V	0.240A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

Wiring Instructions

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

Customization

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

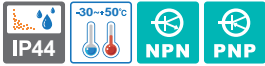


Ordering Specification

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

STA35SL

Ø35mm Slim LED Tower Lights



STA35SL

STA35SL Ø35mm Direct Mount LED Steady Tower Lights

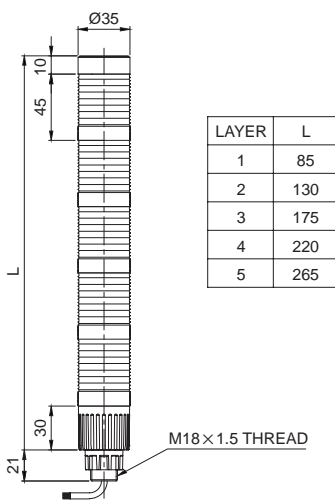
- Ø35mm direct mount tower lights
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation.
- Steady mode only (can operate flashing mode with external control) with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

Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STA35SL Steady	1	DC12V DC24V	0.100A 0.050A	CE DC24V only	0.60kg	• R-Red
	2	DC12V DC24V	0.200A 0.100A		0.85kg	• R-Red • G-Green
	3	DC12V DC24V	0.300A 0.150A		1.05kg	• R-Red • A-Amber • G-Green
	4	DC12V DC24V	0.400A 0.200A		1.30kg	• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V	0.500A 0.250A		1.53kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram (Units : mm)

STA35SL



Wiring Instructions

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

Customization

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



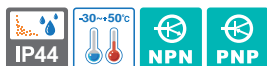
Wall Mount Bracket
STAWB25

Ordering Specification

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

STA35SLM

Ø35mm Slim LED Tower Lights



STA35SLM

STA35SLM Ø35mm Direct Mount LED Steady Tower Lights

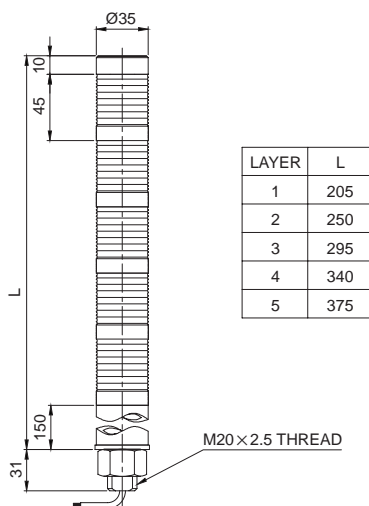
- Ø35mm direct mount tower lights
- Aesthetically pleasing design with aluminum housing
- Fixed layer designs provides superior durability
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color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

Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STA35SLM Steady	1	AC/DC12V AC/DC24V	0.100A 0.050A	CE DC24V only	0.38kg	• R-Red
	2	AC/DC12V AC/DC24V	0.200A 0.100A		0.40kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V	0.300A 0.150A		0.42kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V	0.400A 0.200A		0.45kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V	0.500A 0.250A		0.48kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram (Units : mm)

STA35SLM



Wiring Instructions

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

Customization

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



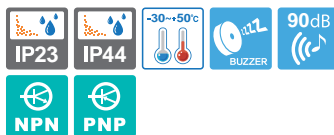
Wall Mount Bracket
STAWB25

Ordering Specification

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

STA45SLM

Ø45mm Slim LED Tower Light



STA45SLM series



Customization

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



Wall Mount Bracket
STAWB45



Common Specifications(STA45SLM/ STA45SLMP)

- Ø45mm direct mount/pole mount tower lights
- Aluminum housing displays a unique metallic luster that defines a high class product
- Excellent visibility by using a high brightness LED with a special diffusion lens
- Lens maintains a semi-transparent color when not emitting the specific color of the signal under operation
- Steady mode only(can operate flashing mode with external control) with fixed user selected color arrangement
- Easy mounting with the bolts/screws located at the bottom of the product
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Materials : Lens-Acrylic, Filter lens -AS, Housing-AI
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant, UL Listed



STA45SLM Ø45mm Direct Mount, LED Steady

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STA45SLM Steady STA45SLM-BZ Steady w/ built-in buzzer	1	AC/DC12V AC/DC24V	0.100A 0.050A	 DC24V only DC24V only	0.50kg	• R-Red
	2	AC/DC12V AC/DC24V	0.200A 0.100A		0.54kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V	0.300A 0.150A		0.58kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V	0.400A 0.200A		0.63kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V	0.500A 0.250A		0.68kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

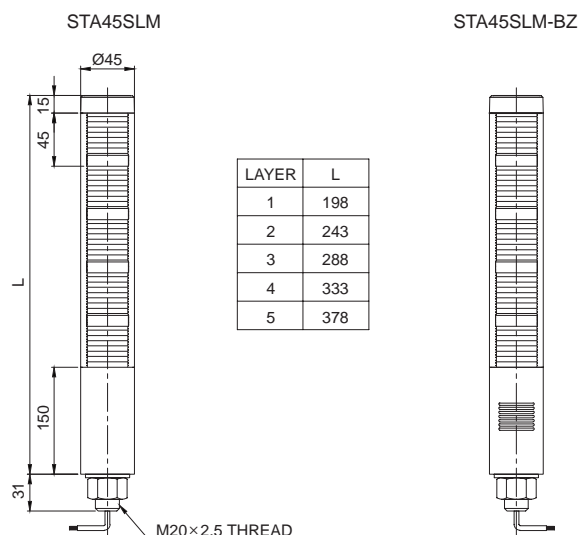
Signal/ Audible Line Current(per each layer)

Voltage settings	DC12V	DC24V
Signal line current	0.100A	0.050A
Audible line current	0.016A	0.031A



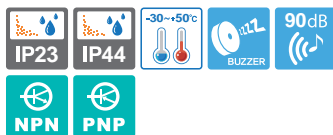
Technical Diagram

(Units : mm)



STA45SLMP

Ø45mm Slim LED Tower Lights



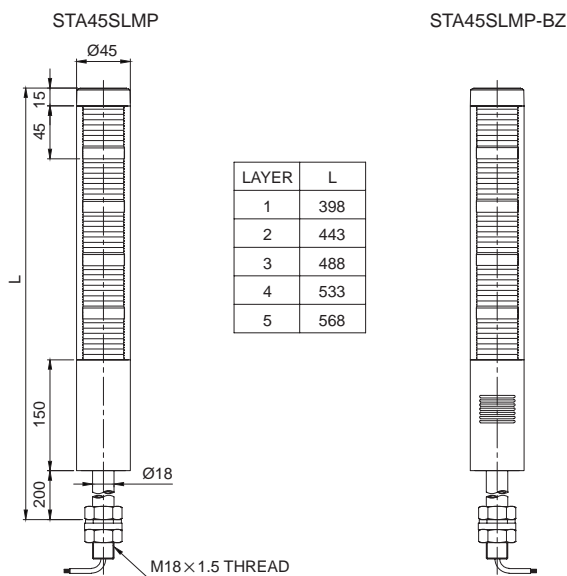
STA45SLMP series

STA45SLMP Ø45mm Pole Mount, LED Steady

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STA45SLMP Steady STA45SLMP-BZ Steady w/ built-in buzzer	1	AC/DC12V AC/DC24V	0.100A 0.050A	CE DC24V only UL DC24V only	0.56kg	• R-Red
	2	AC/DC12V AC/DC24V	0.200A 0.100A		0.60kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V	0.300A 0.150A		0.64kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V	0.400A 0.200A		0.69kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V	0.500A 0.250A		0.74kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram

(Units : mm)



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

- Customized pole length available

Wiring Instructions

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

Ordering Specification

STA45SLMP	-	3	-	24	-	RAG	-	QZ18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting bracket]
• STA45SLM • STA45SLM-BZ • STA45SLMP • STA45SLMP-BZ		• 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers		• 12-DC12V • 24-DC12V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

STA series

Slim LED Tower Lights

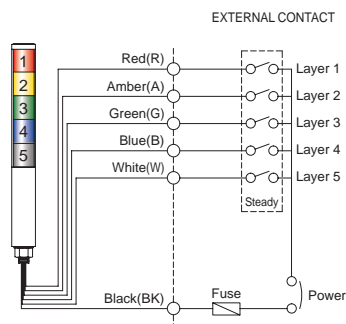


Wiring Instructions

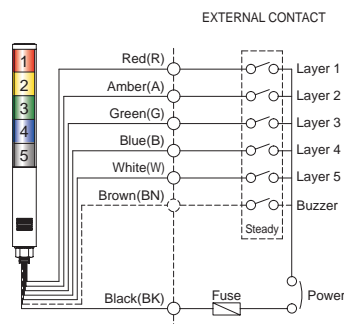
- STA25SLM, STA35SL, STA35SLM and STA45SLM can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.

External Contact

STA25SLM-DC/AC
STA35SL/ STA35SLM-DC



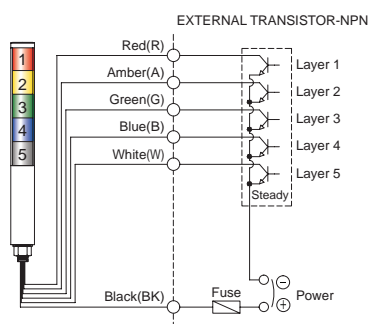
STA45SLM/ STA45SLMP-DC



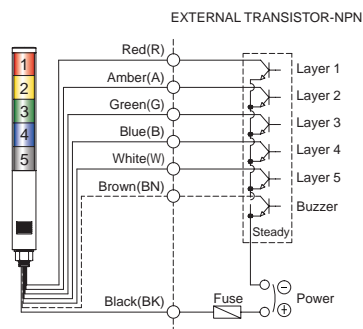
Transistor

NPN-Transistor

STA25SLM-DC
STA35SL/ STA35SLM-DC

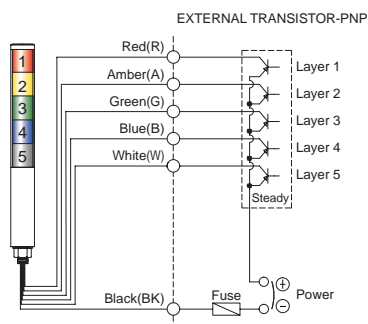


STA45SLM/ STA45SLMP-DC

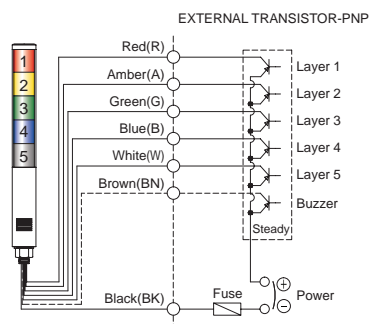


PNP-Transistor

STA25SLM-DC
STA35SL/ STA35SLM-DC



STA45SLM/ STA45SLMP-DC



Wiring Instructions

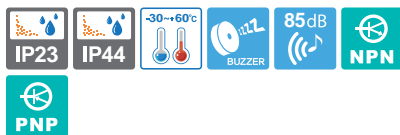
- External power line and External signal line - UL1007 AWG22(0.3sq) 400mm

Transistor Rating

Type	NPN or PNP
Withstanding voltage	Vc 35V
Current	Ic 300mA
Leakage current	0.1mA IL

QTA56L

LED Steady Tower Lights



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



QTA56L

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



QTA56L LED Steady

- High brightness LED with hexagon type mounting pole
- Elegant design with hexagon shaped metal housing
- Aluminum housing provides excellent durability
- Folding type mount bracket can be utilized in various environments
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Materials : Lens-PC, Housing-Al, Mounting bracket-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant

Model number	Layers	Voltage	Current	Certificates	Weight	Color
QTA56L Steady	3	DC24V	0.125A	CE DC24V only	0.71kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green
QTA56L-BZ Steady w/ built-in buzzer			0.155A		0.72kg	

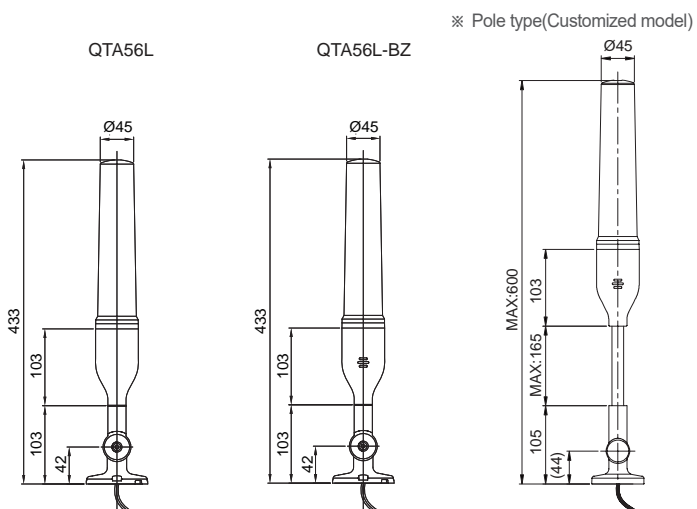
Signal/ Audible line current(Per each layer)

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



Technical Diagram

(Units : mm)



Wiring Instructions

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



Customization

- Pole type



Ordering Specification

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

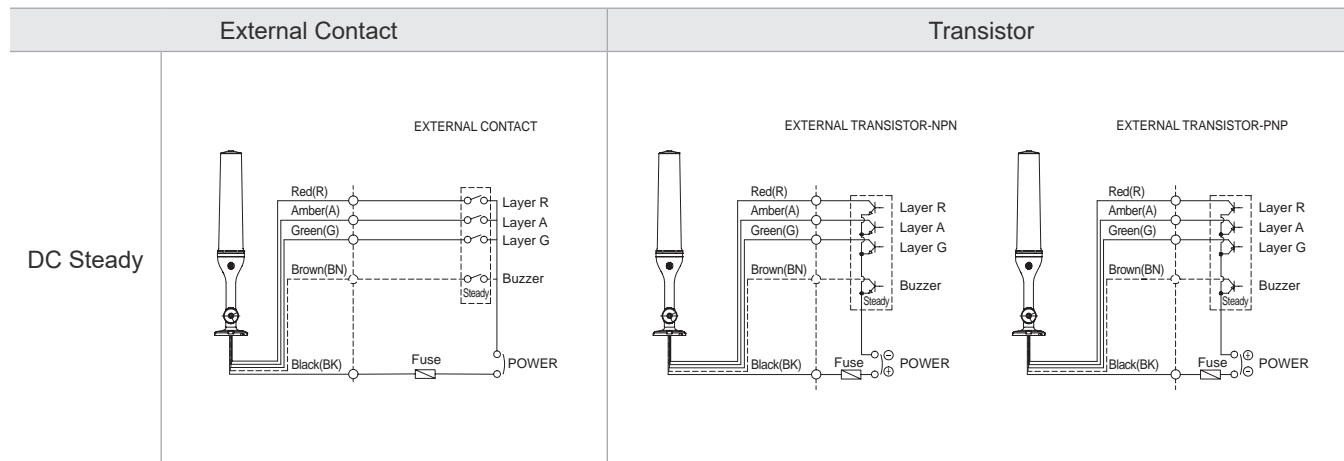
QTA56L

LED Steady Tower Lights



Wiring Instructions

- QTA56L can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.
- Product can be wired regardless of polarity.



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

QAT80L

Ø80mm LED Steady/Flashing Tower Lights



- QAT80L** LED Steady
- QAT80L-BZ** Built-in Buzzer LED Steady
- QAT80LF** Steady/Flashing
- QAT80LF-BZ** Built-in Buzzer Steady/Flashing



QAT80L

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



QAT80L LED Steady/Flashing Tower Lights

- LED Steady/Flashing Tower Lights
- Long product lifetime of over 20,000 hours with the application of a high intensity multiple color LED light source
- Built in 2 tone buzzer, Sound output according to LED color(Max.95dB at 1m).
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Housing-PA66, Pole-AI
- Protection rating : IP65
- Ambient operating temperature : -30°C ≤ Ta ≤ + 50°C
- Compliant with RoHS directive

Model number	Layers	Voltage	Current	Certificates	Weight	Color
QAT80L Steady	3	DC12V-24V	Max. 0.60A	CE DC24V only	0.50Kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green
QAT80L-BZ Steady w/ built-in buzzer					1.10Kg	
QAT80LF Steady/Flashing					0.50Kg	
QAT80LF-BZ Steady/Flashing w/ built-in buzzer					1.10Kg	

Signal/ Audible line current(Per each layer)

Voltage	DC12V	DC24V
Signal line current	0.200A	0.100A
Audible line current	0.040A	0.075A

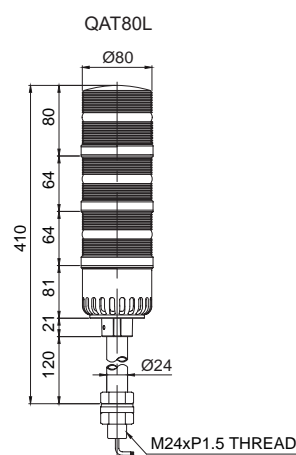
Selectable sound patterns

Built-in sound	Sound	Channel	Volume
1 buzzer sound	prolonged (beep)	Ch1	Max.95dB
2 buzzer sound	staccato (beep, beep, beep)	Ch1	



Technical Diagram

(Units : mm)



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



Ordering Specification

QAT80L	-	3	-	12/24	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QAT80L • QAT80L-BZ • QAT80LF • QAT80LF-BZ 		• 3-3Layers		• 12/24-DC12V-24V		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green

QAT80ML

Ø80mm LED Steady/Flashing Tower Lights



- QAT80ML** LED Steady
- QAT80ML-BZ** Built-in Buzzer LED Steady
- QAT80MLF** Steady/Flashing
- QAT80MLF-BZ** Built-in Buzzer Steady/Flashing



QAT80ML

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



QAT80ML LED Steady/Flashing Tower Lights

- LED Steady/Flashing Tower Lights
- Long product lifetime of over 20,000 hours with the application of a high intensity multiple color LED light source
- Built in 2 tone buzzer, Sound output according to LED color(Max.95dB at 1m).
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Housing-PA66
- Protection rating : IP65
- Ambient operating temperature : -30°C ≤ Ta ≤ + 50°C
- Compliant with RoHS directive

Model number	Layers	Voltage	Current	Certificates	Weight	Color
QAT80ML Steady	3	DC12V-24V	Max. 0.60A	CE DC24V only	0.50Kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green
QAT80ML-BZ Steady w/ built-in buzzer					0.62Kg	
QAT80MLF Steady/Flashing					0.50Kg	
QAT80MLF-BZ Steady/Flashing w/ built-in buzzer					0.62Kg	

Signal/ Audible line current(Per each layer)

Voltage	DC12V	DC24V
Signal line current	0.200A	0.100A
Audible line current	0.040A	0.075A

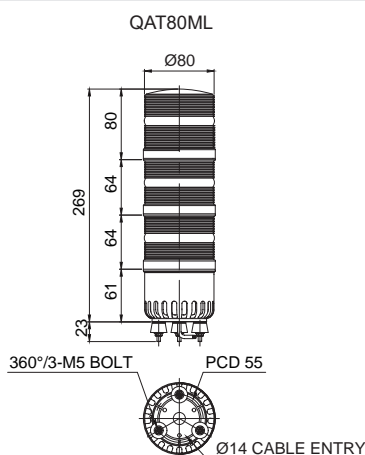
Selectable sound patterns

Built-in sound	Sound	Channel	Volume
1 buzzer sound	prolonged (beep)	Ch1	Max.95dB
2 buzzer sound	staccato (beep, beep, beep)	Ch1	



Technical Diagram

(Units : mm)



Ordering Specification

QAT80ML	-	3	-	12/24	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QAT80ML • QAT80ML-BZ • QAT80MLF • QAT80MLF-BZ 		• 3-3Layers		• 12/24-DC12V-24V		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green

QAT80(M)L

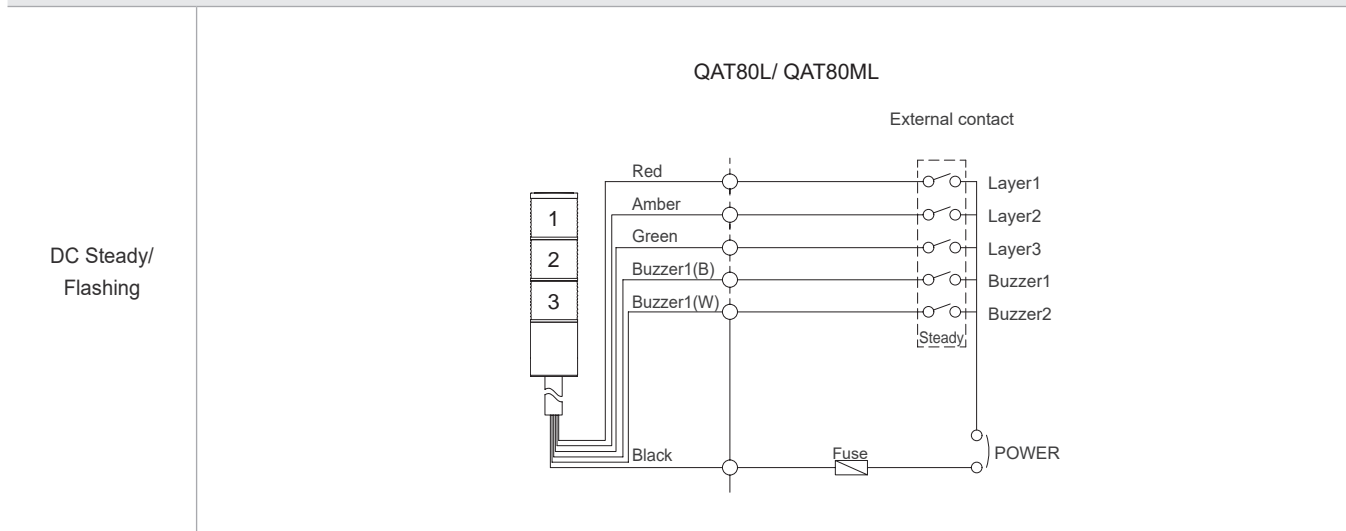
Ø80mm LED Steady/Flashing Tower Lights



Wiring Instructions

- In case of wiring with external contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

Wiring diagrams



SWT series

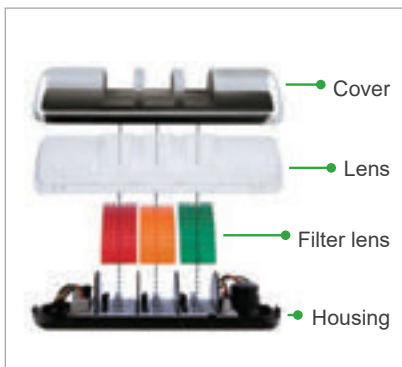


SWT series



SWTE series

• SWT Lens Configuration



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

Wall Mount Semicircular LED Signal Towers

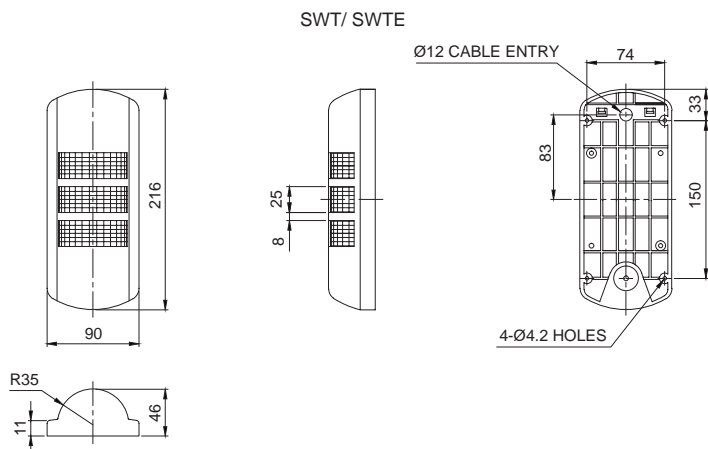
SWT/ SWTE Wall Mount, LED Steady/Flashing

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

Model number	Layer	Voltage	Current	Certificates	Weight	Color
SWT(E)L Steady	2	DC12V-24V	Max.0.130A	CE DC only	0.27kg	● R-Red ● G-Green
SWT(E)L-BZ Steady w/ built-in buzzer		AC110V	0.050A		0.42kg	
		AC220V	0.025A		0.42kg	
SWT(E)LF Steady/Flashing	3	DC12V-24V	Max.0.195A	UL DC24V only	0.30kg	● R-Red ● A-Amber ● G-Green
SWT(E)LF-BZ Steady/Flashing		AC110V	0.050A		0.45kg	
		AC220V	0.025A		0.45kg	

Technical Diagram

(Units : mm)



Customization

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

Ordering Specification

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

SWT series

Wall Mount Semicircular LED Signal Towers



Wiring Instructions

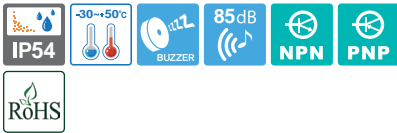
- SWT series can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.
- Product can be wired regardless of polarity.

	External Contact	Transistor
DC Steady	<p>SWTL-DC</p>	<p>SWTL-DC</p>
DC Steady/ Flashing	<p>SWTLF-DC</p>	<p>SWTLF-DC</p>
AC Steady	<p>SWTL-AC</p>	<p>SWTL-AC</p>
AC Steady/ Flashing	<p>SWTLF-AC</p>	<p>SWTLF-AC</p>

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

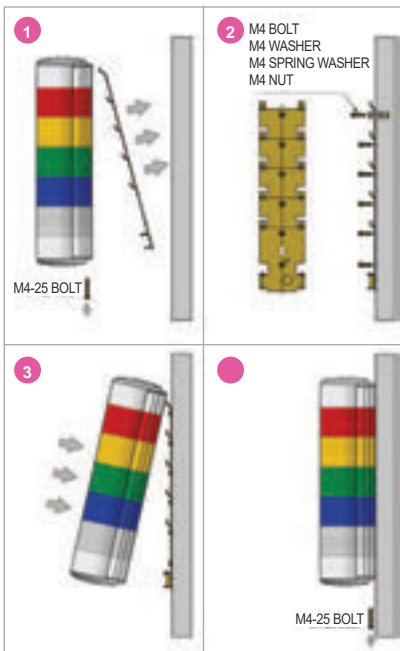
QWT series

Wall Mount LED Steady/Flashing Signal Towers



QWT series

Mounting Instructions



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

Customization

- Available in customized color arrangements

QWT Wall Mount, LED Steady/Flashing

- Wall mount model that minimizes the chance of breakage from moving obstacles
- The use of a circular lens design for the product improves visibility at the sides
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Flashing rate : 60-80 flashes/min
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Materials : Lens-PC, Housing-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive

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

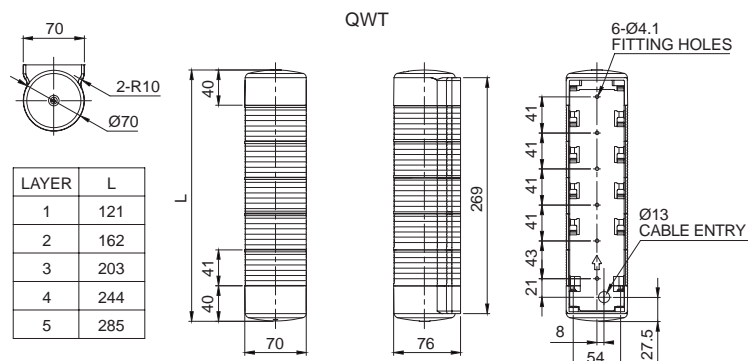
* AC type model has a free-voltage range of 100V-240V.

Signal/ Audible Line Current(per each layer)

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

Technical Diagram

(Units : mm)



Ordering Specification

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

QWT series

Wall Mount LED Steady/Flashing Signal Towers



Wiring Instructions

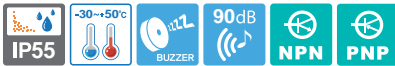
- QWT series can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instructions below.
- Product can be wired regardless of polarity.

	External Contact	Transistor
DC Steady	<p>QWTL-DC EXTERNAL CONTACT</p>	<p>QWTL-DC EXTERNAL TRANSISTOR-NPN EXTERNAL TRANSISTOR-PNP</p>
DC Steady/Flashing	<p>QWTLF-DC EXTERNAL CONTACT</p>	<p>QWTLF-DC EXTERNAL TRANSISTOR-PNP</p>
AC Steady	<p>QWTL-AC EXTERNAL CONTACT</p>	<p>QWTL-AC EXTERNAL TRANSISTOR-PNP</p>
AC Steady/Flashing	<p>QWTLF-AC EXTERNAL CONTACT</p>	<p>QWTLF-AC EXTERNAL TRANSISTOR-PNP</p>

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

MWTL

Wall Mount Semicircular LED Signal Towers with 4 Layers



MWTL

MWTL Wall Mount, 4 Layers LED Steady/Flashing

- Wall mount model that minimizes the chance of damage from moving obstacles or personnel
- LED light distribution structure that directly radiates light to the user provides excellent visibility
- Can be used outdoors with tightly sealed structure
- Standard color arrangements :
4 Colors : ● Red-R ● Amber-A ● Green-G ● Blue-B
- Flashing rate : 60-80 flashes/min
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Materials : Lens-PC, Cover-ABS, Housing-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP55
- Certificates : CE Compliant

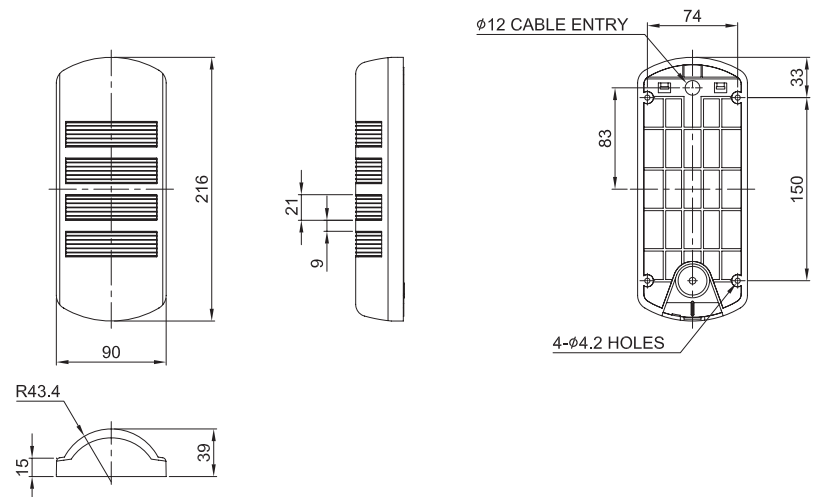
Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
MWTL Steady MWTL-BZ Steady w/ built-in buzzer	4	DC24V	0.023A	 DC24V only	0.29kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue
MWTLF Steady/Flashing MWTLF-BZ Steady/Flashing /w built-in buzzer			0.052A			

Technical Diagram

(Units : mm)

MWTL



Customization

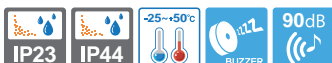
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available

Ordering Specification

MWTL	-	4	-	24	-	RAGB
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • MWTL • MWTLF • MWTL-BZ • MWTLF-BZ 		• 4-Layers		• 24-DC24V		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue

ST45MB

Ø45mm Bulb Steady/Flashing Tower Lights



- ST45MB** Steady
- ST45MB-BZ** Built-in Buzzer Steady
- ST45MBF** Steady/Flashing
- ST45MBF-BZ** Built-in Buzzer Steady/Flashing



ST45MB series

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



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

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

ST45MB Ø45mm Direct Mount, Bulb Steady/Flashing

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

Signal/ Audible Line Current(per each layer)

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

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

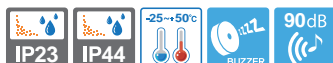


Ordering Specification

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

ST45B

Ø45mm Bulb Steady/Flashing Tower Lights



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



ST45B series

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



ST45B Ø45mm Pole Mount, Bulb Steady/Flashing

Model number	Layer	Voltage	Current	Bulb			Certificates	Weight	Color
				Spec	Standard	Parts no#			
ST45B Steady ST45B-BZ Steady w/ built-in buzzer ST45BF Steady/ Flashing ST45BF-BZ Steady/ Flashing w/ built-in buzzer	1	AC/DC12V	0.398A	12V5W	G14 9S	1	CE DC only	0.36kg	● R-Red
		AC/DC24V	0.212A	24V5W	G14 9S	2		0.36kg	
		AC110V	0.048A	110V5W	T16x28 9S	3		0.36kg	
		AC220V	0.023A	220V5W	T16x28 9S	4		0.36kg	
	2	AC/DC12V	0.797A	12V5W	G14 9S	1		0.41kg	● R-Red ● G-Green
		AC/DC24V	0.424A	24V5W	G14 9S	2		0.41kg	
		AC110V	0.097A	110V5W	T16x28 9S	3		0.41kg	
		AC220V	0.046A	220V5W	T16x28 9S	4		0.41kg	
	3	AC/DC12V	1.196A	12V5W	G14 9S	1		0.46kg 0.46kg 0.46kg 0.46kg	● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.636A	24V5W	G14 9S	2			
		AC110V	0.146A	110V5W	T16x28 9S	3			
		AC220V	0.070A	220V5W	T16x28 9S	4			
4	AC/DC12V	1.595A	12V5W	G14 9S	1	0.51kg 0.51kg 0.51kg 0.51kg	● R-Red ● A-Amber ● G-Green ● B-Blue		
	AC/DC24V	0.848A	24V5W	G14 9S	2				
	AC110V	0.195A	110V5W	T16x28 9S	3				
	AC220V	0.093A	220V5W	T16x28 9S	4				
5	AC/DC12V	1.994A	12V5W	G14 9S	1	0.56kg 0.56kg 0.56kg 0.56kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White		
	AC/DC24V	1.061A	24V5W	G14 9S	2				
	AC110V	0.244A	110V5W	T16x28 9S	3				
	AC220V	0.116A	220V5W	T16x28 9S	4				

* Please refer to page 22 ST45MB type for signal/ audible line current.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

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

Ordering Specification

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

ST45MB/ ST45B

Ø45mm Bulb Steady/Flashing Tower Lights

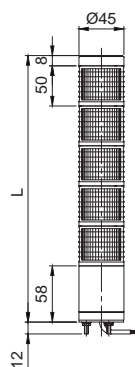


Technical Diagram

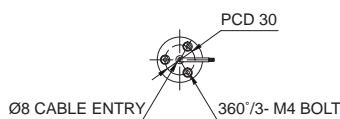
(Units : mm)

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

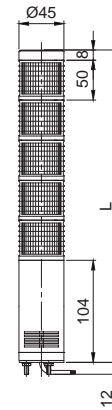
ST45MBF-BZ : AC/DC



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

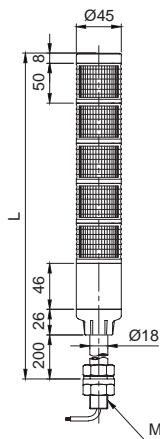


LAYER	L
1	162
2	212
3	262
4	312
5	362



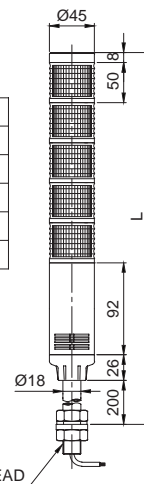
ST45B : AC/DC
ST45B-BZ : AC/DC
ST45BF : AC/DC

ST45BF-BZ : AC/DC



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

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



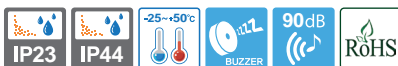
Wiring Instructions

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

* Please refer to page 31 for detailed wiring instructions.

ST56MB

Ø56mm Bulb Steady/Flashing Tower Lights



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



ST56MB series

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



ST56MB Ø56mm Direct Mount, Bulb Steady/Flashing

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V	AC220V
Signal Line Current	0.925A	0.541A	0.095A	0.046A
Audible Line Current	0.016A	0.031A	0.090A	0.090A

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

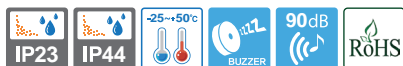


Ordering Specification

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

ST56B

Ø56mm Bulb Steady/Flashing Tower Lights



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



ST56B series

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



ST56B Ø56mm Pole Mount, Bulb Steady/Flashing

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

※ Please refer to page 25 ST56MB type for signal/ audible line current.

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

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

Ordering Specification

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

ST56MB/ ST56B

Ø56mm Bulb Steady/Flashing Tower Lights

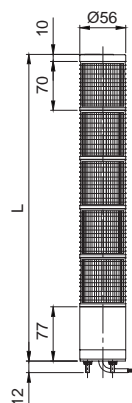


Technical Diagram

(Units : mm)

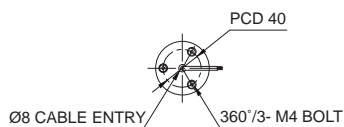
ST56MB : AC/DC
ST56MB-BZ : AC/DC
ST56MBF : AC/DC

ST56MBF-BZ : AC/DC



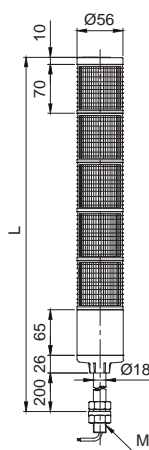
LAYER	L
1	157
2	227
3	297
4	367
5	437

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



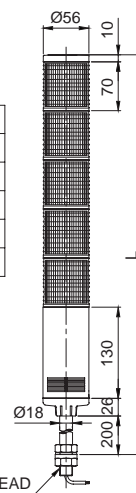
ST56B : AC/DC
ST56B-BZ : AC/DC
ST56BF : AC/DC

ST56BF-BZ : AC/DC



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

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



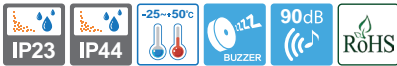
Wiring Instructions

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

* Please refer to page 31 for detailed wiring instructions.

ST80MB

Ø80mm Bulb Steady/Flashing Tower Lights



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



ST80MB series

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



ST80MB Ø80mm Direct mount, Bulb Steady/Flashing

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V	AC220V
Signal line current	0.925A	0.514A	0.095A	0.046A
Audible line current	0.016A	0.031A	0.090A	0.090A

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

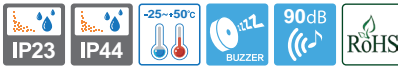


Ordering Specification

ST80MB	-	3	-	24	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • ST80MB • ST80MB-BZ • ST80MBF • ST80MBF-BZ 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White

ST80B

Ø80mm Bulb Steady/Flashing Tower Lights



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



ST80B series

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



ST80B Ø80mm Pole Mount, Bulb Steady/Flashing

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

※ Please refer to page 28 ST80MB type for signal/ audible line current.

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

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

Ordering Specification

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

ST80MB/ST80B

Ø80mm Bulb Steady/Flashing Tower Lights

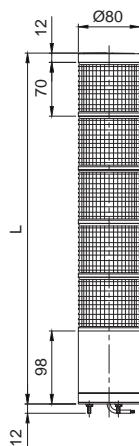


Technical Diagram

(Units : mm)



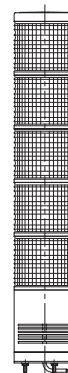
ST80MB : AC/DC
ST80MBF : AC/DC



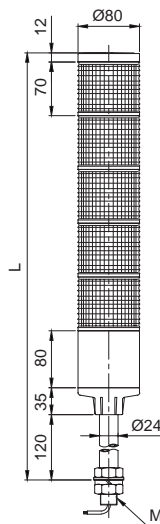
LAYER	L
1	180
2	250
3	320
4	390
5	460



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



ST80B : AC/DC
ST80BF : AC/DC



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

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



Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 31 for detailed wiring instructions.

ST45B/ST56B/ST80B series

Bulb Steady/Flashing Tower Lights

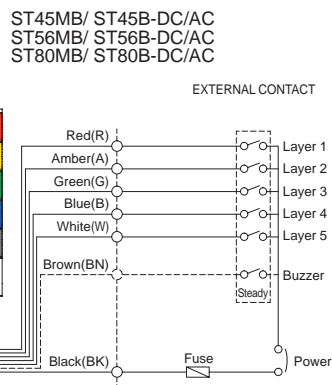


Wiring Instructions

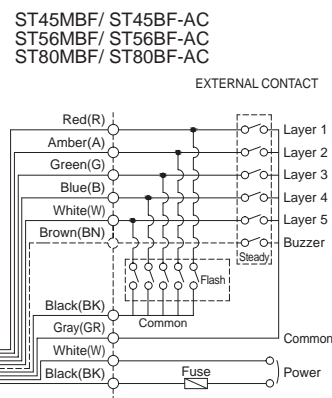
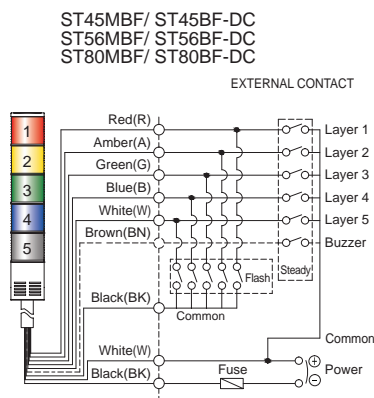
- Please wire by following below instructions for ST45MB/ ST45B, ST56MB/ ST56B and ST80MB/ ST80B series.
- Bulb tower lights do not allow transistor wiring. Please use external contact.

External contact

Steady



Steady/
Flashing



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



STC45ML

Ø45mm Multiple Color LED Steady/Flashing Tower Lights

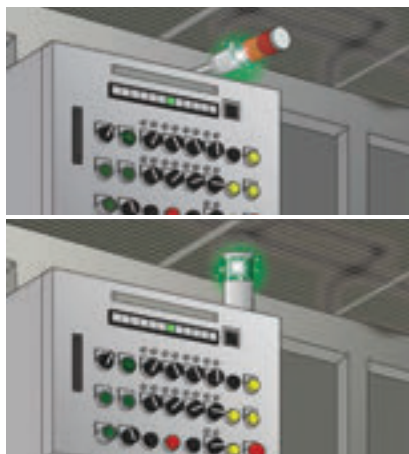


- STC45ML** LED Steady
- STC45ML-BZ** Built-in Buzzer LED Steady
- STC45MLF** LED Steady/Flashing
- STC45MLF-BZ** Built-in Buzzer LED Steady/Flashing



STC45ML series

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



Multiple color 1 layer LED tower lights

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



Wiring Instructions

- External power line :
UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line :
UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 36 for detailed wiring Instructions.



Common Specifications(STC45/ STC56/ STC80)

- Economical tower light model that can deliver two to three signals with one layer
- Long product lifetime of over 20,000 hours with the application of a high intensity multiple color LED light source
- Can select from size of Ø45mm, Ø56mm, and Ø80mm to fit your sophisticated application needs
- A variety of mounting bracket selections for the pole mount type to fit your location and mounting needs
- Built-in buzzer type available (Volume : Max 90dB at 1m)
- Customized 2 buzzer sound type available
- Flashing rate : 60-80 flashes/min
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant
- Compliant with RoHS directive



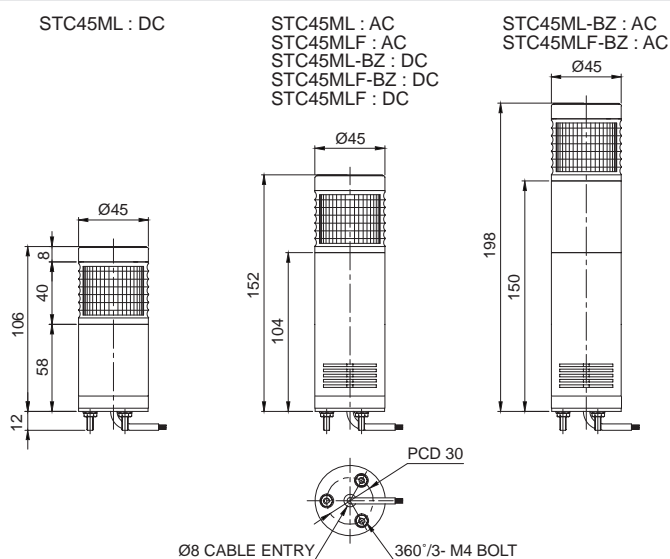
STC45ML Ø45mm Direct Mount, Multiple Color LED Steady/Flashing

Model number	Layers	Voltage	Current	Certificates	Weight	Color
STC45ML	2	AC/DC12V	0.111A	CE DC24V only	0.19kg	<ul style="list-style-type: none"> • R-Red • G-Green
STC45ML-BZ		AC/DC24V	0.100A			
STC45MLF		AC110V	0.028A			
STC45MLF-BZ		AC220V	0.014A			
STC45MLF	3	AC/DC12V	0.111A	CE DC24V only	0.32kg	<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green
STC45MLF-BZ		AC/DC24V	0.100A			
		AC110V	0.028A			
		AC220V	0.014A			



Technical Diagram

(Units : mm)



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Ordering Specification

STC45ML	-	3	-	220	-	RAG
[Model number]		[Layers]		[Voltage]		[Color]
<ul style="list-style-type: none"> • STC45ML • STC45ML-BZ • STC45MLF • STC45MLF-BZ 		<ul style="list-style-type: none"> • 2-2 Colors • 3-3 Colors 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green

STC45L

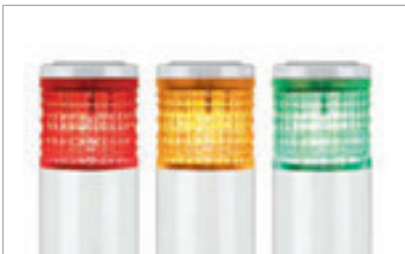
Ø45mm Multiple Color LED Steady/Flashing Tower Lights



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



STC45L series



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



Mounting Bracket

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

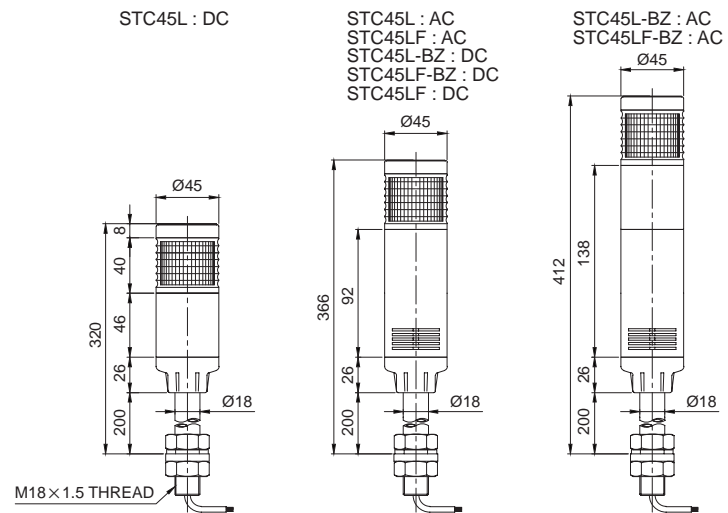
※ Please refer to page 190-195 for detailed dimensions.

STC45L Ø45mm Pole Mount, Multiple Color LED Steady/Flashing

Model number	Layers	Voltage	Current	Certificates	Weight	Color	
STC45L STC45L-BZ STC45LF STC45LF-BZ	2	AC/DC12V	0.111A	CE DC24V only	0.33kg	<ul style="list-style-type: none"> ● R-Red ● G-Green 	
		AC/DC24V	0.100A				
		AC110V	0.028A				
		AC220V	0.014A				
STC45L STC45L-BZ STC45LF STC45LF-BZ	3	AC/DC12V	0.111A		CE DC24V only	0.47kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.100A				
		AC110V	0.028A				
		AC220V	0.014A				

Technical Diagram

(Units : mm)



Wiring Instructions

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

※ Please refer to page 36 for detailed wiring instructions.

Customization

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

Ordering Specification

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

STC56ML

Ø56mm Multiple Color LED Steady/Flashing Tower Lights



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

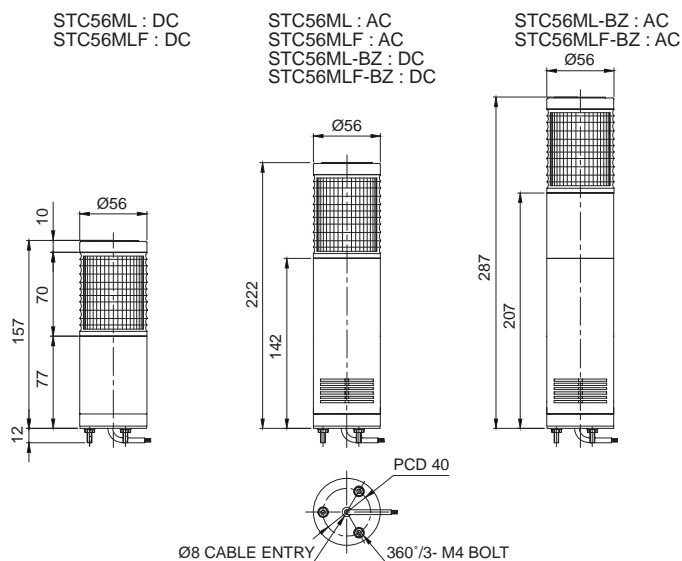
STC56ML Ø56mm Pole Mount, Multiple Color LED Steady/Flashing

Model number	Layers	Voltage	Current	Certificates	Weight	Color
STC56ML	2	AC/DC12V	0.277A	CE DC24V only	0.29kg	<ul style="list-style-type: none"> ● R-Red ● G-Green
STC56ML-BZ		AC/DC24V	0.188A			
STC56MLF	3	AC110V	0.057A			
STC56MLF-BZ		AC220V	0.028A		0.49kg	<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green

Technical Diagram (Units : mm)



STC56ML series



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



40mm lens height

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- ※ Please refer to page 36 for detailed wiring instructions.

Customization

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



Ordering Specification

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

STC56L

Ø56mm Multiple Color LED Steady/Flashing Tower Lights



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



STC56L series

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



40mm lens height

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



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



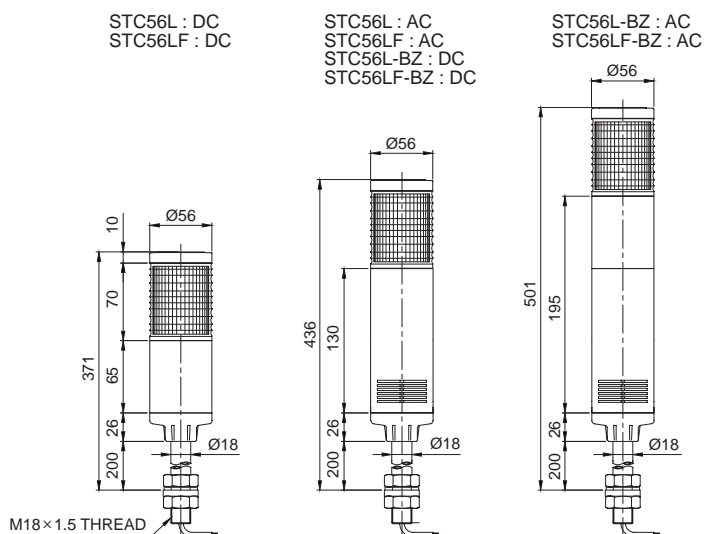
STC56L Ø56mm Pole Mount, Multiple Color LED Steady/Flashing

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



Technical Diagram

(Units : mm)



Wiring Instructions

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

※ Please refer to page 36 for detailed wiring instructions.



Customization

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



Ordering Specification

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

STC series

Multiple Color LED Steady/Flashing Tower Lights



Wiring Instructions

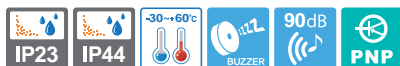
- STC series can be wired by using both external contact and transistor.
- In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.
- Product can be wired regardless of polarity.

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

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

QT56MCL

Multiple Color LED Steady Tower Lights



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

QT56MCL LED Steady

QT56MCL-BZ Built-in Buzzer LED Steady



QT56MCL series

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



QT56MCL Multiple Color LED Steady

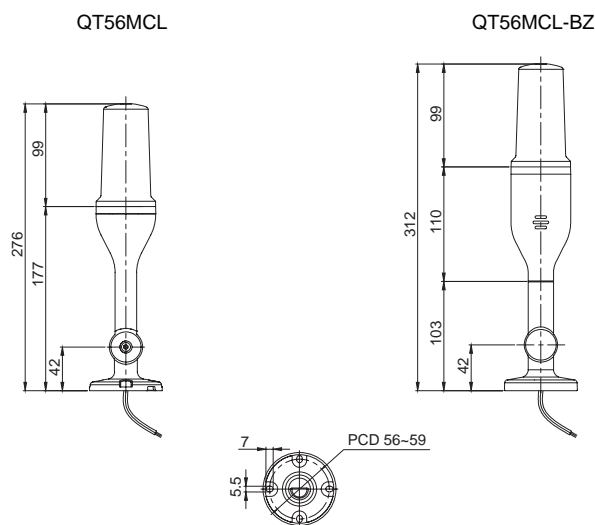
- Helps reduce the costs of installation by reducing the space needed to emit seven color signals in a single tower light
- Elegant design with hexagon shaped metal housing
- Aluminum housing provides excellent durability
- Soft LED illuminates designated colors when on
- When off, milky translucent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

Model number	Voltage	Current	Certificates	Weight	Color
QT56MCL Steady	DC24V	0.080A	CE	0.45kg	7 Colors
QT56MCL-BZ Steady w/ built-in buzzer				0.48kg	

Signal/ Audible line current(Per each layer)

Voltage	DC24V
Signal line current	0.045A
Audible line current	0.035A

Technical Diagram (Units : mm)



Wiring Instructions

- External signal line : Signal line 4P(R,G,B,K) threading, External signal line - UL1007 AWG22(0.3sq) 400mm
 - Product can be wired regardless of polarity
 - Please refer to Wiring Instructions diagram to properly configure color options
- ※ Please refer to page 38 for detailed wiring instructions.

Ordering Specification

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

QT56MCL

Multiple Color LED Steady Tower Lights

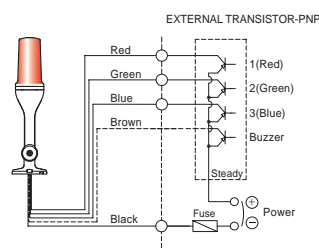
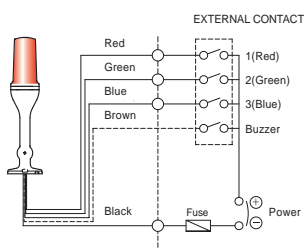


Wiring Instructions

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



QT56MCL



< Wiring Configuration for Signal Color >

No.	Signal color	Wiring configuration
1	RED	1(RED)
2	GREEN	2(GREEN)
3	BLUE	3(BLUE)
4	AMBER	1(RED)+2(GREEN)
5	CYAN	2(GREEN)+3(BLUE)
6	PURPLE	1(RED)+3(BLUE)
7	WHITE	1(RED)+2(GREEN)+3(BLUE)

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

Signal Color Options



[Red]



[Green]



[Blue]



[Amber]



[Cyan]



[Purple]



[White]

- 7 Color modes available via wiring

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

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights

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



1 Different sizes of LED steady/flashing lenses

You can select from a variety of indicators depending on the working environment and application needs

Model number	Lens diameter	Lens length
ST45(M)L	45mm	40mm
ST45(M)LF	45mm	40mm
ST56(M)EL	56mm	40mm
ST56(M)ELF	56mm	40mm
ST56(M)L	56mm	70mm
ST56(M)LF	56mm	70mm
ST80(M)EL	80mm	40mm
ST80(M)ELF	80mm	40mm
ST80(M)L	80mm	70mm
ST80(M)LF	80mm	70mm

2 Buzzer and sound patterns with 15 different tones

Concrete messages can be clearly conveyed with the option of 15 types of audible signals

Main	Built-in sound	Channel	Sound patterns
BZ	1 buzzer sound 2 buzzer sounds		Customized 2 tone Buzzer available
WS	5 Warning sounds	Ch1 Ch2 Ch3 Ch4 Ch5	Fire.A-ANG Emergency Ambulance Machinery Fault High Expansion
WM	5 Melodies	Ch1 Ch2 Ch3 Ch4 Ch5	Sweet Home For Elise Cuckoo's Waltz Piano Sonata Turkish March
WA	5 Alarms	Ch1 Ch2 Ch3 Ch4 Ch5	Beep Intermittent Door Chime Phone Ring PI.PI.PI Short Tripping Beat

3 A variety of mounting bracket selection

- Wall mount type model allows for contained and tidy wiring with no exposed wires
- A number of pole mounting stands are available for a variety of environments depending on location and mounting needs
- Specifically, the QL-type and SL-type tower lights can be applied in a variety of environments as it can be folded up to 90 degrees in the horizontal direction. These products can avoid damage due to external forces when movement of the equipment is required
- QLA type offers an easy to use angle adjustment button on the side for angle intervals of 45 to 90 degrees. No additional tools necessary



Mounting Bracket Options

• Wall Mount Brackets

TWS45 TWS80	TWA45 TWA80
Steel	PC

• Pole Mount Brackets

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

※ Please refer to page 190-195 for detailed dimensions.

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights

Interchangeable Lens Concept

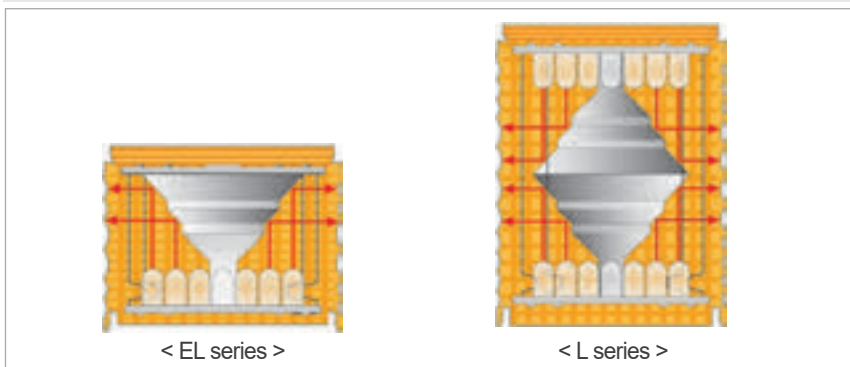
ST45L/ ST56L/ ST80L series product allows for the lens arrangement to be adjusted after removing the bolt that secures the cover. If additional lenses are required for this product please reach out to us. ST45L/ ST56L/ ST80L series can be stacked up to 5 layers.



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

- LED steady/flashing tower lights
- Long product lifetime of over 20,000hours with the application of a high intensity LED light source
- Can select from size selections of Ø45mm, Ø56mm, and Ø80mm to fit your sophisticated application needs
- A variety of mounting bracket selections for the pole mount type to fit your location and mounting needs
- Built-in buzzer available (Volume : Max 90dB at 1m)
- Built-in alarm available (Volume : Max 85dB at 1m/ Speaker output type)
(Can select from 5 warning sounds, 5 alarms, 5 melodies to fit your application needs)
- Flashing rate : 60-80 flashes/min
- Customized color arrangement available (LED light distribution system and lens is integrated into a combined structure)
- Materials : Lens-AS, Housing-ABS, Pole-AI
- Ambient operating temperature: -30°C to +60°C
- Protection rating : Standard type-IP44, Built-in buzzer type-IP23
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive

Reflection System



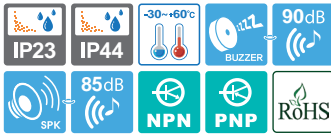
- Qlight's special light distribution system with multi-tiered reflector provides linear and balanced light transmission to the lens for strong LED illumination throughout the product
- The special light diffusion structure inside the product creates the brightest signal light at the center of the lens

References

Mount type	Sound	Buzzer and sound patterns	Lens dimension				
			Ø45mm H40mm	Ø56mm H40mm	Ø56mm H70mm	Ø80mm H40mm	Ø80mm H70mm
 Direct mount	No sound	Standard	ST45ML(F)	ST56MEL(F)	ST56ML(F)	ST80MEL(F)	ST80ML(F)
	 BUZZER	Built-in buzzer	ST45ML(F)-BZ	ST56MEL(F)-BZ	ST56ML(F)-BZ	ST80MEL(F)-BZ	ST80ML(F)-BZ
	 SPK	5 Warning sounds	ST45ML(F)-WS	ST56MEL(F)-WS	ST56ML(F)-WS	ST80MEL(F)-WS	ST80ML(F)-WS
		5 Melodies	ST45ML(F)-WM	ST56MEL(F)-WM	ST56ML(F)-WM	ST80MEL(F)-WM	ST80ML(F)-WM
 Pole mount	5 Alarms	ST45ML(F)-WA	ST56MEL(F)-WA	ST56ML(F)-WA	ST80MEL(F)-WA	ST80ML(F)-WA	
	No sound	Standard	ST45L(F)	ST56EL(F)	ST56L(F)	ST80EL(F)	ST80L(F)
	 BUZZER	Built-in buzzer	ST45L(F)-BZ	ST56EL(F)-BZ	ST56L(F)-BZ	ST80EL(F)-BZ	ST80L(F)-BZ
	 SPK	5 Warning sounds	ST45L(F)-WS	ST56EL(F)-WS	ST56L(F)-WS	ST80EL(F)-WS	ST80L(F)-WS
		5 Melodies	ST45L(F)-WM	ST56EL(F)-WM	ST56L(F)-WM	ST80EL(F)-WM	ST80L(F)-WM
5 Alarms	ST45L(F)-WA	ST56EL(F)-WA	ST56L(F)-WA	ST80EL(F)-WA	ST80L(F)-WA		

ST45ML

Ø45mm LED Steady/Flashing Tower Lights



ST45ML series

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



Substitute model numbers for discontinued model

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



ST45ML Ø45mm Direct Mount, LED Steady/Flashing

Model number	Layer	Voltage	Current	Certificates	Weight	Color
ST45ML ST45ML-BZ ST45ML-WS ST45ML-WM ST45ML-WA ST45MLF ST45MLF-BZ ST45MLF-WS ST45MLF-WM ST45MLF-WA	1	AC/DC12V	0.040A	CE UL DC24V only (buzzer type)	0.19kg	● R-Red
		AC/DC24V	0.040A		0.19kg	
		AC110V	0.024A		0.25kg	
	2	AC/DC12V	0.080A		0.21kg	● R-Red ● G-Green
		AC/DC24V	0.080A		0.21kg	
		AC110V	0.026A		0.29kg	
	3	AC/DC12V	0.120A		0.25kg	● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.120A		0.25kg	
		AC110V	0.028A		0.34kg	
	4	AC/DC12V	0.160A		0.30kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		AC/DC24V	0.160A		0.30kg	
		AC110V	0.031A		0.38kg	
	5	AC/DC12V	0.200A		0.34kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
		AC/DC24V	0.200A		0.34kg	
		AC110V	0.033A		0.42kg	
		AC220V	0.012A		0.25kg	
		AC220V	0.013A		0.29kg	
		AC220V	0.014A		0.34kg	
		AC220V	0.015A		0.38kg	
		AC220V	0.016A		0.42kg	

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

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

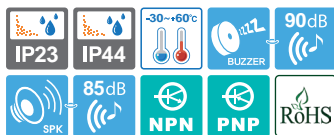


Ordering Specification

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

ST45L

Ø45mm LED Steady/Flashing Tower Lights



ST45L series

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



Substitute model numbers for discontinued model

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

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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

ST45L Ø45mm Pole Mount, LED Steady/Flashing

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

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

※ Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

Ordering Specification

ST45L	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting bracket]
<ul style="list-style-type: none"> • ST45L • ST45L-BZ • ST45L-WS • ST45L-WM • ST45L-WA • ST45LF • ST45LF-BZ • ST45LF-WS • ST45LF-WM • ST45LF-WA 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None • Standard • Bracket • LB18 • LW18 • QZ18 • SZ18 • QL18 • SL18 • QLA18

ST45ML/ST45L

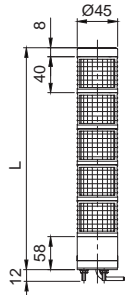
Ø45mm LED Steady/Flashing Tower Lights



Technical Diagram

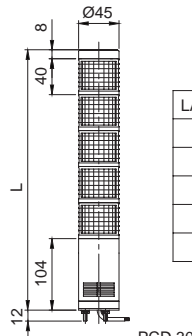
(Units : mm)

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



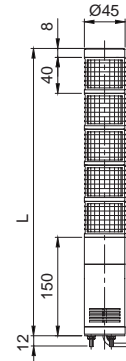
LAYER	L
1	106
2	146
3	186
4	226
5	266

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



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

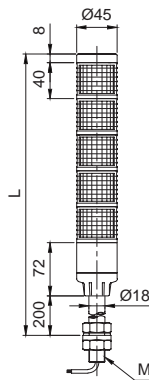
ST45MLF-BZ : AC



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

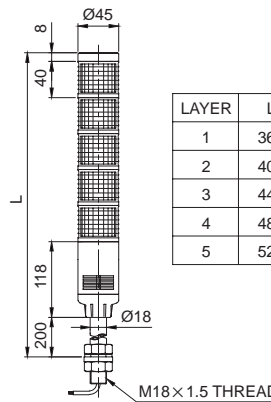


ST45L : AC/DC
ST45L-BZ : DC
ST45LF : DC



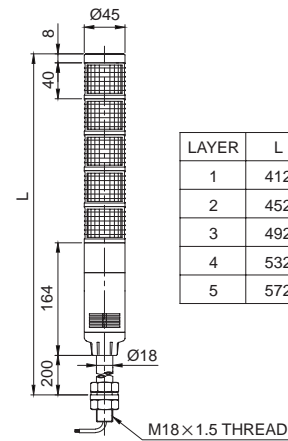
LAYER	L
1	320
2	360
3	400
4	440
5	480

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



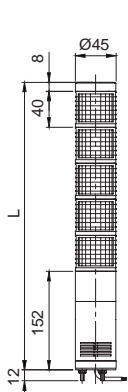
LAYER	L
1	366
2	406
3	446
4	486
5	526

ST45LF-BZ : AC



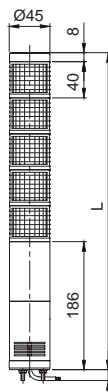
LAYER	L
1	412
2	452
3	492
4	532
5	572

ST45ML-W□ : DC
ST45MLF-W□ : DC



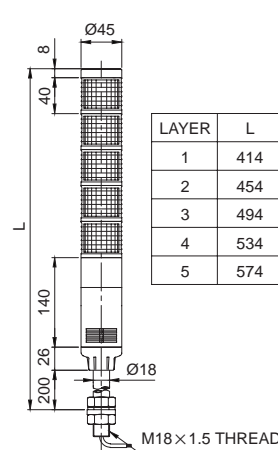
LAYER	L
1	200
2	240
3	280
4	320
5	360

ST45ML-W□ : AC
ST45MLF-W□ : AC



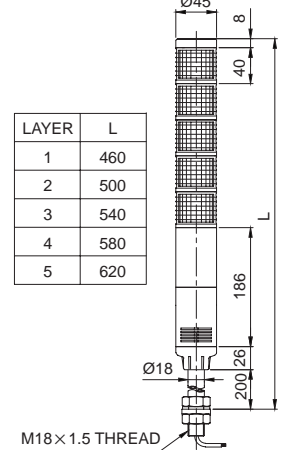
LAYER	L
1	234
2	274
3	314
4	354
5	394

ST45L-W□ : DC
ST45LF-W□ : DC



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

ST45L-W□ : AC
ST45LF-W□ : AC



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

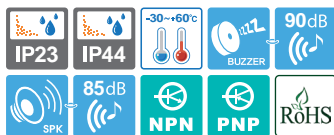


Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 56-57 for detailed wiring instructions.

ST56MEL

Ø56mm LED Steady/Flashing Tower Lights



ST56MEL series

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



Substitute model numbers for discontinued model

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

ST56MEL Ø56mm Direct Mount, LED Steady/Flashing

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

- ST56MEL Steady
- ST56MEL-BZ Built-in buzzer, Steady
- ST56MEL-WS Built-in 5 Warning sounds, Steady
- ST56MEL-WM Built-in 5 Melodies, Steady
- ST56MEL-WA Built-in 5 Alarms, Steady
- ST56MELF Steady/ flashing
- ST56MELF-BZ Built-in buzzer, Steady/ flashing
- ST56MELF-WS Built-in 5 Warning sounds, Steady/ flashing
- ST56MELF-WM Built-in 5 Melodies, Steady/ flashing
- ST56MELF-WA Built-in 5 Alarms, Steady/ flashing

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

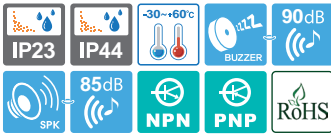


Ordering Specification

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

ST56EL

Ø56mm LED Steady/Flashing Tower Lights



ST56EL series

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



Substitute model numbers for discontinued model

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

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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

ST56EL Ø56mm Pole Mount, LED Steady/Flashing

Model number	Layer	Voltage	Current	Certificates	Weight	Color
ST56EL ST56EL-BZ ST56EL-WS ST56EL-WM ST56EL-WA ST56ELF ST56ELF-BZ ST56ELF-WS ST56ELF-WM ST56ELF-WA	1	AC/DC12V	0.060A	CE DC only UL DC24V only (buzzer type)	0.41kg	● R-Red
		AC/DC24V	0.040A		0.41kg	
		AC110V	0.044A		0.57kg	
		AC220V	0.022A		0.57kg	
	2	AC/DC12V	0.120A		0.47kg	● R-Red ● G-Green
		AC/DC24V	0.080A		0.47kg	
		AC110V	0.048A		0.62kg	
		AC220V	0.024A		0.62kg	
	3	AC/DC12V	0.180A		0.52kg	● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.120A		0.52kg	
		AC110V	0.053A		0.68kg	
		AC220V	0.026A		0.68kg	
	4	AC/DC12V	0.240A		0.58kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		AC/DC24V	0.160A		0.58kg	
		AC110V	0.057A		0.74kg	
AC220V		0.028A	0.74kg			
5	AC/DC12V	0.300A	0.63kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White		
	AC/DC24V	0.200A	0.63kg			
	AC110V	0.062A	0.75kg			
	AC220V	0.031A	0.75kg			

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

※ Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

Ordering Specification

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

ST56MEL/ST56EL

Ø56mm LED Steady/Flashing Tower Lights



Technical Diagram

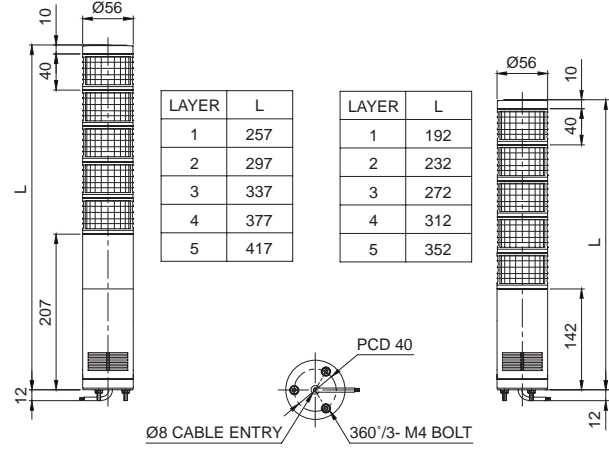
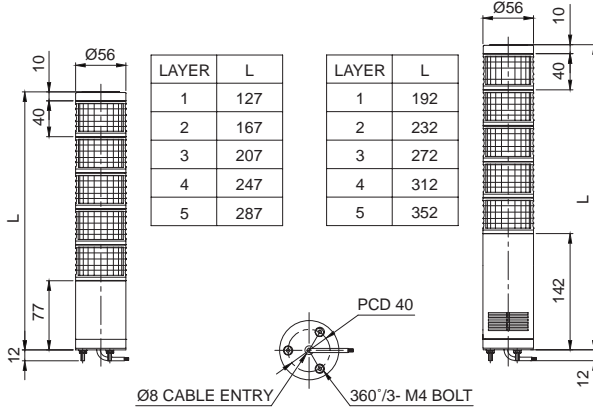
(Units : mm)

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

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

ST56MEL-W□ : AC
ST56MELF-W□ : AC

ST56MEL-W□ : DC
ST56MELF-W□ : DC

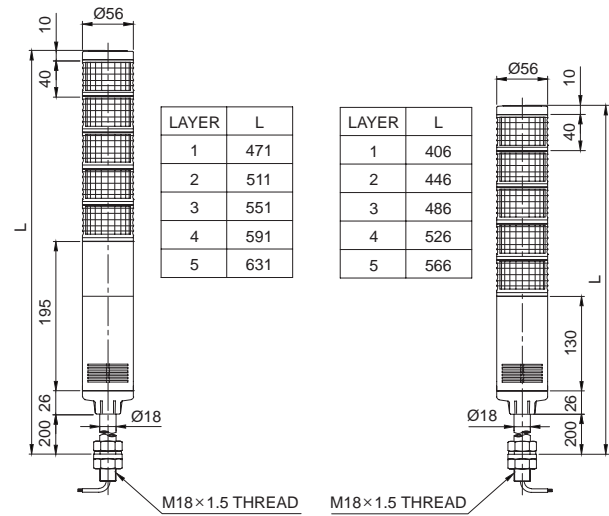
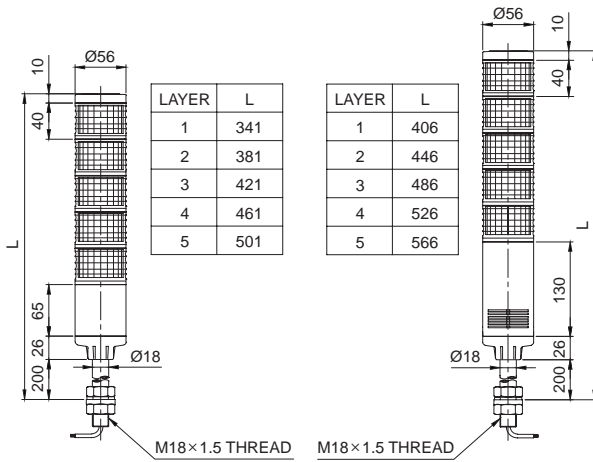


ST56EL : AC/DC
ST56EL-BZ : DC
ST56ELF : DC

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

ST56EL-W□ : AC
ST56ELF-W□ : AC

ST56EL-W□ : DC
ST56ELF-W□ : DC



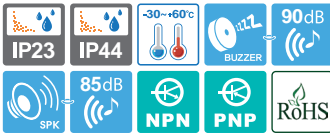
Wiring Instructions

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

※ Please refer to page 56-57 for detailed wiring instructions.

ST56ML

Ø56mm LED Steady/Flashing Tower Lights



ST56ML series

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



Substitute model numbers for discontinued model

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

ST56ML Ø56mm Direct Mount, LED Steady/Flashing

Model number	Layer	Voltage	Current	Certificates	Weight	Color
ST56ML ST56ML-BZ ST56ML-WS ST56ML-WM ST56ML-WA ST56MLF ST56MLF-BZ ST56MLF-WS ST56MLF-WM ST56MLF-WA	1	AC/DC12V	0.120A	CE DC24V only UL DC24V only (buzzer type)	0.22kg	● R-Red
		AC/DC24V	0.080A		0.22kg	
		AC110V	0.048A		0.45kg	
		AC220V	0.024A		0.45kg	
	2	AC/DC12V	0.240A		0.30kg	● R-Red ● G-Green
		AC/DC24V	0.160A		0.30kg	
		AC110V	0.057A		0.53kg	
		AC220V	0.028A		0.53kg	
	3	AC/DC12V	0.360A		0.38kg	● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.240A		0.38kg	
		AC110V	0.066A		0.61kg	
		AC220V	0.033A		0.61kg	
	4	AC/DC12V	0.480A		0.46kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		AC/DC24V	0.320A		0.46kg	
		AC110V	0.075A		0.70kg	
AC220V		0.037A	0.70kg			
5	AC/DC12V	0.600A	0.54kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White		
	AC/DC24V	0.400A	0.54kg			
	AC110V	0.082A	0.78kg			
	AC220V	0.041A	0.78kg			

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

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall Mount Bracket TWS45



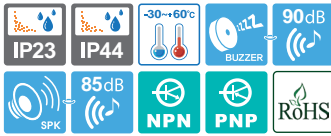
Wall Mount Bracket TWA45

Order specification

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

ST56L

Ø56mm LED Steady/Flashing Tower Lights



ST56L series

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



Substitute model numbers for discontinued model

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

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



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



ST56L Ø56mm Pole Mount, LED Steady/Flashing

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

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

※ Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available



Ordering Specification

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

ST56ML/ST56L

Ø56mm LED Steady/Flashing Tower Lights



Technical Diagram

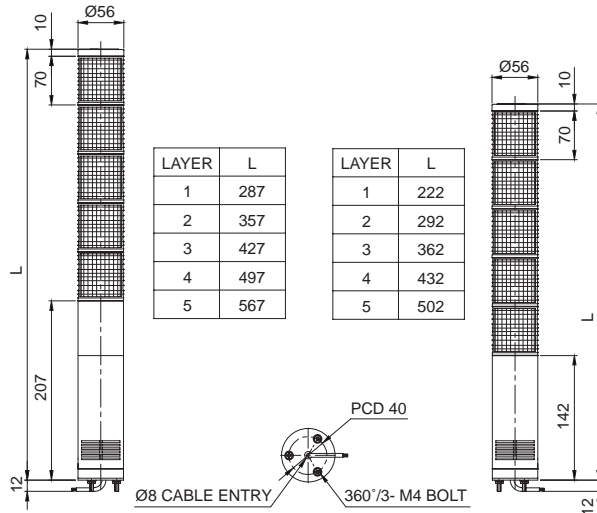
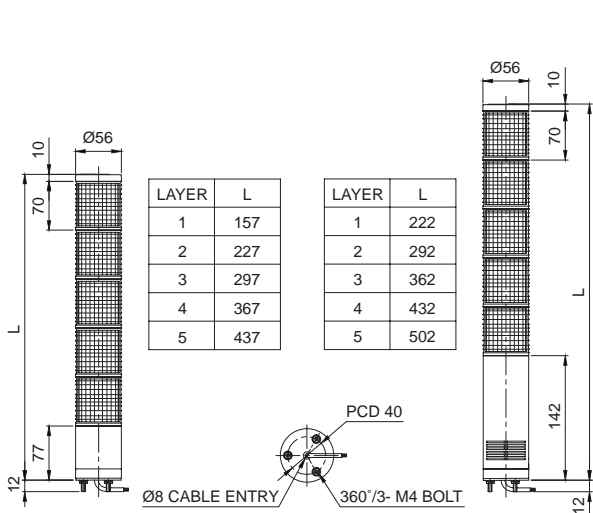
(Units : mm)

ST56ML : AC/DC
ST56ML-BZ : DC

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

ST56ML-W□ : AC
ST56MLF-W□ : AC

ST56ML-W□ : DC
ST56MLF-W□ : DC

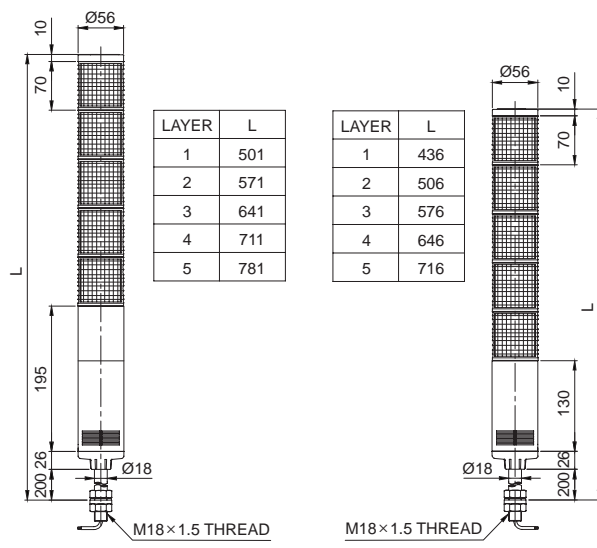
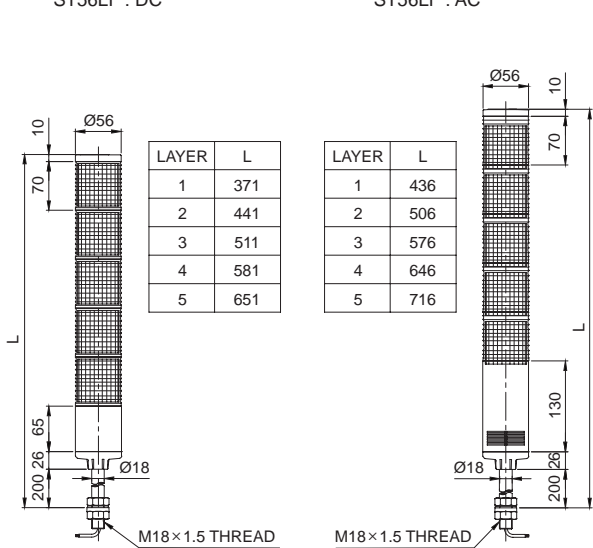


ST56L : AC/DC
ST56L-BZ : DC
ST56LF : DC

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

ST56L-W□ : AC
ST56LF-W□ : AC

ST56L-W□ : DC
ST56LF-W□ : DC

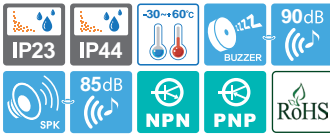


Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 56-57 for detailed wiring instructions.

ST80MEL

Ø80mm LED Steady/Flashing Tower Lights



ST80MEL series

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



Substitute model numbers for discontinued model

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

ST80MEL Ø80mm Direct Mount, LED Steady/Flashing

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

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

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

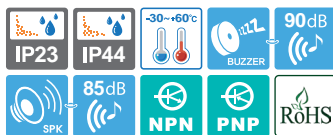


Ordering Specification

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

ST80EL

Ø80mm LED Steady/Flashing Tower Lights



ST80EL series

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



Substitute model numbers for discontinued model

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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

ST80EL Ø80mm Pole Mount, LED Steady/Flashing

Model number	Layer	Voltage	Current	Certificates	Weight	Color
ST80EL ST80EL-BZ ST80EL-WS ST80EL-WM ST80EL-WA ST80ELF ST80ELF-BZ ST80ELF-WS ST80ELF-WM ST80ELF-WA	1	AC/DC12V	0.080A	CE DC only UL DC24V only (buzzer type)	0.58kg	● R-Red
		AC/DC24V	0.040A		0.58kg	
		AC110V	0.046A		0.81kg	
		AC220V	0.023A		0.81kg	
	2	AC/DC12V	0.160A		0.67kg	● R-Red ● G-Green
		AC/DC24V	0.080A			
		AC110V	0.051A			
		AC220V	0.025A			
	3	AC/DC12V	0.240A		0.77kg	● R-Red ● A-Amber ● G-Green
		AC/DC24V	0.120A			
		AC110V	0.057A			
		AC220V	0.028A			
	4	AC/DC12V	0.320A		0.86kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		AC/DC24V	0.160A			
		AC110V	0.064A			
AC220V		0.032A				
5	AC/DC12V	0.400A	0.95kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White		
	AC/DC24V	0.200A				
	AC110V	0.071A				
	AC220V	0.035A				

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

※ Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available

Ordering Specification

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

ST80MEL/ST80EL

Ø80mm LED Steady/Flashing Tower Lights



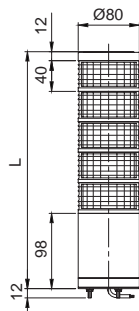
Technical Diagram

(Units : mm)

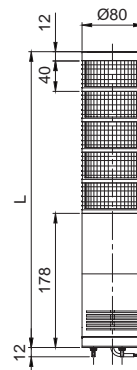
ST80MEL : AC/DC
ST80MELF : AC/DC

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

ST80MEL-W□
ST80MELF-W□



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



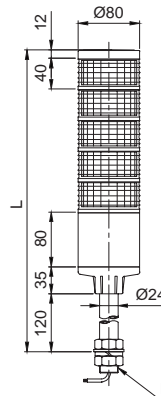
LAYER	L
1	230
2	270
3	310
4	350
5	390



ST80EL : AC/DC
ST80ELF : AC/DC

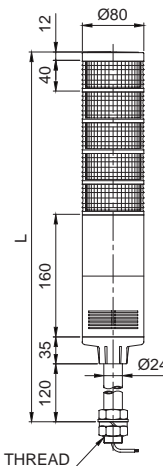
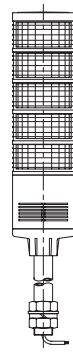
ST80EL-BZ : AC/DC
ST80ELF-BZ : AC/DC

ST80EL-W□
ST80ELF-W□



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

M24×1.5 THREAD



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

M24×1.5 THREAD



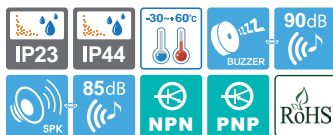
Wiring Instructions

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

※ Please refer to page 56-57 for detailed wiring instructions.

ST80ML

Ø80mm LED Steady/Flashing Tower Lights



ST80ML series

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



Substitute model numbers for discontinued model

Built-in signal sound type, ST80ML-WS, ST80ML-WM, ST80ML-WA are substituted for old model number ST80WML.

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

ST80ML Ø80mm Direct Mount, LED Steady/Flashing

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

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

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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

Customization

- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall

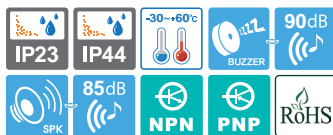


Ordering Specification

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

ST80L

Ø80mm LED Steady/Flashing Tower Lights



ST80L series

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



Substitute model numbers for discontinued model

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



Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.



ST80L Ø80mm Pole Mount, LED Steady/Flashing

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

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

* Please refer to page 186 for detailed information about selectable sound patterns.

Signal/ Audible Line Current(per each layer)

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



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- AC type each layer power provided(same wiring DC steady)
- DC24V voltage UL listed product
- Customized pole length available



Order Specification

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

ST80ML/ST80L

Ø80mm LED Steady/Flashing Tower Lights



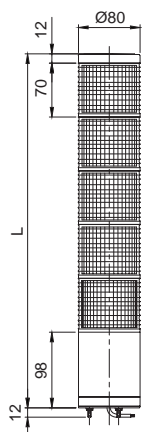
Technical Diagram

(Units : mm)

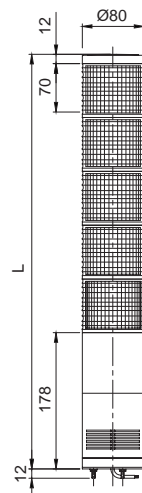
ST80ML : AC/DC
ST80MLF : AC/DC

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

ST80ML-W□
ST80MLF-W□



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



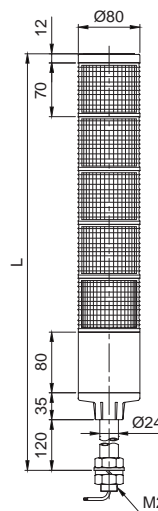
LAYER	L
1	260
2	330
3	400
4	470
5	540



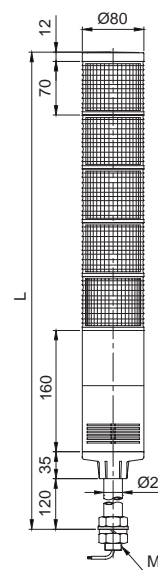
ST80L : AC/DC
ST80LF : AC/DC

ST80L-BZ : AC/DC
ST80LF-BZ : AC/DC

ST80L-W□
ST80LF-W□



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



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



Wiring Instructions

- External power line : UL1015 AWG18(0.75sq) × 2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wired by using transistor and external contact
- ※ Please refer to page 56-57 for detailed wiring instructions.

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights



Wiring Instructions(using external contact)

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

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

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

ST45L/ST56L/ST80L series

LED Steady/Flashing Tower Lights



Wiring Instructions(using transistor)

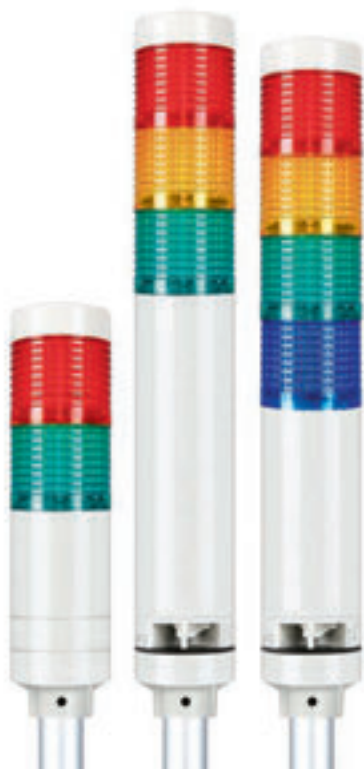
• In case of wiring by transistor, please make sure if it is NPN type or PNP type. Please carefully follow wiring instruction below.

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

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

STG40L

Ø40mm LED Steady/Flashing Tower Lights



STG40L series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



STG40L Ø40mm Pole Mount

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STG40L Steady STG40L-BZ Steady w/ built-in buzzer STG40LF Steady/Flashing STG40LF-BZ Steady/Flashing /w built-in buzzer	1	AC/DC12V AC/DC24V AC110V-220V	0.075A 0.045A Max 0.040A	 DC24V only	0.29kg 0.29kg 0.31kg	• R-Red
	2	AC/DC12V AC/DC24V AC110V-220V	0.150A 0.095A Max 0.050A		0.33kg 0.33kg 0.36kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V AC110V-220V	0.225A 0.145A Max 0.060A		0.38kg 0.38kg 0.40kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V AC110V-220V	0.300A 0.190A Max 0.070A		0.45kg 0.45kg 0.47kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V AC110V-220V	0.375A 0.235A Max 0.080A		0.51kg 0.51kg 0.53kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

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

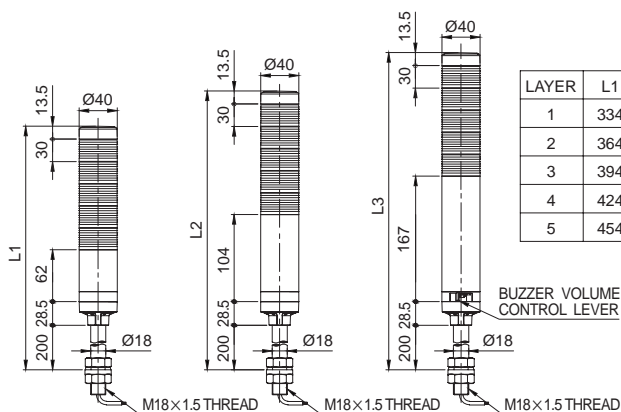
Technical Diagram

(Units : mm)

STG40L : DC
STG40LF : DC
STG40L-BZ : DC

STG40L : AC
STG40LF-BZ : DC

STG40LF : AC
STG40L-BZ : AC
STG40LF-BZ : AC



Customization

- Customized pole length available

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Wiring Instructions

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

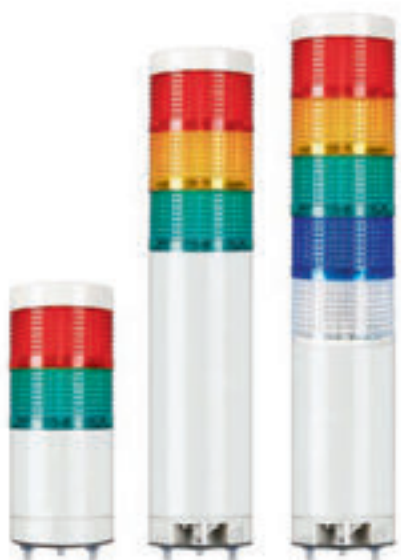
※ Please refer to page 62-63 for detailed wiring instruction.

Ordering Specification

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

STG50ML

Ø50mm LED Steady/Flashing Tower Lights



STG50ML series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45



Cable end M12 connector attached type



- Customized cable end M12 connector attached type available.



Common Specifications(STG50ML/ STG50L)

- Ø50mm LED steady/flashing tower lights
- The special vertical contact structure of the lens allows for easy assembly and disassembly
- Built-in buzzer available upon request: audible signal can be delivered
- Transistors can be connected and can be operated on PLC directly
- Flashing rate : 60-80 flashes/min
- Customized color arrangement available(LED light distribution system and lens is integrated into a combined structure)
- Materials : Lens-AS, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +60°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Pre-wired is standard Can customize the product with the M12 connector if requested
- Compliant with RoHS directive



STG50ML Ø50mm Direct Mount Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STG50ML Steady STG50ML-BZ Steady w/ built-in buzzer STG50MLF Steady/Flashing STG50MLF-BZ Steady/Flashing /w built-in buzzer	1	AC/DC12V AC/DC24V AC110V-220V	0.055A 0.050A Max. 0.040A	 DC24V only	0.20kg 0.20kg 0.22kg	• R-Red
	2	AC/DC12V AC/DC24V AC110V-220V	0.110A 0.100A Max. 0.050A		0.28kg 0.28kg 0.30kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V AC110V-220V	0.165A 0.150A Max. 0.060A		0.36kg 0.36kg 0.38kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V AC110V-220V	0.220A 0.200A Max. 0.070A		0.45kg 0.45kg 0.47kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V AC110V-220V	0.275A 0.250A Max. 0.080A		0.53kg 0.53kg 0.55kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

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

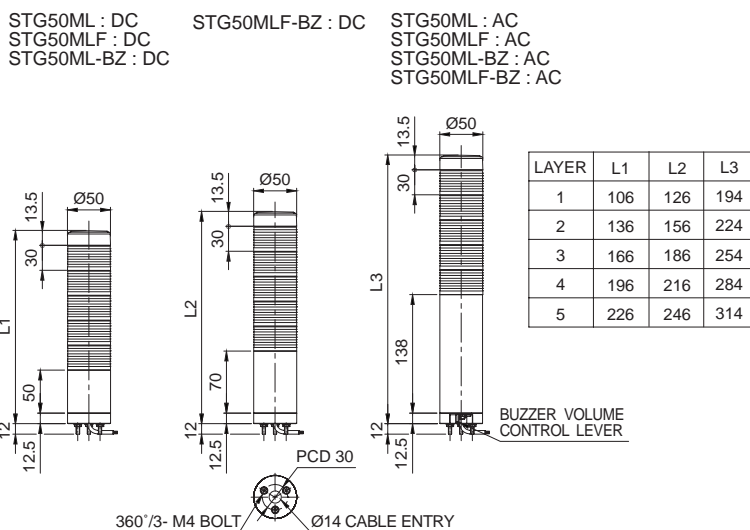
Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.055A	0.050A	Max. 0.040A
Audible line current	0.045A	0.065A	Max. 0.045A



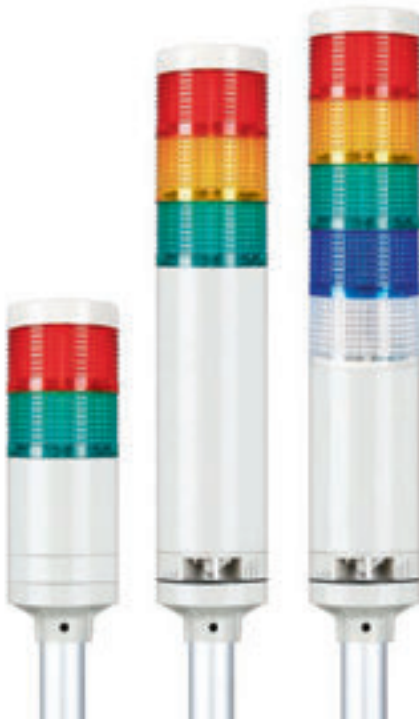
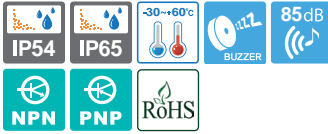
Technical Diagram

(Units : mm)



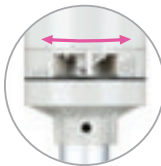
STG50L

Ø50mm LED Steady/Flashing Tower Lights



STG50L series

Buzzer model has a lever mounted at the bottom of the product to adjust the volume depending on the specific working conditions. (BZ type)



Customization

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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

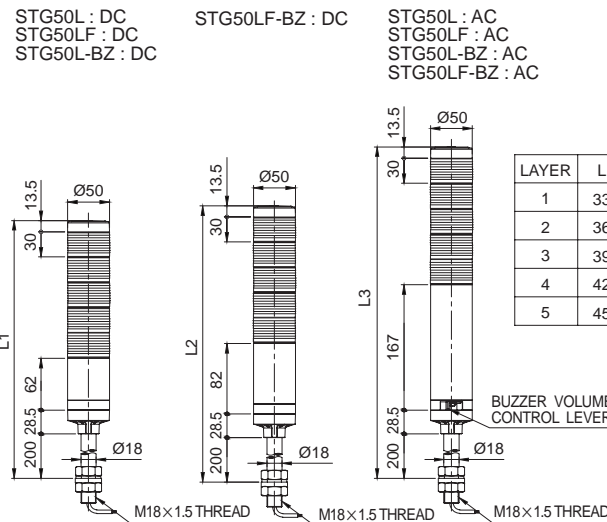
STG50L Ø50mm Pole Mount Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
STG50L Steady STG50L-BZ Steady w/ built-in buzzer STG50LF Steady/Flashing STG50LF-BZ Steady/Flashing /w built-in buzzer	1	AC/DC12V AC/DC24V AC110V-220V	0.055A 0.050A Max. 0.040A	 DC24V only	0.36kg 0.36kg 0.38kg	• R-Red
	2	AC/DC12V AC/DC24V AC110V-220V	0.110A 0.100A Max. 0.050A		0.43kg 0.43kg 0.45kg	• R-Red • G-Green
	3	AC/DC12V AC/DC24V AC110V-220V	0.165A 0.150A Max. 0.060A		0.53kg 0.53kg 0.55kg	• R-Red • A-Amber • G-Green
	4	AC/DC12V AC/DC24V AC110V-220V	0.220A 0.200A Max. 0.070A		0.59kg 0.59kg 0.61kg	• R-Red • A-Amber • G-Green • B-Blue
	5	AC/DC12V AC/DC24V AC110V-220V	0.275A 0.250A Max. 0.080A		0.67kg 0.67kg 0.69kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

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

Technical Diagram

(Units : mm)



Wiring Instructions

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

※ Please refer to page 62-63 for detailed wiring instructions.

Ordering Specification

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

STG series

LED Steady/Flashing Tower Lights



Wiring Instructions(using transistor)

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

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

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

STG series

LED Steady/Flashing Tower Lights



Wiring Instructions(using transistor)

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

Applied products	Wiring Instructions	
DC Steady	<p style="text-align: center;">EXTERNAL TRANSISTOR-NPN</p>	<p style="text-align: center;">EXTERNAL TRANSISTOR-PNP</p>
STG40ML STG40L STG50ML STG50L	<ul style="list-style-type: none"> • STGXXML - Same wiring including buzzer type • STGXXL - Same wiring including buzzer type • STGXXL <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)L 50(50mm) : STG50(M)L 	

Applied products	Wiring Instructions	Applied products	Wiring Instructions
DC Steady/Flashing	<p style="text-align: center;">EXTERNAL TRANSISTOR-PNP</p>	AC Steady/Flashing	<p style="text-align: center;">EXTERNAL TRANSISTOR-PNP</p>
STG40MLF STG40LF STG50MLF STG50LF	<ul style="list-style-type: none"> • STGXXMLF - Same wiring including buzzer type • STGXXLF - Same wiring including buzzer type • STGXXLF <ul style="list-style-type: none"> └ Lens diameter 40(40mm) : STG40(M)LF 50(50mm) : STG50(M)LF 		STG40MLF STG40LF STG50MLF STG50LF

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

Clear and Strong Signal Light Emitted through the Colored Diffusion Lens



Common Specifications(QTG50/ QTG60/ QTG70)

- 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 Ø50mm, Ø60mm, and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTGA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of mounting bracket selections for the pole mount type to fit your location and mounting needs
- Buzzer sound output : Sound volume of Max 85dB at 1m
- Available in 2 customized options; sounds buzzer type and high volume(100dB) buzzer type
- Pre-wired is standard. Can customize the product with the M12 connector if requested
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Housing-ABS, Pole-Al
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



• Each modular color lens can be added without additional tools

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



• Buzzer volume is adjusted via the volume control lever

QTG type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

- 1 High volume buzzer (100dB) option can be fitted to the top of the product. (Customization)**
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 Integrated cover and lens model (QTGA50/ QTGA60/ QTGA70)**
QTGA50/ QTGA60/ QTGA70 The sleek lens cover model is made of one piece for a simple unified look.
- 3 Cable end M12 connector attached type (Customization)**
Pre-wired is standard. Can customize the product with the M12 connector if requested.
- 4 Can select from a variety of mounting brackets option to fit your application needs and build environment**
There are a variety of mounting brackets options available depending on cost and installation requirements.

QTG50ML

Ø50mm LED Steady/Flashing Tower Lights



QTG50ML series



QTGA50ML series

• Customization



• Customized cable end M12 connector attached type available.

QTG50ML Ø50mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color	
QTG50ML Steady	1	AC/DC12V	0.085A	 DC24V only	0.19kg	• R-Red	
QTG50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.19kg		
QTG50MLF Steady/Flashing		AC110V-220V	Max. 0.045A		0.29kg		
QTG50MLF-BZ Steady/Flashing w/ built-in buzzer	2	AC/DC12V	0.170A		 DC24V only	0.27kg	• R-Red • G-Green
QTG50MLF Steady/Flashing		AC/DC24V	0.130A			0.27kg	
QTG50MLF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.065A	0.37kg			
QTGA50ML Steady	3	AC/DC12V	0.255A	 DC24V only		0.36kg	• R-Red • A-Amber • G-Green
QTGA50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.195A			0.36kg	
QTGA50MLF Steady/Flashing		AC110V-220V	Max. 0.085A		0.46kg		
QTGA50MLF-BZ Steady/Flashing w/ built-in buzzer	4	AC/DC12V	0.340A		 DC24V only	0.44kg	• R-Red • A-Amber • G-Green • B-Blue
QTGA50MLF Steady/Flashing		AC/DC24V	0.260A			0.44kg	
QTGA50MLF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.105A	0.54kg			
QTGA50MLF-BZ Steady/Flashing w/ built-in buzzer	5	AC/DC12V	0.425A	 DC24V only		0.53kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
QTGA50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.325A			0.53kg	
QTGA50MLF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.125A		0.63kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.085A	0.065A	Max. 0.045A
Audible line current	0.025A	0.060A	Max. 0.040A

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTG50L

Ø50mm LED Steady/Flashing Tower Lights



QTG50L series



QTGA50L series

• Customization



• Customized cable end M12 connector attached type available.

QTG50L Ø50mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color		
QTG50L Steady	1	AC/DC12V	0.085A	 DC24V only	0.34kg	● R-Red		
QTG50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.34kg			
QTG50LF Steady/Flashing		AC110V-220V	Max. 0.045A		0.44kg			
QTG50LF-BZ Steady/Flashing w/ built-in buzzer	2	AC/DC12V	0.170A		 DC24V only	0.43kg	● R-Red ● G-Green	
QTGA50L Steady		AC/DC24V	0.130A			0.43kg		
QTGA50L-BZ Steady w/ built-in buzzer		AC110V-220V	Max. 0.065A			0.53kg		
QTGA50LF Steady/Flashing	3	AC/DC12V	0.255A			 DC24V only	0.51kg	● R-Red ● A-Amber ● G-Green
QTGA50LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.195A				0.51kg	
QTGA50L Steady		AC110V-220V	Max. 0.085A				0.61kg	
QTGA50L-BZ Steady w/ built-in buzzer	4	AC/DC12V	0.340A		 DC24V only		0.60kg	● R-Red ● A-Amber ● G-Green ● B-Blue
QTGA50LF Steady/Flashing		AC/DC24V	0.260A	0.60kg				
QTGA50LF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.105A	0.70kg				
QTGA50L Steady	5	AC/DC12V	0.425A	 DC24V only			0.68kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
QTGA50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.325A				0.68kg	
QTGA50LF Steady/Flashing		AC110V-220V	Max. 0.125A				0.78kg	

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

Wiring Instructions

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

※ Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

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

QTG60ML

Ø60mm LED Steady/Flashing Tower Lights



QTG60ML series



QTGA60ML series

• Customization



- Customized cable end M12 connector attached type available.

QTG60ML Ø60mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTG60ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.26kg	• R-Red
QTG60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.26kg	
QTG60MLF Steady/Flashing	2	AC/DC12V	0.200A		0.34kg	• R-Red • G-Green
QTG60MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.34kg	
QTGA60ML Steady	3	AC/DC12V	0.300A		0.43kg	• R-Red • A-Amber • G-Green
QTGA60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A		0.43kg	
QTGA60MLF Steady/Flashing	4	AC/DC12V	0.400A		0.51kg	• R-Red • A-Amber • G-Green • B-Blue
QTGA60MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A		0.51kg	
QTGA60MLF Steady/Flashing w/ built-in buzzer	5	AC/DC12V	0.500A		0.59kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
		AC/DC24V	0.350A		0.59kg	
		AC110V-220V	Max. 0.055A		0.36kg	
		AC110V-220V	Max. 0.075A		0.44kg	
		AC110V-220V	Max. 0.095A		0.53kg	
		AC110V-220V	Max. 0.115A		0.61kg	
		AC110V-220V	Max. 0.135A		0.69kg	

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max. 0.055A
Audible line current	0.020A	0.050A	Max. 0.045A

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTG60L

Ø60mm LED Steady/Flashing Tower Lights



QTG60L series



QTGA60L series

• Customization



• Customized cable end M12 connector attached type available.

QTG60L Ø60mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color				
QTG60L Steady	1	AC/DC12V	0.100A	 DC24V only	0.41kg	• R-Red				
QTG60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.41kg					
QTG60LF Steady/Flashing	2	AC/DC12V	0.200A		 DC24V only	0.50kg	• R-Red • G-Green			
QTG60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A			0.50kg				
QTGA60L Steady	3	AC/DC12V	0.300A			 DC24V only	0.58kg	• R-Red • A-Amber • G-Green		
QTGA60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A				0.58kg			
QTGA60LF Steady/Flashing	4	AC/DC12V	0.400A				 DC24V only	0.67kg	• R-Red • A-Amber • G-Green • B-Blue	
QTGA60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A					0.67kg		
QTGA60LF Steady/Flashing w/ built-in buzzer	5	AC/DC12V	0.500A					 DC24V only	0.75kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
QTGA60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.350A						0.75kg	
		AC110V-220V	Max. 0.055A						0.51kg	
		AC110V-220V	Max. 0.075A						0.60kg	
		AC110V-220V	Max. 0.095A		0.68kg					
		AC110V-220V	Max. 0.115A		0.77kg					
		AC110V-220V	Max. 0.135A		0.85kg					

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

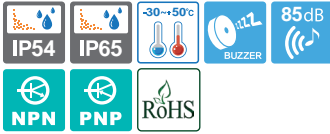
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

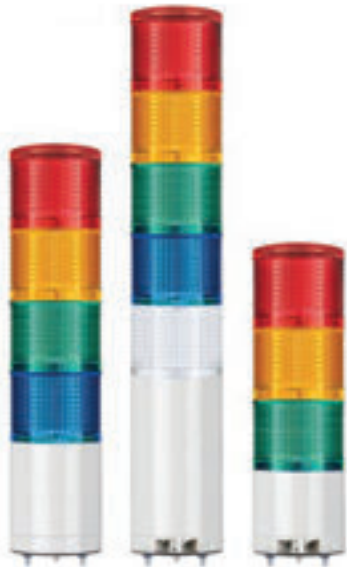
QTG60L	-	3	-	110/220	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting bracket]
<ul style="list-style-type: none"> • QTG60L • QTG60L-BZ • QTG60LF • QTG60LF-BZ • QTGA60L • QTGA60L-BZ • QTGA60LF • QTGA60LF-BZ 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers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

QTG70ML

Ø70mm LED Steady/Flashing Tower Lights



QTG70ML series



QTGA70ML series

• Customization



• Customized cable end M12 connector attached type available.

QTG70ML Ø70mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color	
QTG70ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.42kg	• R-Red	
QTG70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.42kg		
QTG70MLF Steady/Flashing	2	AC/DC12V	0.200A		0.56kg	• R-Red • G-Green	
QTG70MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A				0.66kg
QTGA70ML Steady	3	AC/DC12V	0.300A		 DC24V only	0.77kg	• R-Red • A-Amber • G-Green
QTGA70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A			0.77kg	
QTGA70MLF Steady/Flashing	4	AC/DC12V	0.400A			0.92kg	• R-Red • A-Amber • G-Green • B-Blue
QTGA70MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A				
QTGA70MLF Steady/Flashing	5	AC/DC12V	0.500A			1.07kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
QTGA70MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.350A				
		AC110V-220V	Max. 0.055A			0.52kg	
		AC110V-220V	Max. 0.075A			0.66kg	
		AC110V-220V	Max. 0.095A			0.87kg	
		AC110V-220V	Max. 0.115A			1.02kg	
		AC110V-220V	Max. 0.135A		1.17kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max 0.055A
Audible line current	0.020A	0.050A	Max 0.045A

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTG70L

Ø70mm LED Steady/Flashing Tower Lights



QTG70L series



QTGA70L series

• Customization



• Customized cable end M12 connector attached type available.

QTG70L Ø70mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTG70L Steady	1	AC/DC12V	0.100A	 DC24V only	0.54kg	• R-Red
QTG70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.54kg	
QTG70LF Steady/Flashing	2	AC/DC12V	0.200A		0.66kg	• R-Red • G-Green
QTG70LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.66kg	
QTGA70L Steady	3	AC/DC12V	0.300A		0.81kg	• R-Red • A-Amber • G-Green
QTGA70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.81kg		
QTGA70LF Steady/Flashing	4	AC/DC12V	0.400A	0.96kg	• R-Red • A-Amber • G-Green • B-Blue	
QTGA70LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A	0.96kg		
QTGA70LF-BZ Steady/Flashing w/ built-in buzzer	5	AC/DC12V	0.500A	1.20kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
		AC/DC24V	0.350A	1.20kg		
		AC110V-220V	Max. 0.135A	1.29kg		

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

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

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

QTG series

LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

QTG50ML : DC
QTG50MLF : DC
QTG50ML-BZ : DC

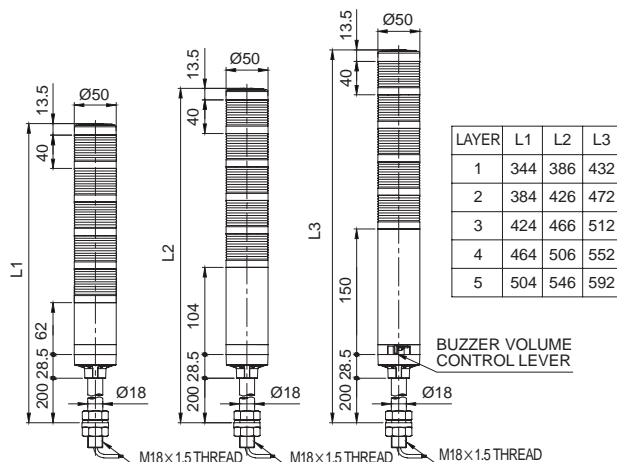
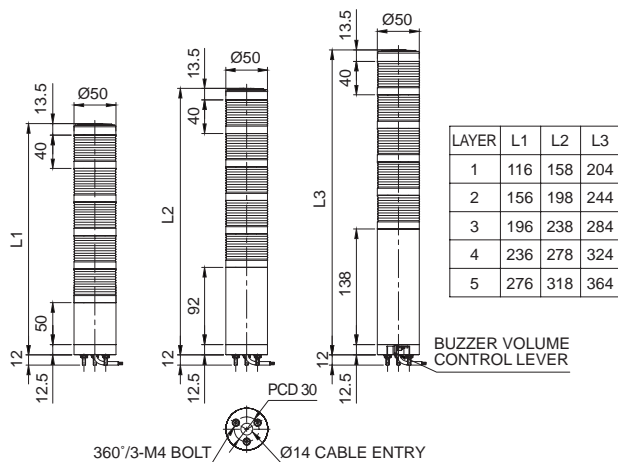
QTG50ML : AC
QTG50MLF-BZ : DC

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

QTG50L : DC
QTG50LF : DC
QTG50L-BZ : DC

QTG50L : AC
QTG50LF-BZ : DC

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



QTG60ML : DC
QTG60MLF : DC
QTG60ML-BZ : DC

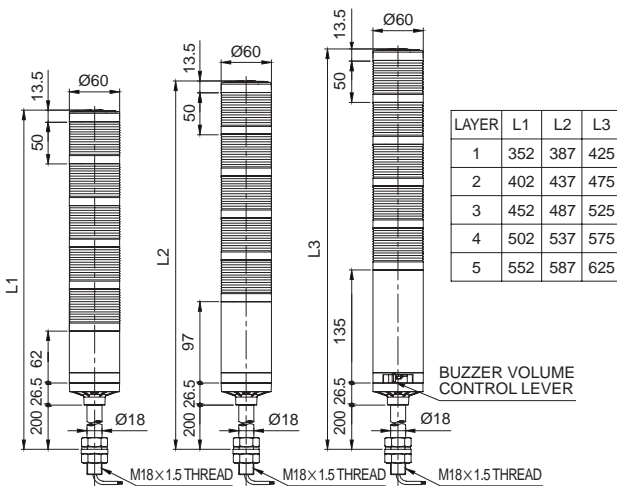
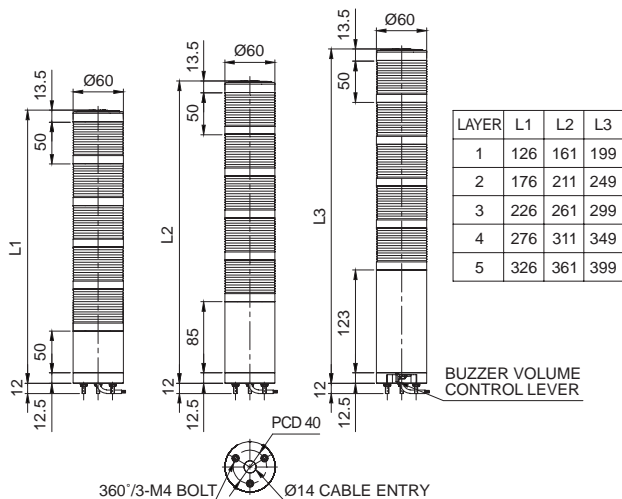
QTG60ML : AC
QTG60MLF-BZ : DC

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

QTG60L : DC
QTG60LF : DC
QTG60L-BZ : DC

QTG60L : AC
QTG60LF-BZ : DC

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



QTG70ML : DC
QTG70MLF : DC
QTG70ML-BZ : DC

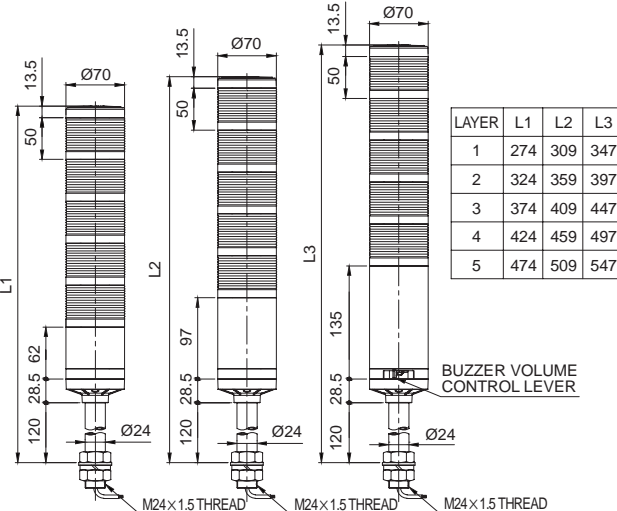
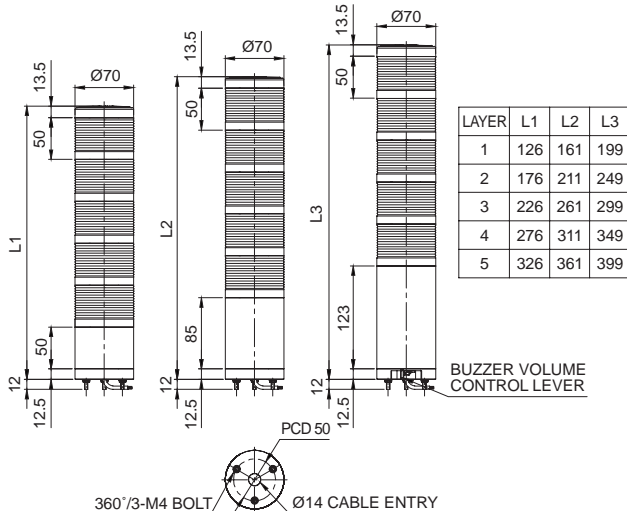
QTG70ML : AC
QTG70MLF : AC
QTG70MLF-BZ : AC
QTG70MLF-BZ : DC

QTG70MLF-BZ : AC

QTG70L : DC
QTG70LF : DC
QTG70L-BZ : DC

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

QTG70LF-BZ : AC



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



Common Specifications(QTC50/ QTC60/ QTC70)

- Modular LED steady/flashing signal tower lights
- Added a separate color filter lens inside the outer lens to help provide a clear signal
- Can select from size selections of Ø50mm, Ø60mm and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTCA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- When it is turned off the milky color filter provides comfortable viewing at close proximity for the operator
- A variety of mounting bracket selections for the pole mount type to fit your location and mounting needs
- Built-in buzzer available : Volume of Max 85dB at 1m
- Available in customized 2 sound buzzer type and high volume(100dB) buzzer type
- Pre-wired is standard. Can customize the product with the M12 connector if requested
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min
- Materials : Lens-PC, Filter lens : PC, Housing-ABS, Pole-AI
- Ambient operating temperature : -30°C to +50°C
- Protection rating : Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



• Each modular color lens can be added without additional tools

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



• QTC Series Special Lens

QTC Series added a separate color filter lens inside the outer lens to help provide a clear signal.

• Buzzer volume is adjusted via the volume control lever

QTC type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

1 High volume buzzer (100dB) option can be fitted to the top of the product. (Customization)

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 Integrated cover and lens model (QTCA50/ QTCA60/ QTCA70)

The sleek body cover and lens model is made of one piece for a simple unified look.

3 Cable end M12 connector attached type (Customization)

Pre-wired is standard. Can customize the product with the M12 connector if requested.

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

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



QTC50ML

Ø50mm LED Steady/Flashing Tower Lights



QTC50ML series



QTC50ML series

• Customization



• Customized cable end M12 connector attached type available.

QTC50ML Ø50mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC50ML Steady	1	AC/DC12V	0.085A	 DC24V only	0.20kg	● R-Red
QTC50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.20kg	
QTC50MLF Steady/Flashing	2	AC/DC12V	0.170A		0.28kg	● R-Red ● G-Green
QTC50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.130A		0.28kg	
QTC50MLF Steady/Flashing	3	AC/DC12V	0.255A		0.37kg	● R-Red ● A-Amber ● G-Green
QTC50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.195A	0.37kg		
QTC50ML Steady	4	AC/DC12V	0.340A	0.45kg	● R-Red ● A-Amber ● G-Green ● B-Blue	
QTC50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.260A	0.45kg		
QTC50MLF Steady/Flashing	5	AC/DC12V	0.425A	0.54kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White	
QTC50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.325A	0.54kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.085A	0.065A	Max 0.045A
Audible line current	0.025A	0.060A	Max 0.040A

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount

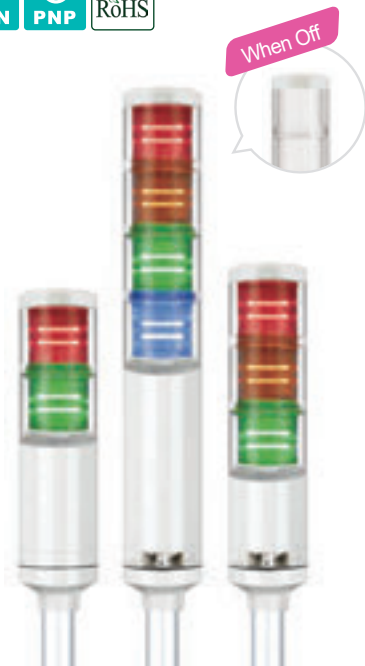


Ordering Specification

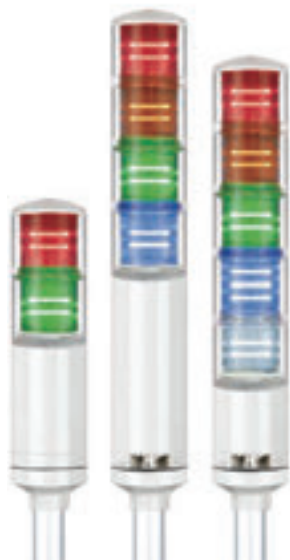
QTC50ML	-	3	-	110/220	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QTC50ML • QTC50ML-BZ • QTC50MLF • QTC50MLF-BZ • QTCA50ML • QTCA50ML-BZ • QTCA50MLF • QTCA50MLF-BZ 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers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

QTC50L

Ø50mm LED Steady/Flashing Tower Lights



QTC50L series



QTCA50L series

• Customization



• Customized cable end M12 connector attached type available.

QTC50L Ø50mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC50L Steady	1	AC/DC12V	0.085A	 DC24V only	0.35kg	• R-Red
QTC50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.35kg	
QTC50LF Steady/Flashing	2	AC/DC12V	0.170A		0.44kg	• R-Red • G-Green
QTC50LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.130A		0.44kg	
QTC50L Steady	3	AC/DC12V	0.255A		0.52kg	• R-Red • A-Amber • G-Green
QTC50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.195A	0.62kg		
QTC50LF Steady/Flashing	4	AC/DC12V	0.340A	0.61kg	• R-Red • A-Amber • G-Green • B-Blue	
QTC50LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.260A	0.71kg		
QTC50L Steady	5	AC/DC12V	0.425A	0.69kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
QTC50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.325A	0.79kg		

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

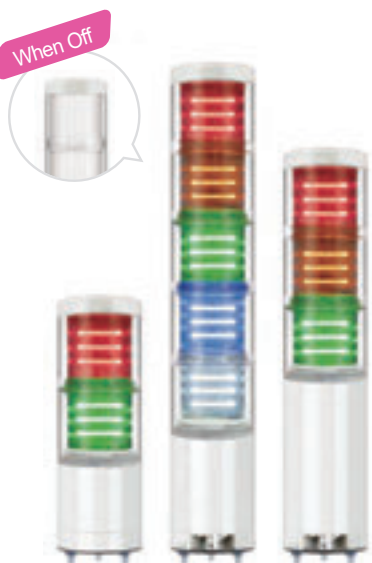
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

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

QTC60ML

Ø60mm LED Steady/Flashing Tower Lights



QTC60ML series



QTC60ML series

• Customization



- Customized cable end M12 connector attached type available.

QTC60ML Ø60mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC60ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.28kg	• R-Red
QTC60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.28kg	
QTC60MLF Steady/Flashing	2	AC/DC12V	0.200A		0.36kg	• R-Red • G-Green
QTC60MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.36kg	
QTC60ML Steady	3	AC/DC12V	0.300A		0.45kg	• R-Red • A-Amber • G-Green
QTC60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.45kg		
QTC60MLF Steady/Flashing	4	AC/DC12V	0.400A	0.53kg	• R-Red • A-Amber • G-Green • B-Blue	
QTC60MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A	0.53kg		
QTC60ML Steady	5	AC/DC12V	0.500A	0.61kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
QTC60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.350A	0.61kg		
QTC60MLF Steady/Flashing		AC110V-220V	Max. 0.055A	0.63kg		
QTC60MLF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.115A	0.63kg		
QTC60MLF Steady/Flashing		AC110V-220V	Max. 0.135A	0.71kg		
QTC60MLF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.135A	0.71kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max 0.055A
Audible line current	0.020A	0.050A	Max 0.045A

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount

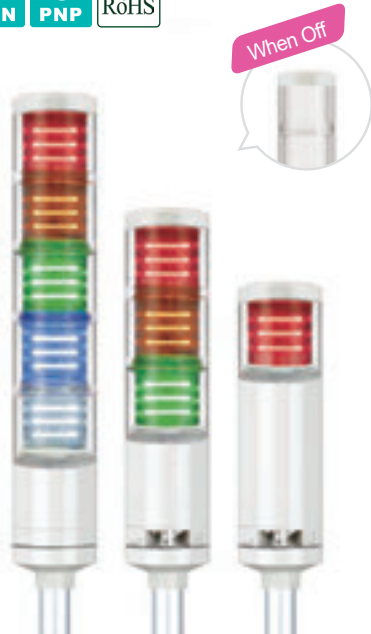


Ordering Specification

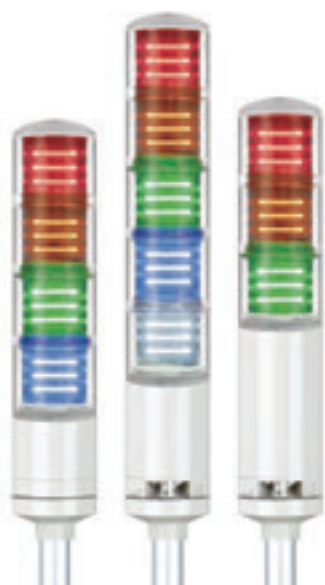
QTC60ML	-	3	-	110/220	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QTC60ML • QTC60ML-BZ • QTC60MLF • QTC60MLF-BZ • QTCA60ML • QTCA60ML-BZ • QTCA60MLF • QTCA60MLF-BZ 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers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

QTC60L

Ø60mm LED Steady/Flashing Tower Lights



QTC60L series



QTC60L series

• Customization



• Customized cable end M12 connector attached type available.

QTC60L Ø60mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC60L Steady	1	AC/DC12V	0.100A	 DC24V only	0.43kg	• R-Red
QTC60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.43kg	
QTC60LF Steady/Flashing	2	AC/DC12V	0.200A		0.52kg	• R-Red • G-Green
QTC60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.62kg	
QTC60L Steady	3	AC/DC12V	0.300A		 DC24V only	0.60kg
QTC60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.60kg		
QTC60LF Steady/Flashing	4	AC/DC12V	0.400A	0.69kg		• R-Red • A-Amber • G-Green • B-Blue
QTC60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A	0.79kg		
QTC60L Steady	5	AC/DC12V	0.500A	0.77kg		• R-Red • A-Amber • G-Green • B-Blue • W-White
QTC60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.350A	0.87kg		

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

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

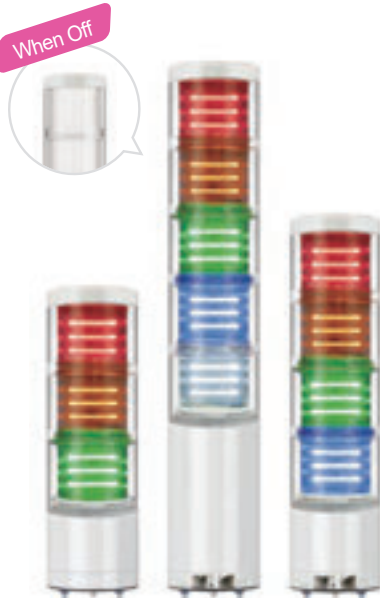
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

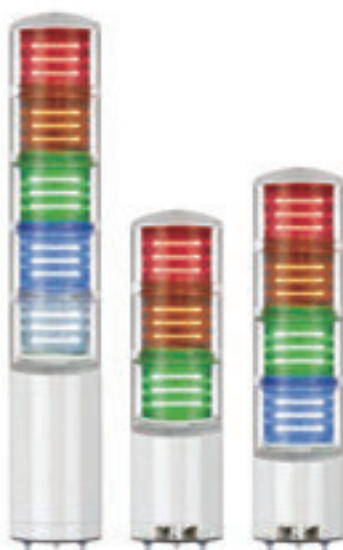
QTC60L	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting bracket]
<ul style="list-style-type: none"> • QTC60L • QTC60L-BZ • QTC60LF • QTC60LF-BZ • QTCA60L • QTCA60L-BZ • QTC60LF • QTC60LF-BZ 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers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

QTC70ML

Ø70mm LED Steady/Flashing Tower Lights



QTC70ML series



QTC70ML series

• Customization



• Customized cable end M12 connector attached type available.

QTC70ML Ø70mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC70ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.44kg	● R-Red
QTC70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.44kg	
QTC70MLF Steady/Flashing	2	AC/DC12V	0.200A		0.58kg	● R-Red ● G-Green
QTC70MLF-BZ Steady w/ built-in buzzer/Flashing		AC/DC24V	0.140A		0.68kg	
QTCA70ML Steady	3	AC/DC12V	0.300A		 DC24V only	0.79kg
QTCA70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.89kg		
QTC70MLF Steady/Flashing	4	AC/DC12V	0.400A	0.94kg		● R-Red ● A-Amber ● G-Green ● B-Blue
QTC70MLF-BZ Steady w/ built-in buzzer/Flashing		AC/DC24V	0.280A	1.04kg		
QTCA70MLF Steady/Flashing	5	AC/DC12V	0.500A	1.09kg		● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
QTCA70MLF-BZ Steady w/ built-in buzzer/Flashing		AC/DC24V	0.350A	1.19kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max 0.055A
Audible line current	0.020A	0.050A	Max 0.045A

Wiring Instructions

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

※ Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTC70L

Ø70mm LED Steady/Flashing Tower Lights



QTC70L series



QTCA70L series

• Customization



• Customized cable end M12 connector attached type available.

QTC70L Ø70mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTC70L Steady	1	AC/DC12V	0.100A	 DC24V only	0.56kg	• R-Red
QTC70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.66kg	
QTC70LF Steady/Flashing	2	AC/DC12V	0.200A		0.68kg	• R-Red • G-Green
QTC70LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.78kg	
QTCA70L Steady	3	AC/DC12V	0.300A		0.83kg	• R-Red • A-Amber • G-Green
QTCA70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.92kg		
QTCA70LF Steady/Flashing	4	AC/DC12V	0.400A	0.98kg	• R-Red • A-Amber • G-Green • B-Blue	
QTCA70LF-BZ Steady/Flashing /w built-in buzzer		AC/DC24V	0.280A	1.08kg		
	5	AC/DC12V	0.500A	1.22kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
		AC/DC24V	0.350A	1.31kg		

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq) 400mm
 - LED tower light can be wiring with external contact and transistor
- * Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be within 4 layers)
- Cable end M12 connector attached type

Ordering Specification

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

QTC series

LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

QTC50ML : DC
QTC50MLF : DC
QTC50ML-BZ : DC

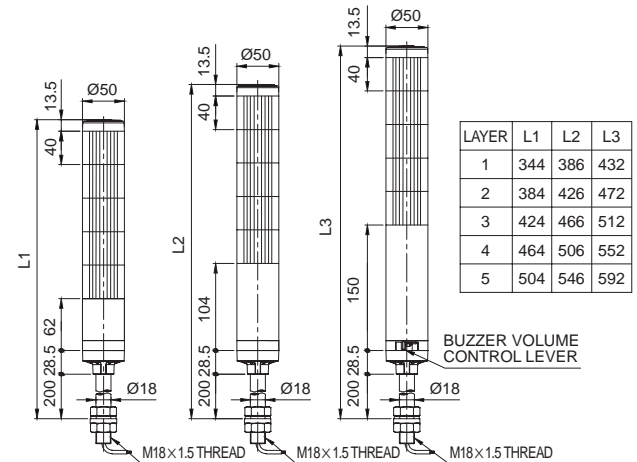
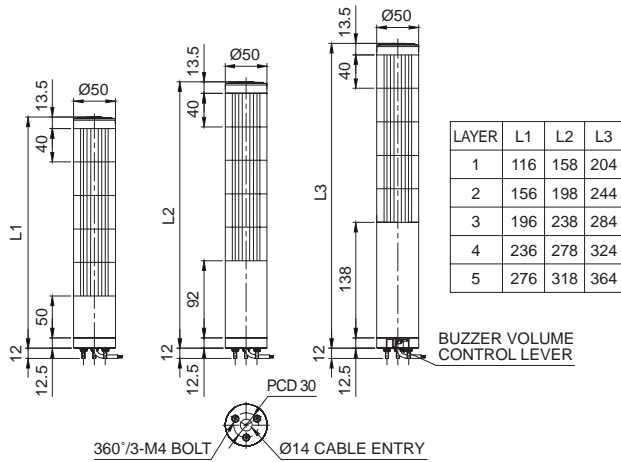
QTC50ML : AC
QTC50MLF-BZ : DC

QTC50MLF : AC
QTC50ML-BZ : AC
QTC50MLF-BZ : AC

QTC50L : DC
QTC50LF : DC
QTC50L-BZ : DC

QTC50L : AC
QTC50LF-BZ : DC

QTC50LF : AC
QTC50L-BZ : AC
QTC50LF-BZ : AC



QTC60ML : DC
QTC60MLF : DC
QTC60ML-BZ : DC

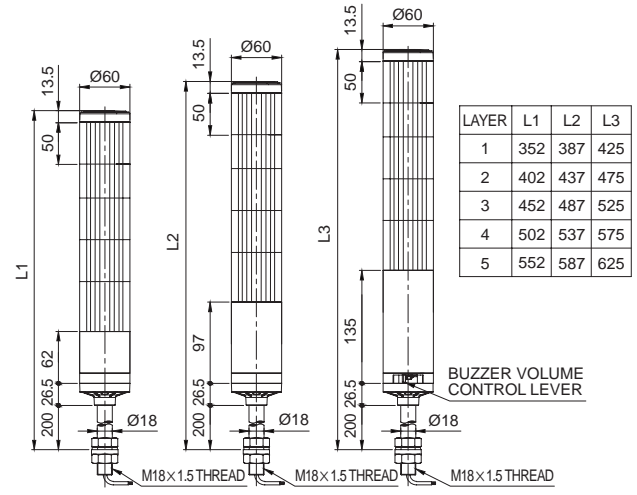
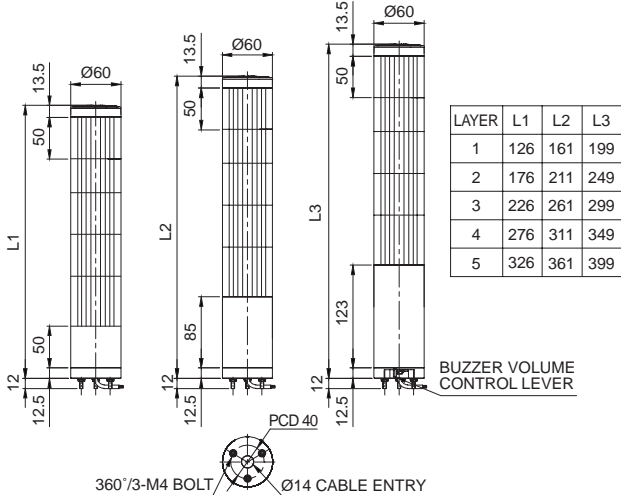
QTC60ML : AC
QTC60MLF-BZ : DC

QTC60MLF : AC
QTC60ML-BZ : AC
QTC60MLF-BZ : AC

QTC60L : DC
QTC60LF : DC
QTC60L-BZ : DC

QTC60L : AC
QTC60LF-BZ : DC

QTC60LF : AC
QTC60L-BZ : AC
QTC60LF-BZ : AC



QTC70ML : DC
QTC70MLF : DC
QTC70ML-BZ : DC

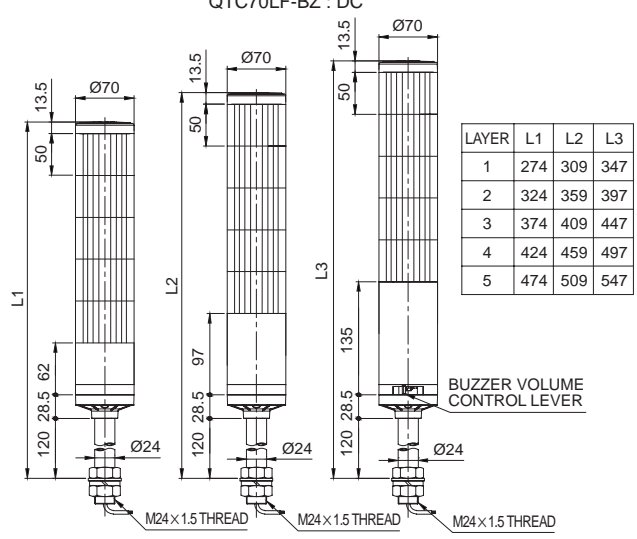
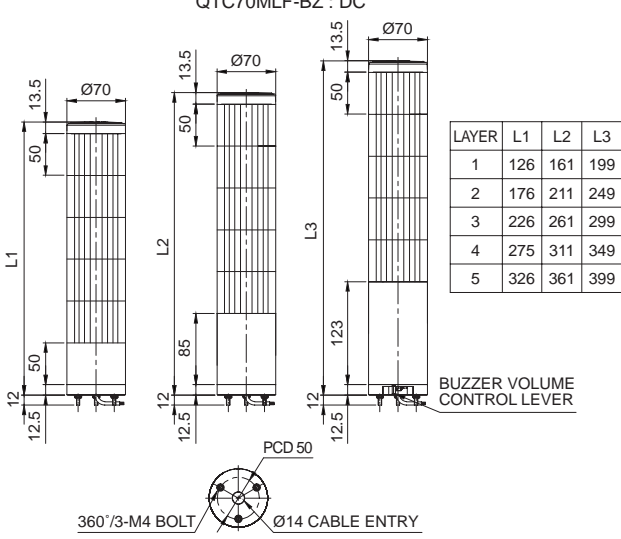
QTC70ML : AC
QTC70MLF : AC
QTC70ML-BZ : AC
QTC70MLF-BZ : DC

QTC70MLF-BZ : AC

QTC70L : DC
QTC70LF : DC
QTC70L-BZ : DC

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

QTC70LF-BZ : AC



Soft and Comfortable Signal Light Emitted through the Translucent Milky Lens



Common Specifications(QTR50/ QTR60/ QTR70)

- Modular LED steady/flashing signal tower lights
- Soft and comfortable signal light emitted through the translucent milky lens
- When the product is turned off the milky color filter provides comfortable viewing at close proximity for the operator
- Can select from size selections of Ø50mm, Ø60mm, and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTRA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of mounting brackets selections for the pole mount type to fit your location and mounting needs
- Built-in buzzer available (Volume : Max 85dB at 1m)
- Available in customized 2 sound buzzer type and high volume(100dB) buzzer type
- Pre-wired is standard. Can customize the product with the M12 connector if requested
- Can be used with NPN open collector transistor driven input, which allows direct connection to a PLC
- Flashing rate : 60-80 flashes/min.
- Materials : Lens-PC, Housing-ABS, Pole-AI
- Ambient operating temperature : -30°C to +50°C
- Protection rating: Standard type-IP65, Built-in buzzer type-IP54
- Certificates : CE Compliant, UL Listed
- Compliant with RoHS directive



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



• QTR series special lens

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

• Buzzer volume is adjusted via the volume control lever

QTR type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

- 1 **High volume buzzer (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 **Integrated Housing cover and lens model (QTRA50/ QTRA60/ QTRA70)**
The sleek housing cover and lens model is made of one piece for a simple unified look.
- 3 **Cable end M12 connector attached type (Customization)**
Pre-wired is standard. Can customize the product with the M12 connector if requested.
- 4 **Can select from a variety of mounting bracket options to fit your application needs and build environment**
There are a variety of mounting bracket options available depending on cost and installation requirements.

QTR50ML

Ø50mm LED Steady/Flashing Tower Lights



QTR50ML series



QTRA50ML series

• Customization



- Customized cable end M12 connector attached type available.

QTR50ML Ø50mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR50ML Steady	1	AC/DC12V	0.085A	 DC24V only	0.19kg	• R-Red
QTR50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.19kg	
QTR50MLF Steady/Flashing	2	AC/DC12V	0.170A		0.27kg	• R-Red • G-Green
QTR50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.130A		0.27kg	
QTRA50ML Steady	3	AC/DC12V	0.255A		0.36kg	• R-Red • A-Amber • G-Green
QTRA50ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.195A	0.36kg		
QTRA50MLF Steady/Flashing	4	AC/DC12V	0.340A	0.44kg	• R-Red • A-Amber • G-Green • B-Blue	
QTRA50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.260A	0.44kg		
QTRA50MLF Steady/Flashing	5	AC/DC12V	0.425A	0.53kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
QTRA50MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.325A	0.53kg		
		AC110V-220V	Max 0.045A		0.29kg	
		AC110V-220V	Max 0.065A		0.37kg	
		AC110V-220V	Max 0.085A		0.46kg	
		AC110V-220V	Max 0.105A		0.54kg	
		AC110V-220V	Max 0.125A		0.63kg	

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.085A	0.065A	Max 0.045A
Audible line current	0.025A	0.060A	Max 0.040A

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTR50L

Ø50mm LED Steady/Flashing Tower Lights



QTR50L series



QTRA50L series

• Customization



• Customized cable end M12 connector attached type available.

QTR50L Ø50mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR50L Steady	1	AC/DC12V	0.085A	 DC24V only	0.34kg	• R-Red
QTR50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.065A		0.34kg	
QTR50LF Steady/Flashing	2	AC/DC12V	0.170A		0.43kg	• R-Red • G-Green
QTR50LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.130A			
QTRA50L Steady	3	AC/DC12V	0.255A		0.51kg	• R-Red • A-Amber • G-Green
QTRA50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.195A			
QTRA50LF Steady/Flashing	4	AC/DC12V	0.340A		0.60kg	• R-Red • A-Amber • G-Green • B-Blue
QTRA50LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.260A			
QTR50L Steady	5	AC/DC12V	0.425A		0.68kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
QTR50L-BZ Steady w/ built-in buzzer		AC/DC24V	0.325A			

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

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type

Ordering Specification

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

QTR60ML

Ø60mm LED Steady/Flashing Tower Lights



QTR60ML series



QTRA60ML series

• Customization



• Customized cable end M12 connector attached type available.

QTR60ML Ø60mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR60ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.26kg	• R-Red
QTR60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.26kg	
QTR60MLF Steady/Flashing	2	AC/DC12V	0.200A		0.34kg	• R-Red • G-Green
QTR60MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.34kg	
QTRA60ML Steady	3	AC/DC12V	0.300A		0.43kg	• R-Red • A-Amber • G-Green
QTRA60ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.43kg		
QTRA60MLF Steady/Flashing	4	AC/DC12V	0.400A	0.51kg	• R-Red • A-Amber • G-Green • B-Blue	
QTRA60MLF-BZ Steady/Flashing /w built-in buzzer/		AC/DC24V	0.280A	0.51kg		
	5	AC/DC12V	0.500A	0.59kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
		AC/DC24V	0.350A	0.59kg		
		AC110V-220V	Max. 0.055A	0.36kg		
		AC110V-220V	Max. 0.075A	0.44kg		
		AC110V-220V	Max. 0.095A	0.53kg		
		AC110V-220V	Max. 0.115A	0.61kg		
		AC110V-220V	Max. 0.135A	0.69kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max 0.055A
Audible line current	0.020A	0.050A	Max 0.045A

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTR60L

Ø60mm LED Steady/Flashing Tower Lights



QTR60L series



QTRA60L series

• Customization



• Customized cable end M12 connector attached type available.

QTR60L Ø60mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR60L Steady	1	AC/DC12V	0.100A	 DC24V only	0.41kg	• R-Red
QTR60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.41kg	
QTR60LF Steady/Flashing	2	AC/DC12V	0.200A		0.50kg	• R-Red • G-Green
QTR60LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.60kg	
QTRA60L Steady	3	AC/DC12V	0.300A		0.58kg	• R-Red • A-Amber • G-Green
QTRA60L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.68kg		
QTRA60LF Steady/Flashing	4	AC/DC12V	0.400A	0.67kg	• R-Red • A-Amber • G-Green • B-Blue	
QTRA60LF-BZ Steady/Flashing /w built-in buzzer		AC/DC24V	0.280A	0.77kg		
	5	AC/DC12V	0.500A	0.75kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
		AC/DC24V	0.350A	0.85kg		
		AC110V-220V	Max. 0.055A			
		AC110V-220V	Max. 0.075A			
		AC110V-220V	Max. 0.095A			
		AC110V-220V	Max. 0.115A			
		AC110V-220V	Max. 0.135A			

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

Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type

Ordering Specification

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

QTR70ML

Ø70mm LED Steady/Flashing Tower Lights



QTR70ML series



QTRA70ML series

• Customization



- Customized cable end M12 connector attached type available.



QTR70ML Ø70mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR70ML Steady	1	AC/DC12V	0.100A	 DC24V only	0.42kg	• R-Red
QTR70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.42kg	
QTR70MLF Steady/Flashing	2	AC/DC12V	0.200A		0.56kg	• R-Red • G-Green
QTR70MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.66kg	
QTRA70ML Steady	3	AC/DC12V	0.300A		 DC24V only	0.77kg
QTRA70ML-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.77kg		
QTRA70MLF Steady/Flashing	4	AC/DC12V	0.400A	0.92kg		• R-Red • A-Amber • G-Green • B-Blue
QTRA70MLF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A	1.02kg		
	5	AC/DC12V	0.500A	1.07kg		• R-Red • A-Amber • G-Green • B-Blue • W-White
		AC/DC24V	0.350A	1.17kg		

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

Signal/ Audible Line Current(per each layer)

Voltage	AC/DC12V	AC/DC24V	AC110V-220V
Signal line current	0.100A	0.070A	Max 0.055A
Audible line current	0.020A	0.050A	Max 0.045A



Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.



Customization

- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTR70L

Ø70mm LED Steady/Flashing Tower Lights



QTR70L series



QTRA70L series

• Customization



• Customized cable end M12 connector attached type available.

QTR70L Ø70mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QTR70L Steady	1	AC/DC12V	0.100A	 DC24V only	0.54kg	• R-Red
QTR70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.070A		0.54kg	
QTR70LF Steady/Flashing	2	AC/DC12V	0.200A		0.66kg	• R-Red • G-Green
QTR70LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.140A		0.76kg	
QTRA70L Steady	3	AC/DC12V	0.300A		0.81kg	• R-Red • A-Amber • G-Green
QTRA70L-BZ Steady w/ built-in buzzer		AC/DC24V	0.210A	0.90kg		
QTRA70LF Steady/Flashing	4	AC/DC12V	0.400A	0.96kg	• R-Red • A-Amber • G-Green • B-Blue	
QTRA70LF-BZ Steady/Flashing w/ built-in buzzer		AC/DC24V	0.280A	1.06kg		
	5	AC/DC12V	0.500A	1.20kg	• R-Red • A-Amber • G-Green • B-Blue • W-White	
		AC/DC24V	0.350A	1.29kg		

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



Wiring Instructions

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

* Please refer to page 88-89 for detailed wiring instructions.



Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.



Customization

- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep) buzzer output available
- Customized pole length available
- High buzzer module equipped on top(Lens should be 4 layers or less)
- Cable end M12 connector attached type



Ordering Specification

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

QTR series

LED Steady/Flashing Tower Lights



Technical Diagram

(Units : mm)

QTR50ML : DC
QTR50MLF : DC
QTR50ML-BZ : DC

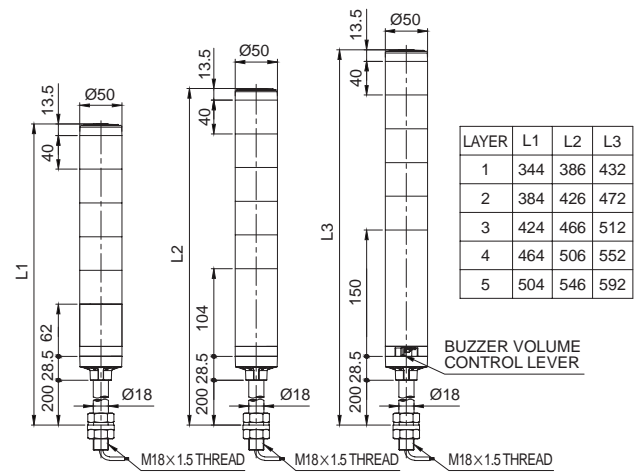
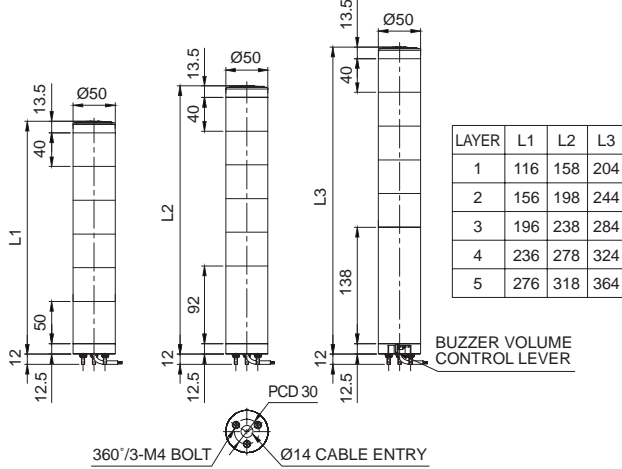
QTR50ML : AC
QTR50MLF-BZ : DC

QTR50MLF : AC
QTR50ML-BZ : AC
QTR50MLF-BZ : AC

QTR50L : DC
QTR50LF : DC
QTR50L-BZ : DC

QTR50L : AC
QTR50LF-BZ : DC

QTR50LF : AC
QTR50L-BZ : AC
QTR50LF-BZ : AC



QTR60ML : DC
QTR60MLF : DC
QTR60ML-BZ : DC

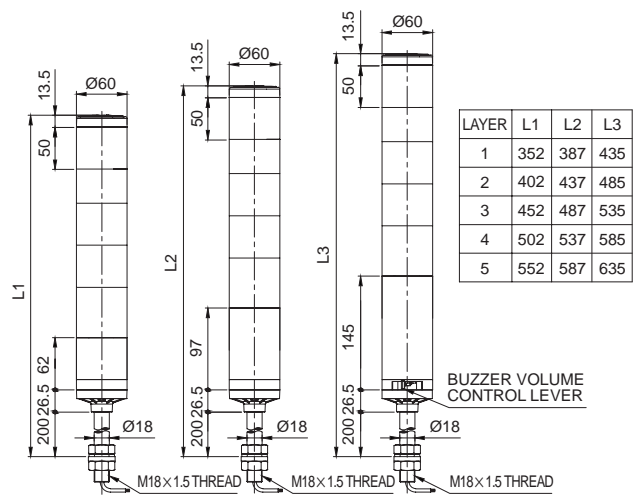
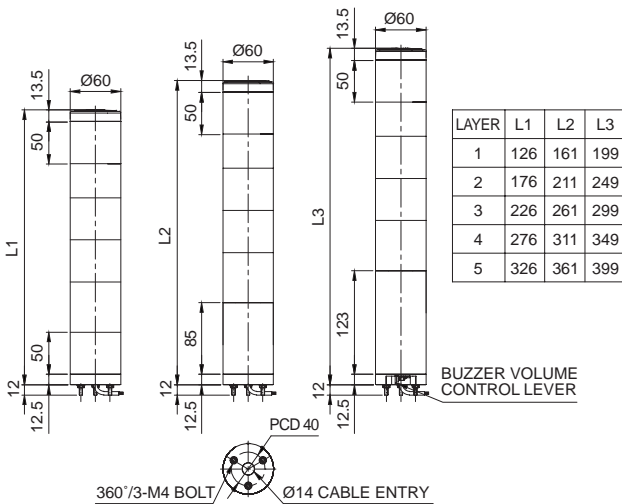
QTR60ML : AC
QTR60MLF-BZ : DC

QTR60MLF : AC
QTR60ML-BZ : AC
QTR60MLF-BZ : AC

QTR60L : DC
QTR60LF : DC
QTR60L-BZ : DC

QTR60L : AC
QTR60LF-BZ : DC

QTR60LF : AC
QTR60L-BZ : AC
QTR60LF-BZ : AC



QTR70ML : DC
QTR70MLF : DC
QTR70ML-BZ : DC

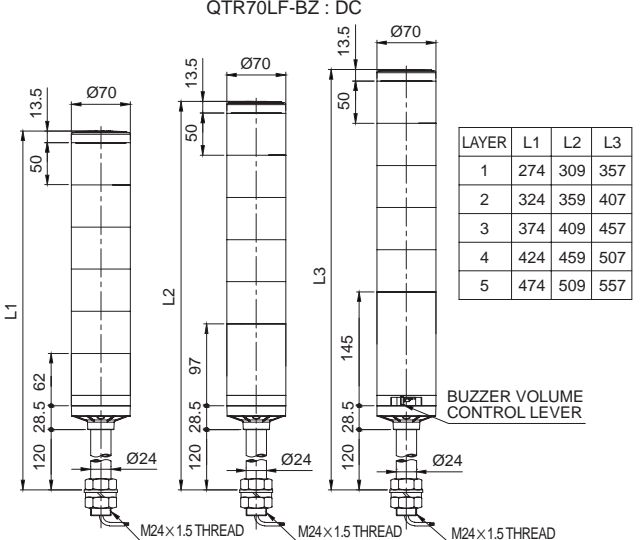
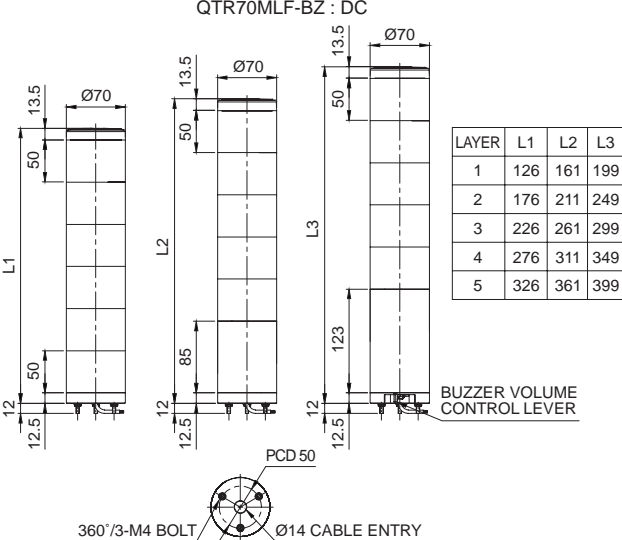
QTR70ML : AC
QTR70MLF : AC
QTR70ML-BZ : AC
QTR70MLF-BZ : DC

QTR70MLF-BZ : AC

QTR70L : DC
QTR70LF : DC
QTR70L-BZ : DC

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

QTR70LF-BZ : AC



QTG/QTC/QTR series



Wiring Instructions(using external contact)

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

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

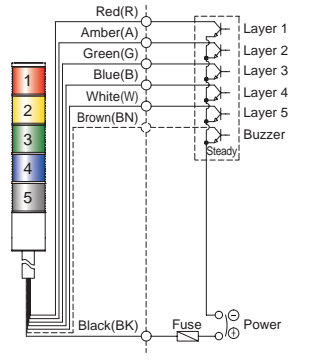
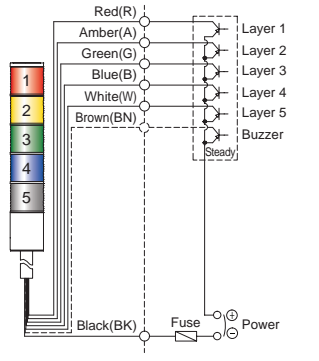
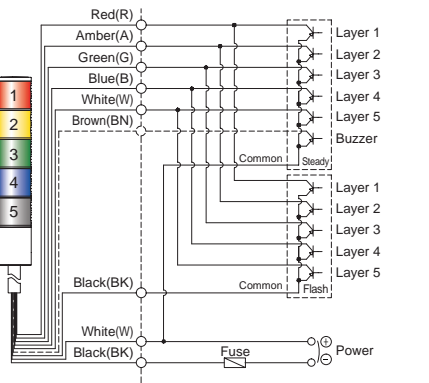
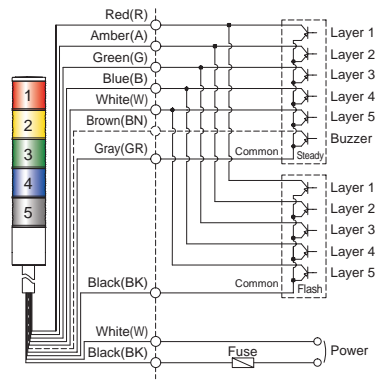
- DC steady type : External power/ External signal line : UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type : External power line : UL1015 AWG18(0.75sq)×2C 400mm
External signal line : UL1007 AWG22(0.3sq) 400mm

QTG/QTC/QTR series



Wiring Instructions(using transistor)

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

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

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

QT50L/ QT50ML
QT70L/ QT70ML

New Model Concept which Allows for Significant Customization to Your Specific Needs Using Special Modular Components



- QT Series tower light is a multifunctional product that allows for significant customization to your specific needs using our special modular components such as the lens, buzzer, ethernet cord, USB cord and mounting brackets. Additional tools are not required for assembly
- All modular components can be arranged freely to the user desired position (upper/ lower) except for the dial tone lever




• Buzzer modules position can be chosen freely

The buzzer module is designed to be compatible with the light modules by using a novel architecture developed by Qlight. Therefore, users can reposition the module to the location they desire. In the photo to the left, the buzzer module is located at the top, center and bottom positions.

• Can select from a variety of LED light functions

The LED indicator can provide varying signals/actions by using different independent light modules; flashing, strobe, rotating. For example, green would indicate normal operation, a red module would indicate risk which can be highlighted further by selecting a strobe flashing or rotating module.



	1 Buzzer Tone Type 1 Buzzer Tone Type
	5 Warning Sounds Type 5 Melodies Type 5 Alarms Type

• Select from 15 kinds of buzzer tones

There are 4 audible modules available which includes one buzzer type module and 3 alarm modules. Each alarm module comes with 5 sound patterns that can be selected for your specific application environment. The Buzzer module is customizable with two options- the 1 tone buzzer and high volume buzzer. Detailed specifications of the alarm sounds and buzzer sounds are included in page 91-93.

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

You can chose from 8 different kinds of pole options for mounting. The pole materials vary from steel, aluminum, and polycarbonate. Please refer to page 190-195 for more detailed information about the pole specifications and dimensions.



• Module Selections

Users can directly purchase the necessary modules for assembly. Detailed specifications and features for each Individual module are introduced in page 95-98(QT50), page 105-108(QT70). For information about module combination procedure can be found in the assembly Instructions page.

• Assembled Product

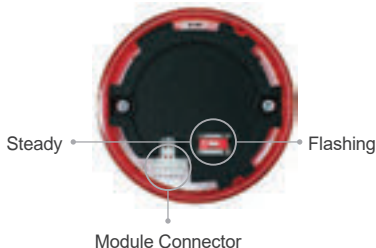
We are able to provide the consumer with an assembled product with module specifications provided by the customer. Specifications and products assembled in a variety of formats are detailed in page 99-104(QT50), page 109-114(QT70).

QT series

Modular Multi-Functional LED Tower Lights

Module

Multi-functional module can be assemble to user requirements



Please use the switch for Steady and Flashing which is on top of Q50L-F and Q70L-F, LED steady/flashing module.

LED Module

- 4 kinds of LED modules; Steady, steady/flashing, strobe, revolving flashing
- Good visibility with high brightness.
- Module position can be chosen based on signal importance.

	<p>LED Steady Module</p> <ul style="list-style-type: none"> • Output LED Steady signal • High brightness LED • Voltage : DC12V, DC24V, AC110V, AC220V
	<p>LED Steady/Flashing Module</p> <ul style="list-style-type: none"> • Output LED Steady/Flashing signal • High brightness LED • Voltage : DC12V, DC24V, AC110V, AC220V
	<p>LED Strobe Module</p> <ul style="list-style-type: none"> • LED flashing light • Excellent notice compare to flashing type • Voltage : DC12V, DC24V
	<p>LED Revolving Flashing Module</p> <ul style="list-style-type: none"> • LED light revolve and flash • Dynamic Signal • Voltage : DC12V, DC24V

Buzzer Module

- Buzzer module has Siren and Bip sound, Bip sound is adjustable.
- Buzzer module position can be chosen freely and has a good air tight seal.

	<p>Siren Sound Buzzer Module</p> <ul style="list-style-type: none"> • Siren buzzer volume : Max 90dB • Sound fixed • Voltage : DC12V, DC24V, AC110V, AC220V
	<p>Bip Sound Buzzer Module</p> <ul style="list-style-type: none"> • Bip sound(Pi-Pi) volume : Max 90dB • Sound adjustable • Voltage : DC12V, DC24V, AC110V, AC220V

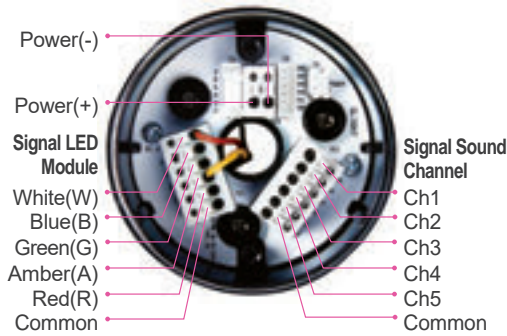


- Sound adjustable by lever on module side
- Buzzer module position can be chosen freely

QT series

Modular Multi-Functional LED Tower Lights

Basic Signal Sound Module



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



Lever for sound adjustment
Channel switch



Example for Signal Sound Module

Signal Sound Module

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

	<p>Warning Sound Module</p> <ul style="list-style-type: none"> • 5 Warning sounds : Max 85dB - fire, emergency , Ambulance, PI.PI.PI Short, Machinery Fault , Beep Intermittent • Voltage : USB DC5V
	<p>Melody Module</p> <ul style="list-style-type: none"> • 5 Melodies : Max 85dB - Sweet home, For Elise, Cuckoo's Waltz, Piano sonata, Turkish March • Voltage : USB DC5V
	<p>Alarm Module</p> <ul style="list-style-type: none"> • 5 Alarms : Max 85dB - Beep Intermittent, Door Chime, Phone Ring, PI.PI.PI Short, Triple Beat • Voltage : USB DC5V

Signal Sound Selection and Sound Adjust

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

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

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

USB Module(Built-in Signal Sound)

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

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

Module Connection



- 1 Connect wire between module



- 2 Match the edge of module



- 3 To assemble turn right



Uses a connector for easy assembly.

Ethernet Module(Built-in Signal Sound)

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

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

Module Connection

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

QT series

Modular Multi-Functional LED Tower Lights

Base Module is composed of the control line and threaded to the mounting bracket for improved product mounting efficiency. Please refer to below instruction and choose the mount type.



Base Module

- 6P terminal plate equipped on basic module. Please refer to page 115 for wiring of power line and signal line.

Direct Mount		3 Bolts on base module
Wall Mount		Wall mount bracket on base module
Pole Mount		Pole module and pole assemble on base module

Module Color

- Housing color of the QT series modular tower lights is black
- Customizable in beige color



Wiring Instructions

- QT series can be wired to external contact and transistor
 - In case of wiring with transistor, please select the proper transistor type either NPN or PNP based on the source voltage setting
 - DC Steady type : External power/External signal line : UL1007 AWG22(0.3sq) 400mm
 - AC Steady, AC/DC steady/flashing type :
External power line : UL1015 AWG18(0.75sq)×2C 400mm
 - External signal line : UL1007 AWG22(0.3sq)400mm
- ※ Please refer to page 115 for detailed wiring instructions.



Mounting Bracket

- Pole Mounting Bracket

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

※ Please refer to page 190-195 for detailed information about the pole specifications and dimensions.

Power Line Wiring Instructions




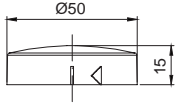
Terminal box can be wired without a special tool by using the push and release locking mechanism.

QT50 series

Modular Multi-Functional LED Tower Lights


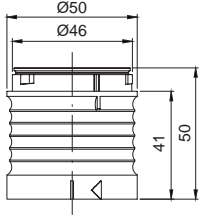




Modular Products Detailed Specifications : QT50L/QT50ML

(Units : mm)

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


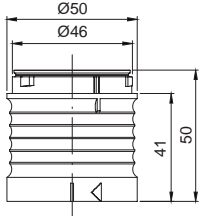


LED Steady Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-NR Red LED Steady Module	Q50L-NR-12 Q50L-NR-24 Q50L-NR-110 Q50L-NR-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 50 \times 50$ 
	Q50L-NA Amber LED Steady Module	Q50L-NA-12 Q50L-NA-24 Q50L-NA-110 Q50L-NA-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	
	Q50L-NG Green LED Steady Module	Q50L-NG-12 Q50L-NG-24 Q50L-NG-110 Q50L-NG-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	
	Q50L-NB Blue LED Steady Module	Q50L-NB-12 Q50L-NB-24 Q50L-NB-110 Q50L-NB-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	
	Q50L-NC White LED Steady Module	Q50L-NC-12 Q50L-NC-24 Q50L-NC-110 Q50L-NC-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	

LED Flashing Module


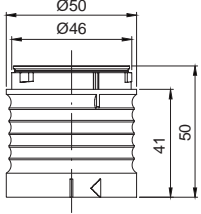

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-FR Red LED Flashing Module	Q50L-FR-12 Q50L-FR-24 Q50L-FR-110 Q50L-FR-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 50 \times 50$ 
	Q50L-FA Amber LED Flashing Module	Q50L-FA-12 Q50L-FA-24 Q50L-FA-110 Q50L-FA-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	
	Q50L-FG Green LED Flashing Module	Q50L-FG-12 Q50L-FG-24 Q50L-FG-110 Q50L-FG-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	

QT50 series


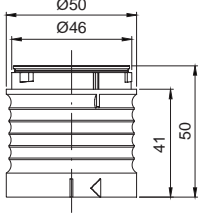




Modular Multi-Functional LED Tower Lights

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-FB Blue LED Flashing Module	Q50L-FB-12 Q50L-FB-24 Q50L-FB-110 Q50L-FB-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> • Material : PC • Protection ratings with assemble : IP 65 • Product size : Ø50×50 
	Q50L-FC White LED Flashing Module	Q50L-FC-12 Q50L-FC-24 Q50L-FC-110 Q50L-FC-220	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	


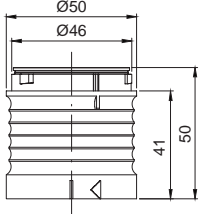

LED Strobe Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-SR Red LED Strobe Module	Q50L-SR-12 Q50L-SR-24	DC12V DC24V	0.110A 0.110A	<ul style="list-style-type: none"> • Material : PC • Protection ratings with assemble : IP 65 • Product size : Ø50×50 
	Q50L-SA Amber LED Strobe Module	Q50L-SA-12 Q50L-SA-24	DC12V DC24V	0.110A 0.110A	
	Q50L-SG Green LED Strobe Module	Q50L-SG-12 Q50L-SG-24	DC12V DC24V	0.110A 0.110A	
	Q50L-SB Blue LED Strobe Module	Q50L-SB-12 Q50L-SB-24	DC12V DC24V	0.110A 0.110A	
	Q50L-SC White LED Strobe Module	Q50L-SC-12 Q50L-SC-24	DC12V DC24V	0.110A 0.110A	

LED Revolving Flashing Module


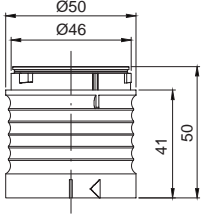


(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-RR Red LED Revolving Flashing Module	Q50L-RR-12 Q50L-RR-24	DC12V DC24V	0.070A 0.070A	<ul style="list-style-type: none"> • Material : PC • Protection ratings with assemble : IP 65 • Product size : Ø50×50 
	Q50L-RA Amber LED Revolving Flashing Module	Q50L-RA-12 Q50L-RA-24	DC12V DC24V	0.070A 0.070A	

QT50 series


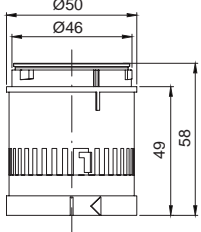
Modular Multi-Functional LED Tower Lights

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-RG Green LED Revolving Flashing Module	Q50L-RG-12 Q50L-RG-24	DC12V DC24V	0.070A 0.070A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : Ø50×50 
	Q50L-RB Blue LED Revolving Flashing Module	Q50L-RB-12 Q50L-RB-24	DC12V DC24V	0.070A 0.070A	
	Q50L-RC White LED Revolving Flashing Module	Q50L-RC-12 Q50L-RC-24	DC12V DC24V	0.070A 0.070A	


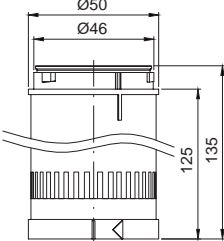
Buzzer Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-BZ Buzzer Module	Q50L-BZ-12 Q50L-BZ-24 Q50L-BZ-110 Q50L-BZ-220	DC12V DC24V AC110V AC220V	0.015A 0.030A 0.090A 0.090A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP54 Product size : Ø50×58 Sound : Max 90dB 

Signal Sound Module

(Units : mm)


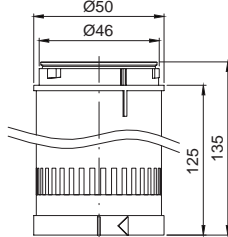
Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-WS Warning Sound Module	Q50L-WS-12 Q50L-WS-24	DC12V DC24V	0.220A 0.130A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP54 Product size : Ø50×135 Sound : Max 85dB 
	Q50L-WM Melody Module	Q50L-WM-12 Q50L-WM-24	DC12V DC24V	0.220A 0.130A	
	Q50L-WA Alarm Module	Q50L-WA-12 Q50L-WA-24	DC12V DC24V	0.220A 0.130A	

QT50 series

Modular Multi-Functional LED Tower Lights


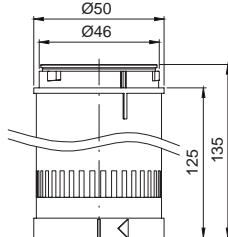
USB Module(Built-In Signal Sound)

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q50L-USB-WS Warning Sound Module (USB Type)	Q50L-USB-WS-12 Q50L-USB-WS-24	USB DC5V	0.500A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 54 Product size : Ø50×135 Sound : Max 85dB 
	Q50L-USB-WM Melody Module (USB Type)	Q50L-USB-WM-12 Q50L-USB-WM-24	USB DC5V	0.500A	
	Q50L-USB-WA Alarm Module (USB Type)	Q50L-USB-WA-12 Q50L-USB-WA-24	USB DC5V	0.500A	


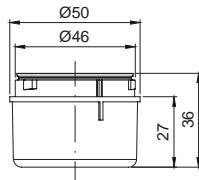
Ethernet Module(Built-In Signal Sound)

(Units : mm)

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


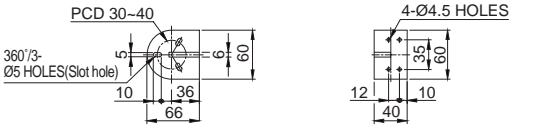
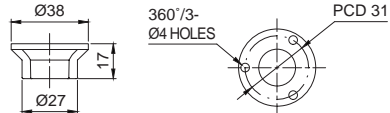
Base Module

(Units : mm)

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

Mount Bracket Module

(Units : mm)

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

QT50L

Ø50mm Modular Multi-Functional LED Tower Lights



QT50L

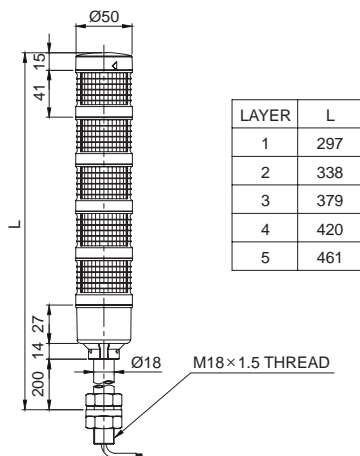
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT50L



Customization

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



QT50L Ø50mm Modular LED Tower Lights, Pole Mount

Product consist of cover, LED modules, base module, and pole module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT50L QT50LF	1	DC12V DC24V AC110V AC220V	0.090A 0.050A 0.020A 0.020A	CE DC, AC220V only	0.25kg 0.25kg 0.26kg 0.26kg	• R-Red
	2	DC12V DC24V AC110V AC220V	0.180A 0.100A 0.040A 0.040A		0.30kg 0.30kg 0.31kg 0.31kg	• R-Red • G-Green
	3	DC12V DC24V AC110V AC220V	0.270A 0.150A 0.060A 0.060A		0.34kg 0.34kg 0.35kg 0.35kg	• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V AC220V	0.360A 0.200A 0.080A 0.080A		0.38kg 0.38kg 0.39kg 0.39kg	• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V AC220V	0.450A 0.250A 0.100A 0.100A		0.43kg 0.43kg 0.44kg 0.44kg	• R-Red • A-Amber • G-Green • B-Blue • W-White

QT50L
QT50LF

Steady Module
Flashing Module

Base Module(BS)
+
Pole Module(PB)

※ Please refer to page 95-98 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 115 for detailed information about the wiring instructions.



Mounting Bracket

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

※ Please refer to page 190-195 for detailed information about the pole specifications and dimensions.

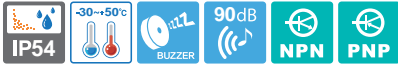


Ordering Specification

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

QT50L-BZ

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



QT50L-BZ

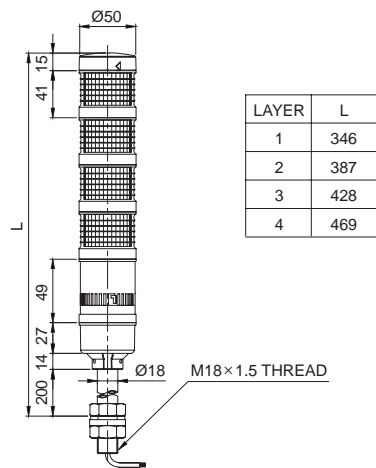
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT50L-BZ



Customization

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



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

Product consist of cover, LED modules, buzzer module, base module, and pole module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT50L-BZ QT50LF-BZ (Max 90dB)	1	DC12V	0.105A	CE DC, AC220V only	0.32kg	• R-Red
		DC24V	0.080A		0.32kg	
		AC110V	0.110A		0.33kg	
		AC220V	0.110A		0.33kg	
	2	DC12V	0.195A		0.37kg	• R-Red • G-Green
		DC24V	0.130A		0.37kg	
		AC110V	0.130A		0.38kg	
		AC220V	0.130A		0.38kg	
	3	DC12V	0.285A		0.41kg	• R-Red • A-Amber • G-Green
		DC24V	0.180A		0.41kg	
		AC110V	0.150A		0.42kg	
		AC220V	0.150A		0.42kg	
	4	DC12V	0.375A		0.45kg	• R-Red • A-Amber • G-Green • B-Blue
		DC24V	0.230A		0.45kg	
		AC110V	0.170A		0.46kg	
		AC220V	0.170A		0.46kg	

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

※ Please refer to page 95-98 for detailed specification of module.



Wiring Instructions

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

※ Please refer to page 115 for detailed information about the wiring instructions.



Mounting Bracket

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

※ Please refer to page 190-195 for detailed information about the pole specifications and dimensions.



Ordering Specification

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

QT50L-W

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



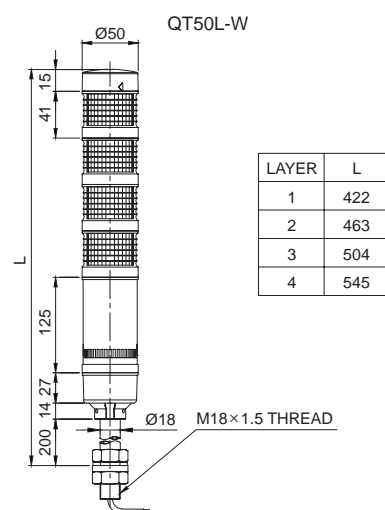
QT50L-W

Color Options:

Beige color is available



Technical Diagram (Units : mm)



Customization

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



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

Product consist of cover, LED modules, signal sound module, base module, and pole module



Specifications

Model number	Layer	Built-in sound	Voltage	Current	Certificates	Weight	Color
QT50L-WS QT50L-WM QT50L-WA QT50LF-WS QT50LF-WM QT50LF-WA	1	WS-5 Warning Sounds WM-5 Melodies WA-Alarm Sounds (Max 85dB)	DC12V	0.310A	CE DC24V only	0.42kg	• R-Red
			DC24V	0.180A		0.42kg	
	2		DC12V	0.400A		0.46kg	• R-Red • G-Green
			DC24V	0.230A		0.46kg	
	3		DC12V	0.490A		0.50kg	• R-Red • A-Amber • G-Green
			DC24V	0.280A		0.50kg	
	4		DC12V	0.580A		0.54kg	• R-Red • A-Amber • G-Green • B-Blue
			DC24V	0.330A		0.54kg	

QT50L Steady Module
QT50LF Flashing Module

Base Module(BS)
+ Pole Module(PB)

Signal Sound Module
WS Warning Sounds
WM Melody
WA Alarm

※ Please refer to page 95-98 for detailed specification of module.

※ Please refer to page 186 for detailed sound specification.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 115 for detailed information about the wiring instructions.



Mounting Bracket

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

※ Please refer to page 190-195 for detailed information about the pole specifications and dimensions.



Ordering Specification

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

QT50ML

Ø50mm Modular LED Tower Lights



QT50ML

Color Options:

Beige color is available



QT50ML Ø50mm Modular LED Tower Lights, Direct Mount

Product consist of cover, LED modules, base module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT50ML QT50MLF	1	DC12V	0.090A	CE DC, AC220V only	0.10kg	● R-Red
		DC24V	0.050A		0.10kg	
		AC110V	0.020A		0.11kg	
		AC220V	0.020A		0.11kg	
	2	DC12V	0.180A		0.14kg	● R-Red ● G-Green
		DC24V	0.100A		0.14kg	
		AC110V	0.040A		0.15kg	
		AC220V	0.040A		0.15kg	
	3	DC12V	0.270A		0.19kg	● R-Red ● A-Amber ● G-Green
		DC24V	0.150A		0.19kg	
		AC110V	0.060A		0.20kg	
		AC220V	0.060A		0.20kg	
	4	DC12V	0.360A		0.23kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		DC24V	0.200A		0.23kg	
		AC110V	0.080A		0.24kg	
		AC220V	0.080A		0.24kg	
	5	DC12V	0.450A		0.27kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
		DC24V	0.250A		0.27kg	
		AC110V	0.100A		0.28kg	
		AC220V	0.100A		0.28kg	

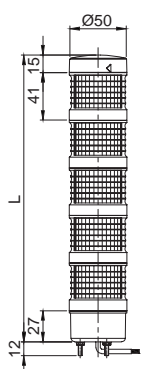
QT50L Steady Module + Base Module(MBS)
QT50LF Flashing Module

※ Please refer to page 95-98 for detailed specification of module.

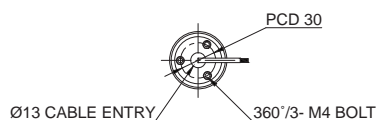


Technical Diagram (Units : mm)

QT50ML



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



Wiring Instructions

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

※ Please refer to page 115 for detailed information about the wiring instructions.



Customization

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

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

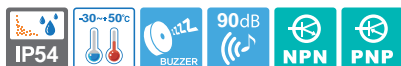


Ordering Specification

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

QT50ML-BZ

Ø50mm Built-in Buzzer Modular LED Tower Lights



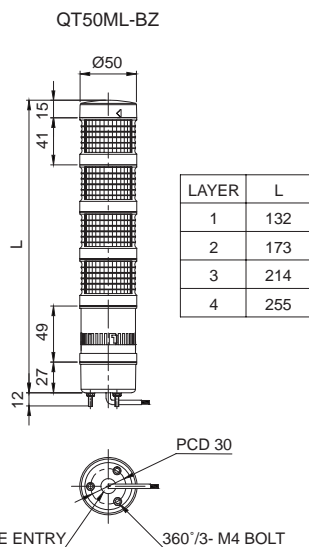
QT50ML-BZ

Color Options:

Beige color is available



Technical Diagram (Units : mm)



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

Product consist of cover, LED modules, buzzer module, base module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT50ML-BZ QT50MLF-BZ (Max 90dB)	1	DC12V	0.105A	CE DC, AC220V only	0.17kg	● R-Red
		DC24V	0.080A		0.17kg	
		AC110V	0.110A		0.18kg	
		AC220V	0.110A		0.18kg	
	2	DC12V	0.195A		● R-Red ● G-Green	
		DC24V	0.130A			
		AC110V	0.130A			
		AC220V	0.130A			
	3	DC12V	0.285A		● R-Red ● A-Amber ● G-Green	
		DC24V	0.180A			
		AC110V	0.150A			
		AC220V	0.150A			
4	DC12V	0.375A	● R-Red ● A-Amber ● G-Green ● B-Blue			
	DC24V	0.230A				
	AC110V	0.170A				
	AC220V	0.170A				

QT50L Steady Module + Base Module(MBS) + Buzzer(BZ)
QT50LF Flashing Module

※ Please refer to page 95-98 for detailed specification of module.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 115 for detailed information about the wiring instructions.



Customization

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



Ordering Specification

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

QT50ML-W

Ø50mm Built-in Signal Sound Modular LED Tower Lights



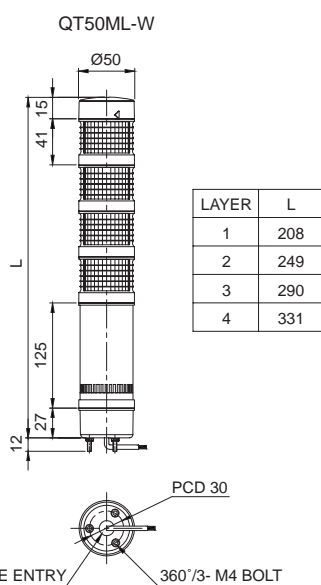
QT50ML-W

Color Options:

Beige color is available



Technical Diagram (Units : mm)



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

Product consist of cover, LED modules, signal sound module, base module



Specifications

Model number	Layer	Built-in Sound	Voltage	Current	Certificates	Weight	Color
QT50ML-WS QT50ML-WM QT50ML-WA QT50MLF-WS QT50MLF-WM QT50MLF-WA	1	WS-5 Warning Sounds WM-5 Melodies WA-Alarm Sounds (Max 85dB)	DC12V	0.310A	CE DC24V only	0.27kg	• R-Red
			DC24V	0.180A		0.27kg	
	2		DC12V	0.400A		0.28kg	• R-Red • G-Green
			DC24V	0.230A		0.28kg	
	3		DC12V	0.490A		0.30kg	• R-Red • A-Amber • G-Green
			DC24V	0.280A		0.30kg	
	4		DC12V	0.580A		0.32kg	• R-Red • A-Amber • G-Green • B-Blue
			DC24V	0.330A		0.32kg	

QT50L Steady Module + **Base Module(MBS)** + **Signal Sound Module**
QT50LF Steady/Flashing Module + **Base Module(MBS)** + **WS Warning Sounds**
WM Melody
WA Alarm

※ Please refer to page 95-98 for detailed specification of module.

※ Please refer to page 186 for detailed sound specification.



Wiring Instructions

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

※ Please refer to page 115 for detailed information about the wiring instructions.



Customization

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



Ordering Specification


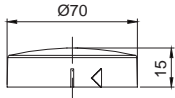
QT50ML-WS	-	3	-	24	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QT50ML-WS • QT50ML-WM • QT50ML-WA • QT50MLF-WS • QT50MLF-WM • QT50MLF-WA 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers 		<ul style="list-style-type: none"> •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

QT70 series

Modular Multi-Functional LED Tower Lights


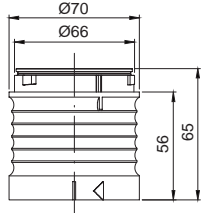




Module Specifications QT70L/QT70ML

(Units : mm)

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


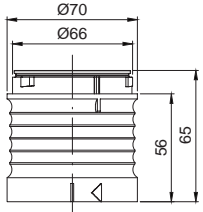


LED Steady Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-NR Red LED Steady Module	Q70L-NR-12 Q70L-NR-24 Q70L-NR-110 Q70L-NR-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 70 \times 65$ 
	Q70L-NA Amber LED Steady Module	Q70L-NA-12 Q70L-NA-24 Q70L-NA-110 Q70L-NA-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	
	Q70L-NG Green LED Steady Module	Q70L-NG-12 Q70L-NG-24 Q70L-NG-110 Q70L-NG-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	
	Q70L-NB Blue LED Steady Module	Q70L-NB-12 Q70L-NB-24 Q70L-NB-110 Q70L-NB-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	
	Q70L-NC White LED Steady Module	Q70L-NC-12 Q70L-NC-24 Q70L-NC-110 Q70L-NC-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	

LED Flashing Module


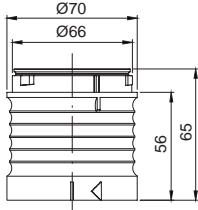

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-FR Red LED Flashing Module	Q70L-FR-12 Q70L-FR-24 Q70L-FR-110 Q70L-FR-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> Material : PC Protection ratings with assemble : IP 65 Product size : $\varnothing 70 \times 65$ 
	Q70L-FA Amber LED Flashing Module	Q70L-FA-12 Q70L-FA-24 Q70L-FA-110 Q70L-FA-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	
	Q70L-FG Green LED Flashing Module	Q70L-FG-12 Q70L-FG-24 Q70L-FG-110 Q70L-FG-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	

QT70 series


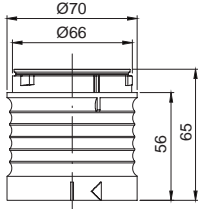




Modular Multi-Functional LED Tower Lights

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-FB Blue LED Flashing Module	Q70L-FB-12 Q70L-FB-24 Q70L-FB-110 Q70L-FB-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	<ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65 
	Q70L-FC White LED Flashing Module	Q70L-FC-12 Q70L-FC-24 Q70L-FC-110 Q70L-FC-220	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	


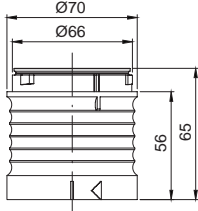

LED Strobe Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-SR Red LED Strobe Module	Q70L-SR-12 Q70L-SR-24	DC12V DC24V	0.120A 0.120A	<ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65 
	Q70L-SA Amber LED Strobe Module	Q70L-SA-12 Q70L-SA-24	DC12V DC24V	0.120A 0.120A	
	Q70L-SG Green LED Strobe Module	Q70L-SG-12 Q70L-SG-24	DC12V DC24V	0.120A 0.120A	
	Q70L-SB Blue LED Strobe Module	Q70L-SB-12 Q70L-SB-24	DC12V DC24V	0.120A 0.120A	
	Q70L-SC White LED Strobe Module	Q70L-SC-12 Q70L-SC-24	DC12V DC24V	0.120A 0.120A	

LED Revolving Flashing module


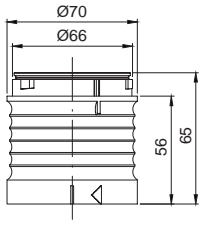


(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-RR Red LED Revolving Flashing Module	Q70L-RR-12 Q70L-RR-24	DC12V DC24V	0.080A 0.080A	<ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70x65 
	Q70L-RA Amber LED Revolving Flashing Module	Q70L-RA-12 Q70L-RA-24	DC12V DC24V	0.080A 0.080A	

QT70 series


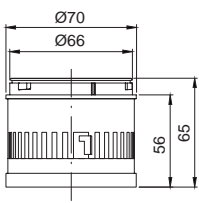

Modular Multi-Functional LED Tower Lights

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-RG Green LED Revolving Flashing Module	Q70L-RG-12 Q70L-RG-24	DC12V DC24V	0.080A 0.080A	<ul style="list-style-type: none"> Material : PC Protection rating : IP65 Dimension : Ø70×65 
	Q70L-RB Blue LED Revolving Flashing Module	Q70L-RB-12 Q70L-RB-24	DC12V DC24V	0.080A 0.080A	
	Q70L-RC White LED Revolving Flashing Module	Q70L-RC-12 Q70L-RC-24	DC12V DC24V	0.080A 0.080A	


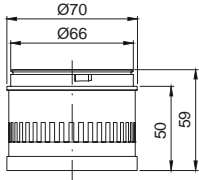
Buzzer Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-BZ Buzzer Module	Q70L-BZ-12 Q70L-BZ-24 Q70L-BZ-110 Q70L-BZ-220	DC12V DC24V AC110V AC220V	0.015A 0.030A 0.090A 0.090A	<ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : Ø70×65 Volume : Max 90dB 
	Q70L-BZS Siren Buzzer Module	Q70L-BZS-12 Q70L-BZS-24 Q70L-BZS-110 Q70L-BZS-220	DC12V DC24V AC110V AC220V	0.240A 0.150A 0.010A 0.020A	

Signal Sound Module

(Units : mm)

Shape	Parts Name	Model No.	Specification		Common Specifications
			Voltage	Current	
	Q70L-WS Warning Sound Module	Q70L-WS-12 Q70L-WS-24	DC12V DC24V	0.220A 0.130A	<ul style="list-style-type: none"> Material : PC Protection rating : IP54 Dimension : Ø70×59 Volume : Max 85dB 
	Q70L-WM Melody Module	Q70L-WM-12 Q70L-WM-24	DC12V DC24V	0.220A 0.130A	
	Q70L-WA Alarm Module	Q70L-WA-12 Q70L-WA-24	DC12V DC24V	0.220A 0.130A	

QT70L

Ø70mm Multi-Functional Modular LED Tower Lights



QT70L

Color Options:

Beige color is available



QT70L Ø70mm Pole Mount Modular LED Tower Lights

Product consist of cover, LED modules, base module, and pole module

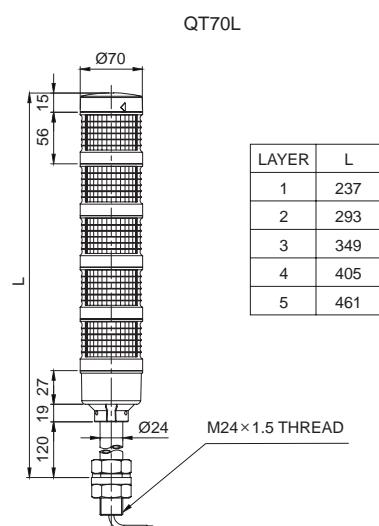
Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT70L QT70LF	1	DC12V	0.100A	CE DC only	0.41kg	● R-Red
		DC24V	0.050A		0.41kg	
		AC110V	0.020A		0.42kg	
		AC220V	0.020A		0.42kg	
	2	DC12V	0.200A		● R-Red ● G-Green	0.48kg
		DC24V	0.100A			0.48kg
		AC110V	0.040A			0.49kg
		AC220V	0.040A			0.49kg
	3	DC12V	0.300A		● R-Red ● A-Amber ● G-Green	0.55kg
		DC24V	0.150A			0.55kg
		AC110V	0.060A			0.56kg
		AC220V	0.060A			0.56kg
	4	DC12V	0.400A		● R-Red ● A-Amber ● G-Green ● B-Blue	0.63kg
		DC24V	0.200A			0.63kg
		AC110V	0.080A			0.64kg
		AC220V	0.080A			0.64kg
	5	DC12V	0.500A		● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White	0.71kg
		DC24V	0.250A			0.71kg
		AC110V	0.100A			0.72kg
		AC220V	0.100A			0.72kg

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

※ Please refer to page 105-108 for detailed specification of module.

Technical Diagram (Units : mm)



Customization

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

Wiring Instructions

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

※ Please refer to page 115 for detailed information about the wiring instructions.

Mounting Bracket



※ Please refer to page 190-195 for detailed dimension of mount brackets.

Ordering Specification

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

QT70L-BZ

Ø70mm Multi-Functional Modular LED Tower Lights with Buzzer



QT70L-BZ

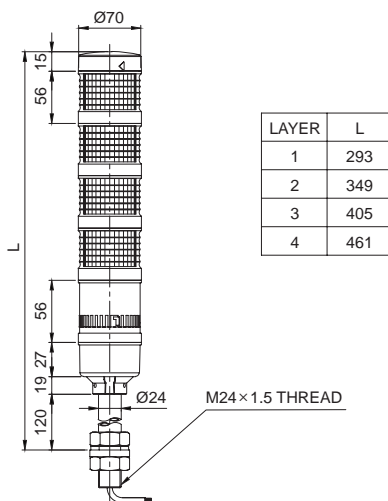
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT70L-BZ



Customization

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



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

Product consist of cover, LED modules, buzzer module, base module, and pole module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color	
QT70L-BZ QT70LF-BZ (Max 90dB)	1	DC12V	0.115A	CE DC24V only	0.50kg	• R-Red	
		DC24V	0.080A		0.50kg		
		AC110V	0.110A		0.51kg		
		AC220V	0.110A		0.51kg		
	2	DC12V	0.215A		0.58kg	• R-Red • G-Green	
		DC24V	0.130A				0.88kg
		AC110V	0.130A				0.59kg
		AC220V	0.130A				0.59kg
	3	DC12V	0.315A		0.65kg	• R-Red • A-Amber • G-Green	
		DC24V	0.180A				0.65kg
		AC110V	0.150A				0.66kg
		AC220V	0.150A				0.66kg
	4	DC12V	0.415A		0.73kg	• R-Red • A-Amber • G-Green • B-Blue	
		DC24V	0.230A				0.73kg
		AC110V	0.170A				0.74kg
		AC220V	0.170A				0.74kg

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

※ Please refer to page 105-108 for detailed specification of module.



Wiring Instructions

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

※ Please refer to page 115 for detailed information about the wiring instructions.



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimension of mount brackets.



Ordering Specification

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

QT70L-W

Ø70mm Multi-Functional Modular LED Tower Lights with Signal Sound



QT70L-W

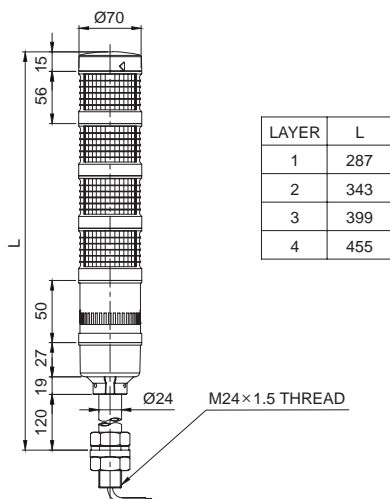
Color Options:

Beige color is available



Technical Diagram (Units : mm)

QT70L-W



Customization

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



QT70L-W Ø70mm Pole Mount Modular LED Tower Lights with Signal Sound

Product consist of cover, LED modules, signal sound module, base module, and pole module



Specifications

Model number	Layer	Built-in Sound	Voltage	Current	Certificates	Weight	Color
QT70L-WS QT70L-WM QT70L-WA QT70LF-WS QT70LF-WM QT70LF-WA	1	WS-5 Warning sounds WM-5 Melodies WA-Alarms (Max 85dB)	DC12V	0.320A	CE DC24V only	0.62kg	• R-Red
			DC24V	0.180A		0.62kg	
	2		DC12V	0.420A		0.69kg	• R-Red • G-Green
			DC24V	0.230A		0.69kg	
	3		DC12V	0.520A		0.76kg	• R-Red • A-Amber • G-Green
			DC24V	0.280A		0.76kg	
	4		DC12V	0.620A		0.84kg	• R-Red • A-Amber • G-Green • B-Blue
			DC24V	0.330A		0.84kg	

QT70L Steady Module + Base Module(BS) + Signal Sound Module
QT70LF Flashing Module + Pole Module(PB) + WS Warning sounds
 WM Melodies
 WA Alarms

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

※ Please refer to page 186 for detailed sound specification.



Wiring Instructions

- LED tower light can be wired with external contact and transistor
- ※ Please refer to page 115 for detailed information about the wiring instructions.



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimension of mount brackets.



Ordering Specification

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

QT70ML

Ø70mm Multi-Functional Modular LED Tower Lights



QT70ML

Color Options:

Beige color is available



QT70ML Ø70mm Direct Mount Modular LED Tower Lights

Product consist of cover, LED modules, signal sound module, base module

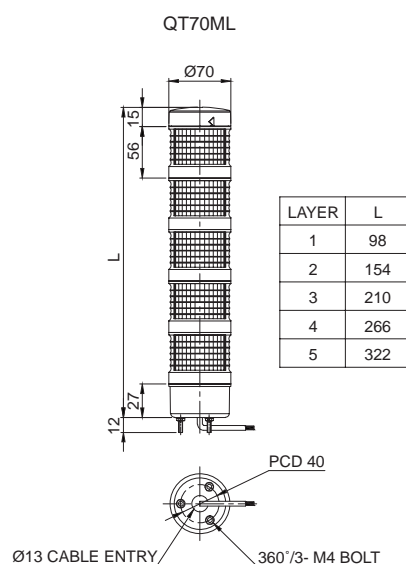
Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT70ML QT70MLF	1	DC12V DC24V AC110V AC220V	0.100A 0.050A 0.020A 0.020A	CE DC24V only	0.17kg 0.17kg 0.18kg 0.18kg	● R-Red
	2	DC12V DC24V AC110V AC220V	0.200A 0.100A 0.040A 0.040A		0.25kg 0.26kg 0.26kg 0.26kg	● R-Red ● G-Green
	3	DC12V DC24V AC110V AC220V	0.300A 0.150A 0.060A 0.060A		0.32kg 0.32kg 0.33kg 0.33kg	● R-Red ● A-Amber ● G-Green
	4	DC12V DC24V AC110V AC220V	0.400A 0.200A 0.080A 0.080A		0.40kg 0.40kg 0.41kg 0.41kg	● R-Red ● A-Amber ● G-Green ● B-Blue
	5	DC12V DC24V AC110V AC220V	0.500A 0.250A 0.100A 0.100A		0.47kg 0.47kg 0.48kg 0.48kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White

QT70L Steady Module + Base Module(MBS)
QT70LF Flashing Module

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

Technical Diagram (Units : mm)



Wiring Instructions

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

* Please refer to page 115 for detailed information about the wiring instructions.

Customization

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

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



Ordering Specification

QT70ML	-	3	-	220	-	RAG
[Model number]		[Layer]		[Voltage]		[Color]
<ul style="list-style-type: none"> • QT70ML • QT70MLF 		<ul style="list-style-type: none"> • 1-1Layer • 2-2Layers • 3-3Layers • 4-4Layers • 5-5Layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110-AC110V • 220-AC220V 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White

QT70ML-BZ

Ø70mm Multi-Functional Modular LED Tower Lights with Buzzer



QT70ML-BZ

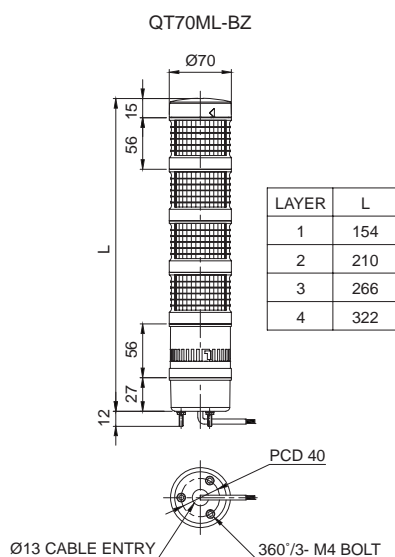
Color Options:

Beige color is available



Technical Diagram

(Units : mm)



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

Product consist of cover, LED modules, buzzer module, base module



Specifications

Model number	Layer	Voltage	Current	Certificates	Weight	Color
QT70ML-BZ QT70MLF-BZ (Max 90dB)	1	DC12V	0.115A	CE DC24V only	0.26kg	● R-Red
		DC24V	0.080A		0.26kg	
		AC110V	0.110A		0.27kg	
		AC220V	0.110A		0.27kg	
	2	DC12V	0.215A		0.34kg	● R-Red ● G-Green
		DC24V	0.130A		0.34kg	
		AC110V	0.130A		0.35kg	
		AC220V	0.130A		0.35kg	
	3	DC12V	0.315A		0.42kg	● R-Red ● A-Amber ● G-Green
		DC24V	0.180A		0.42kg	
		AC110V	0.150A		0.43kg	
		AC220V	0.150A		0.43kg	
	4	DC12V	0.415A		0.49kg	● R-Red ● A-Amber ● G-Green ● B-Blue
		DC24V	0.230A		0.49kg	
		AC110V	0.170A		0.50kg	
		AC220V	0.170A		0.50kg	

QT70L Steady Module + Base Module(MBS) + Buzzer(BZ)
QT70LF Flashing Module

* Please refer to page 105-108 for detailed specification of module.



Wiring Instructions

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

* Please refer to page 115 for detailed information about the wiring instructions.



Customization

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

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



Ordering Specification

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

QT70ML-W

Ø70mm Multi-Functional Modular LED Tower Lights with Signal Sound



QT70ML-W

Color Options:

Beige color is available



QT70ML-W Ø70mm Pole Mount Modular LED Tower Lights with Signal Sound

Product consist of cover, LED modules, signal sound module, base module

Specifications

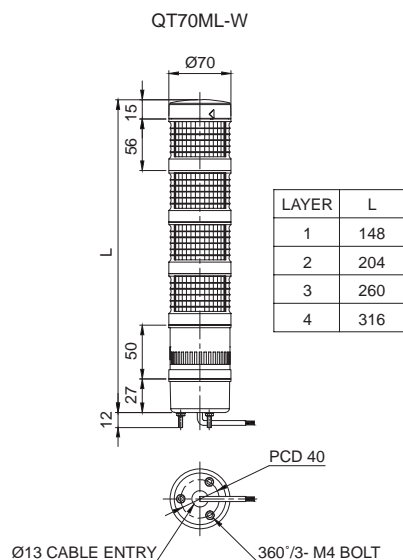
Model number	Layer	Built-in Sound	Voltage	Current	Certificates	Weight	Color
QT70ML-WS QT70ML-WM QT70ML-WA QT70MLF-WS QT70MLF-WM QT70MLF-WA	1	WS-5 Warning sounds WM-5 Melodies WA-Alarms (Max 85dB)	DC12V	0.320A	CE DC24V only	0.37kg	• R-Red
			DC24V	0.180A		0.37kg	
	2		DC12V	0.420A		0.44kg	• R-Red • G-Green
			DC24V	0.230A		0.44kg	
	3		DC12V	0.520A		0.54kg	• R-Red • A-Amber • G-Green
			DC24V	0.280A		0.54kg	
	4		DC12V	0.620A		0.59kg	• R-Red • A-Amber • G-Green • B-Blue
			DC24V	0.330A		0.59kg	

QT70L Steady Module + Signal Sound Module
QT70LF Flashing Module + WS Warning sounds + Base Module(MBS)
 + WM Melodies
 + WA Alarms

* Please refer to page 105-108 for detailed specification of module.

* Please refer to page 186 for detailed sound specification.

Technical Diagram (Units : mm)



Wiring Instructions

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

* Please refer to page 115 for detailed information about the wiring instructions.

Customization

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

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



Ordering Specification

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

QT series

Multi-Functional Modular LED Tower Lights



Wiring Instructions

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

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



CATALOGUE

USB/ Ethernet Signal Tower Lights

INNOVATION IN ALARM & SIGNAL

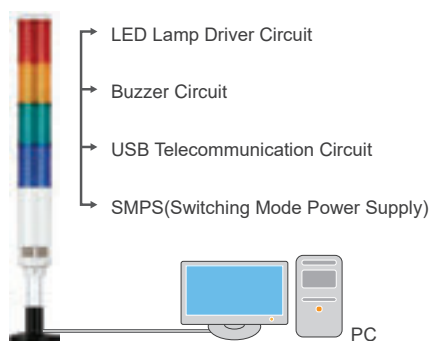


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Technical Data for USB Type LED Tower Light

Can be connected to the USB port of your PC without any additional power supply

- The LED tower light that is fully controllable by the PC application program of a PC via an USB port connection
- The USB communication cable is comprise of VCC, D-, D +, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in clear melody, alarm sound, the type of sound can be chosen when ordered
- Supported OS(32bit 64bit) : Windows XP, Windows 7, Windows 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)



- Qlight's USB Tower Light is a LED tower lamp connected to a USB interface and controlled by a PC program. These products work on hosts that support USB 1.1 or higher and allow up to 4 USB Tower Light connections per PC
 - Supports Low speed (1.5Mbps) and Full speed (12Mbps) communication
 - Provides MS Runtime libraries for developers(VC ++, VB, Delphi) to utilize in various PC applications. A sample program (VC ++) is available for testing purposes. The product uses device drivers in the PC for built-in HID (Human Interface Devices). Therefore, the operating system (OS) does not need a separate driver to control and to communicate with the LED Tower Light through the PC application
- Native support for 32bit OS, and supports 64bit in Windows XP, Win7. For other OS, please contact us(32bit 64bit)

※ Image to the left shows the Tower Light Connections.

1. Basic USB Information

USB is an abbreviation for Universal Serial Bus, a PC peripheral bus standard developed to satisfy the industries growing need in the mid 1990s for a new interconnection between computers and electronic devices. Developed by companies such as Intel, Microsoft, Compaq, IBM, NEC, Nortel, DEC etc. the USB can connect up to 127 devices without reboot or setup for new peripherals. Data transfer speed have been improving rapidly.

Communication	DEVICE CLASS CODE	INTERFACE CLASS CODE
Audio Interface	0x00	0x01
Communication Device	0x02	-
HID	0x00	0x00
HUB	0x09	0x09
Storage	0x00	0x08
Monitor	Same as HID	Same as HID
Print	-	0x07

※ HID(Human Interface Devices)?

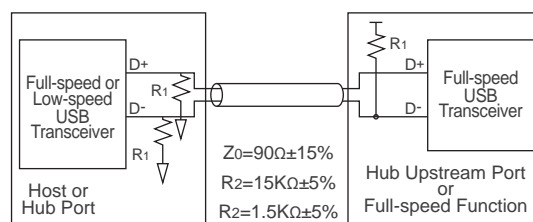
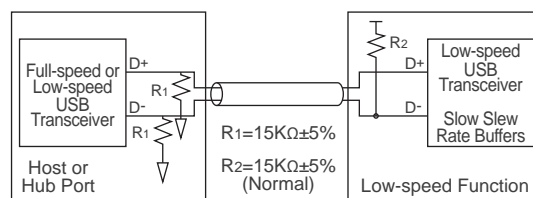
USB can be applied to various devices and can be classified by its use case. Among them is the USB classification called the Human Interface Device (HID). These devices can be used to control the PC. A typical HID device includes a mouse, keyboard, joystick, etc. The data from the devices is sent to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

2. Connection

The process of connecting and detecting the device to the USB port is called "the initial determination". After "the initial determination" is made, the host PC requests the device's specific role and the function is then specified by the Descriptor. At that moment the device and the PC periodically exchanges requests, and the descriptor. This process is called "Enumeration". After the finishing the "enumeration" process the PC detects the device and registers it as a USB Device. When the registration is completed, the USB Device exchanges data and perform its designated function.

The process how the USB Device is connected to the PC

1. When you connect a USB Device to the PC, Device is powered on.
2. Normally the D+, D- of the PC is on low signal with both D+ and D- having pull down resistors of 15KΩ.
3. A full speed USB Device has a pull-up resistor of 1.5KΩ hung on D+, Low speed devices on the other hand have a pull-up resistor of 1.5KΩ on the D-.
4. Therefore, the PC usually has a low signal on the data line but when the USB device is connected the PC it detects the high signal of the data line and notifies the host of the USB device connection.



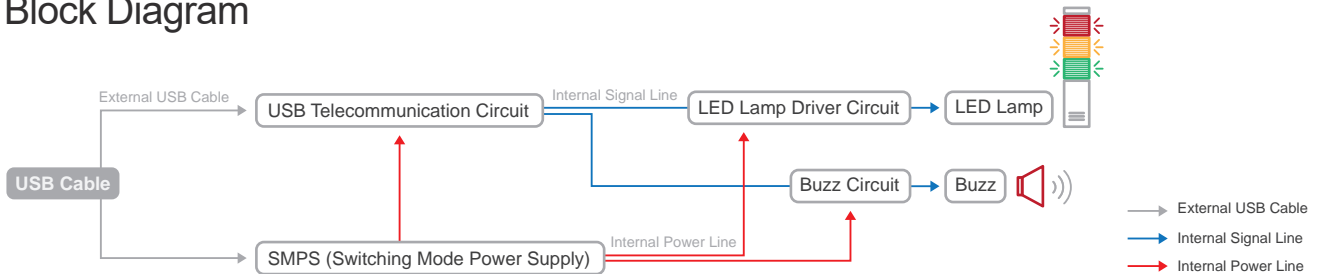
Technical Data for USB Type LED Tower Light

3. Communication data format of the USB product

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

PC to USB Tower Light				
No.	Type	ABB	Descript	Size(Bytes)
1	Device Information	VID	VENDOR ID : 0x04D8(Provided by IC manufacturer)	2
2		PID	PRODUCT ID : 0xE73C(QLIGHT ID)	2
3		INDEX	1. Maximum of 4 USB tower lights can be installed per PC. 2. Field value helps to distinguish each USB tower light. 3. Reference - USB0 : 0x4970/ USB1 : 0x4971/ USB2 : 0x4972/ usb3 : 0x4973 4. Assign 0-3 for convenient use in IBM PC environment.	2
1	Data	Write	1. Send 'W=0x57' which means transferring the data from PC to USB.	1
2		Sound Group	1. Field for sound pattern designation. 0 : WS/ 1 : WP/ 2 : WM/ 3 : WA/ 4 : WB/ 5 : BZ/ 6 : WM(8)/ 7 : WA(8) 2. Total 8 groups are provided and each group has channel 1 to 5.	1
3		R LAMP	1. Field for controlling Red lamp. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care	1
4		A LAMP	1. Field for controlling Amber lamp. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care	1
5		G LAMP	1. Field for controlling Green lamp. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care	1
6		B LAMP	1. Field for controlling Blue lamp. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care	1
7		W LAMP	1. Field for controlling White lamp. 2. Reference - 0 : LAMP OFF/ 1 : LAMP BLINK(ON/OFF)/ 2 : LAMP ON/ Else : Don't care	1

4. Block Diagram



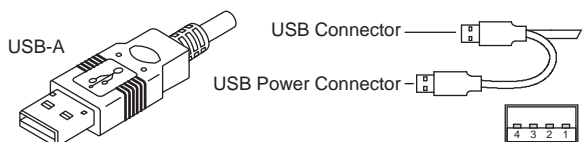
5. Specifications

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

Technical Data for USB Type LED Tower Light

6. USB Cable

1. The power consumption of a USB Tower light(3 layers type) is only about 2.5W.
2. The USB specification is 5VDC/(300mA/500mA) per PC port which equals approximately 1.5W. Thus, using two ports will supply the proper power to the product.
3. It is possible to use multiple colors at the same time by using the USB power supply, but using one lamp and one alarm sound at a time is recommended.
4. There are two types of USB connections as shown in the image below; a standard USB connector and a USB power connector with a power line connected in parallel.



Pin	Name	WIRE Color	Description
1	VCC	RED	+5V
2	D-	WHITE	Data-
3	D+	GREEN	Data+
4	GND	BLACK	Ground

7. Use of the USB device

1. Connect the USB tower light to the PC as shown in the illustration above.
2. Download the test program from the provided CD or from our homepage.
3. The downloaded sample program will be saved as "USB Test Program.zip". When you unzip the file, there will be a file with the names below.

QLight_Lamptest_USB.exe

Test program

QUvc_dll.dll

Required library for test program

※ When developing the program, please download and refer to the file "manual and library"(sample programs and manuals for developers).

4. When you run the "QLight lamptest_usb.exe"file, a test programs will show up as above. Products sound options are classified as WS w/P w/A w/M / BZ . The product will only play the sound option selected when the order was placed.

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

Specification List for USB LED Tower Lights



Model number(series)	ST45ML-USB	ST45L-USB	ST56MEL-USB	ST56EL-USB	ST80MEL-USB	ST80EL-USB
Voltage	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V
Dimension (mm)	Diameter	Ø45	Ø45	Ø56	Ø56	Ø80
	Height	198-358	412-572	192-352	406-566	230-390
	Depth					
Materials	Lens-AS	Lens-AS	Lens-AS	Lens-AS	Lens-AS	Lens-AS
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS
Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
	LED Simulated revolving					
Sound & volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 Signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP23	IP23	IP23	IP23	IP23	IP23
Certificates	-	-	CE	CE	-	-
Customization	Customized color arrangements, Wall mount brackets	Customized color arrangements, Customized pole length	Customized color arrangements, 70mm lens height, Wall mount brackets	Customized color arrangements, 70mm lens height, Customized pole length	Customized color arrangements, 70mm lens height, Wall mount brackets	Customized color arrangements, 70mm lens height, Customized pole length
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Model number(series)	QT50ML-USB	QT50L-USB	QT70ML-USB	QT70L-USB	STDEL-USB
Voltage	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V	DC12V, DC24V AC110V, AC220V
Dimension (mm)	Diameter	Ø50	Ø50	Ø70	Ø80(Lens) Ø119(Housing)
	Height	208-372	422-586	148-372	287-511
	Depth				
Materials	Lens-PC	Lens-PC	Lens-PC	Lens-PC	Lens-AS
	Housing-PC	Housing-PC	Housing-PC	Housing-PC	Housing-ABS
Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing				
	LED Steady				
	LED Steady/Flashing	•	•	•	•
	LED Strobe	•	•	•	•
	LED Simulated revolving	•	•	•	
Sound & volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 Signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	-
Protection rating	IP54	IP54	IP54	IP54	IP54
Certificates	CE	CE	CE	CE	-
Customization	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized pole length	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized pole length	Customized color arrangements, 70mm lens height
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Specification List for USB LED Tower Lights



Model number(series)	QTG50(M)L-USB	QTG60(M)L-USB	QTG70(M)L-USB	QTC50(M)L-USB	QTC60(M)L-USB	QTC70(M)L-USB
Voltage	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V	USB DC 5V
Dimension (mm)	Diameter	Ø50	Ø60	Ø70	Ø50	Ø60
	Height	116-364	126-399	126-399	116-364	126-399
	Depth					
	Materials	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens, filter lens-PC Housing-ABS	Lens, filter lens-PC Housing-ABS
Light source & Operation	Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
Sound & volume	LED Simulated revolving					
	1 buzzer sound	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m
5 Signal sounds						
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Direct mount	Direct mount	Direct mount	Direct mount	Direct mount
Bracket	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates	CE	CE	CE	CE	CE	CE
Customization	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets
Page	P129	P130	P131	P132	P133	P134



Model number(series)	QTR50(M)L-USB	QTR60(M)L-USB	QTR70(M)L-USB
Voltage	USB DC 5V	USB DC 5V	USB DC 5V
Dimension (mm)	Diameter	Ø50	Ø60
	Height	116-364	126-399
	Depth		
	Materials	Lens-PC Housing-ABS	Lens-PC Housing-ABS
Light source & Operation	Layer	1-5 Layers	1-5 Layers
	Bulb Steady/Flashing		
	LED Steady		
	LED Steady/Flashing	•	•
	LED Strobe		
Sound & volume	LED Simulated revolving		
	1 buzzer sound	Max. 90dB at 1m	Max. 90dB at 1m
5 Signal sounds			
Layer color change	Yes	Yes	Yes
Mount bracket	Direct mount	Direct mount	Direct mount
Bracket	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates	-	-	-
Customization	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets
Page	P135	P136	P137

ST45(M)L-USB

Ø45mm USB LED Tower Lights



Connected to PC USB port without power supply unit

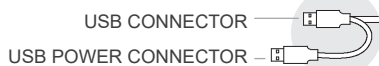


ST45(M)L-USB series



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



Customization

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



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45



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

- Software controls the steady/flashing function
- Please refer to page 160 for detailed information about selectable sound patterns.
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- Volume : Buzzer – Max 90dB at 1m / Signal Sound – Max 85db at 1m
- Compliant with RoHS directive

※ Number of activated LED lights reference

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



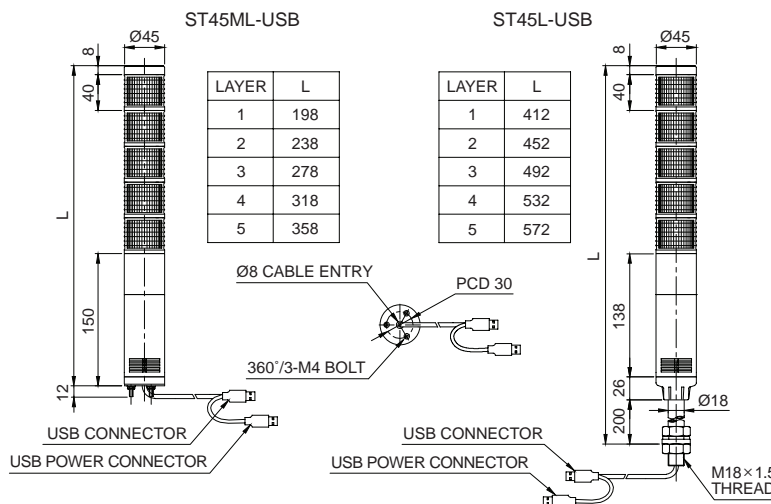
ST45L-USB Ø45mm Pole Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST45L-USB-BZ	5 Buzzer sounds	1 layer	1 layer : ●R
ST45L-USB-WS	5 Warning sounds	2 layers	2 layers : ●R ●G
ST45L-USB-WM	5 Melodies	3 layers	3 layers : ●R ●A ●G
ST45L-USB-WA	5 Alarms	4 layers	4 layers : ●R ●A ●G ●B
		5 layers	5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



ST45ML-USB Ø45mm Direct Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST45ML-USB-BZ	5 Buzzer sounds	1 layer	1 layer : ●R
ST45ML-USB-WS	5 Warning sounds	2 layers	2 layers : ●R ●G
ST45ML-USB-WM	5 Melodies	3 layers	3 layers : ●R ●A ●G
ST45ML-USB-WA	5 Alarms	4 layers	4 layers : ●R ●A ●G ●B
		5 layers	5 layers : ●R ●A ●G ●B ●W



Ordering Specification

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

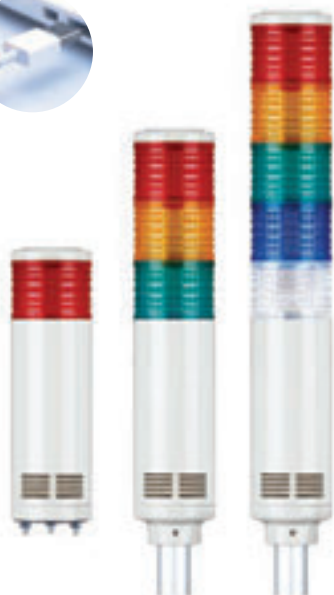
※ Mount brackets are available for the pole mount type(ST45L-USB series) only.

ST56(M)EL-USB

Ø56mm USB LED Tower Lights



Connected to PC USB port without power supply unit



ST56(M)EL-USB series

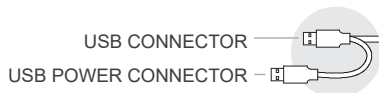


70mm lens height model is available upon request (Model number : ST56(M)L-USB)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



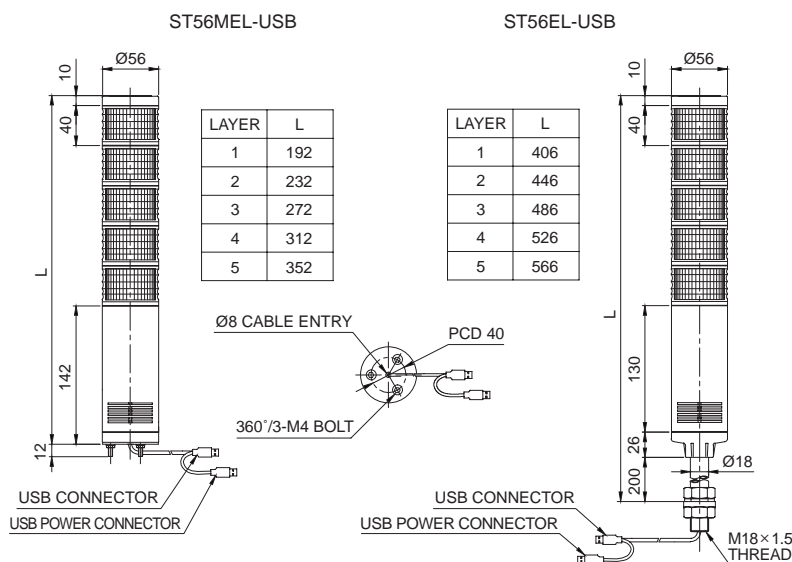
ST56EL-USB Ø56mm Pole Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST56EL-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R
ST56EL-USB-WS	5 Warning sounds		2 layers : ●R ●G
ST56EL-USB-WM	5 Melodies		3 layers : ●R ●A ●G
ST56EL-USB-WA	5 Alarms		4 layers : ●R ●A ●G ●B
			5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



ST56MEL-USB Ø56mm Direct Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST56MEL-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R
ST56MEL-USB-WS	5 Warning sounds		2 layers : ●R ●G
ST56MEL-USB-WM	5 Melodies		3 layers : ●R ●A ●G
ST56MEL-USB-WA	5 Alarms		4 layers : ●R ●A ●G ●B
			5 layers : ●R ●A ●G ●B ●W



Customization

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



Ordering Specification

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

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

ST80(M)EL-USB

Ø80mm USB LED Tower Lights



Connected to PC USB port without power supply unit



ST80(M)EL-USB series

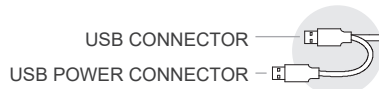


70mm lens height model is available upon request
(Model number : ST80(M)L-USB)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



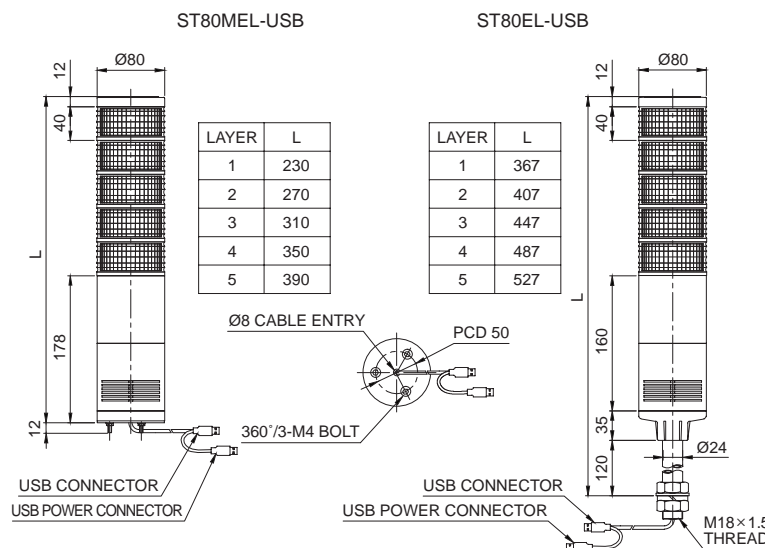
ST80EL-USB Ø80mm Pole Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST80EL-USB-BZ	5 Buzzer sounds	1 layer	1 layer : ●R
ST80EL-USB-WS	5 Warning sounds	2 layers	2 layers : ●R ●G
ST80EL-USB-WM	5 Melodies	3 layers	3 layers : ●R ●A ●G
ST80EL-USB-WA	5 Alarms	4 layers	4 layers : ●R ●A ●G ●B
		5 layers	5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



ST80MEL-USB Ø80mm Direct Mount USB LED Tower Light

Model number	Layer	Certificate	Color
ST80MEL-USB-BZ	5 Buzzer sounds	1 layer	1 layer : ●R
ST80MEL-USB-WS	5 Warning sounds	2 layers	2 layers : ●R ●G
ST80MEL-USB-WM	5 Melodies	3 layers	3 layers : ●R ●A ●G
ST80MEL-USB-WA	5 Alarms	4 layers	4 layers : ●R ●A ●G ●B
		5 layers	5 layers : ●R ●A ●G ●B ●W



Customization

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



Ordering Specification

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

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

STDEL-USB

USB LED Steady/ Flashing Tower Light & Electric Horn Combination



USB controllable high signal sound



STDEL-USB

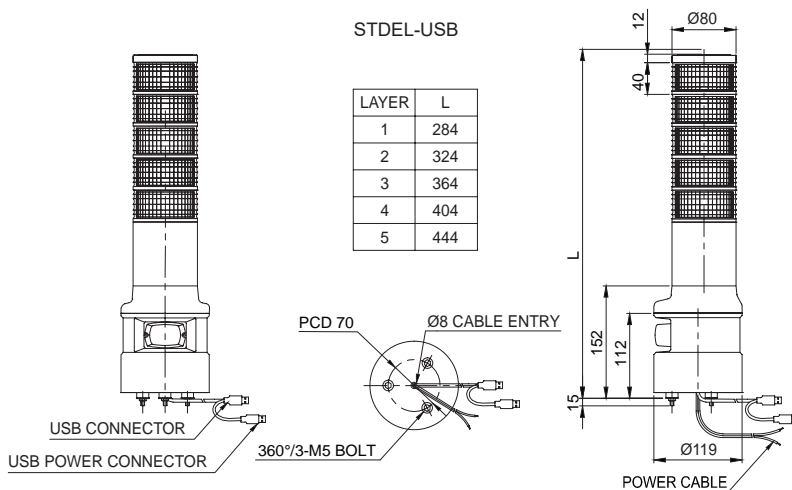
STDEL-USB Ø80mm USB Steady/ Flashing Tower Light & Electric Combination

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

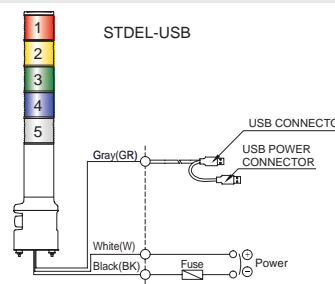


Technical Diagram

(Units : mm)

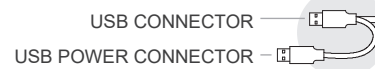


Wiring Instructions



Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- USB Cable :



Connect both USB connector and USB power connector to PC



Customization

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



Ordering Specification

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

QT50(M)L-USB

Ø50mm USB LED Tower Lights



QT50(M)L-USB series

Product of LED Strobe, LED Simulated revolving module

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

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

Mounting Bracket

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

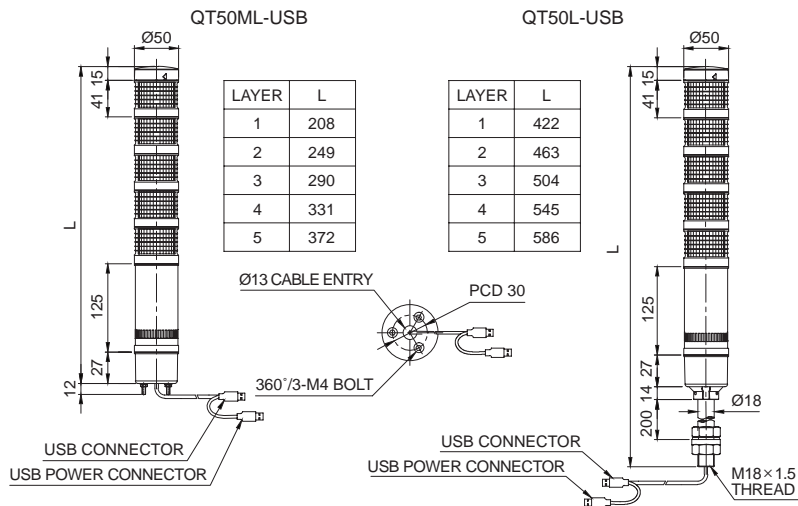
※ Please refer to page 190-195 for detailed dimensions.

QT50L-USB Ø50mm Pole Mount USB Tower Light

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

• Modules : Cover + LED Modules + USB Module + Base Module(BS) + Pole Module(PB)

Technical Diagram (Units : mm)



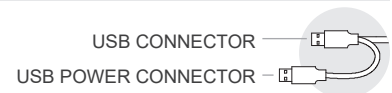
QT50ML-USB Ø50mm Direct Mount USB Tower Light

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

• Modules : Cover + LED Modules + USB Module + Base Module(BS)

Wiring Instructions

- Connect both USB connector and USB power connector to PC



Customization

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



Ordering Specification

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

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

QT70(M)L-USB

Ø70mm USB LED Tower Lights



QT70(M)L-USB series

Product of LED Strobe, LED Simulated revolving module

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

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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

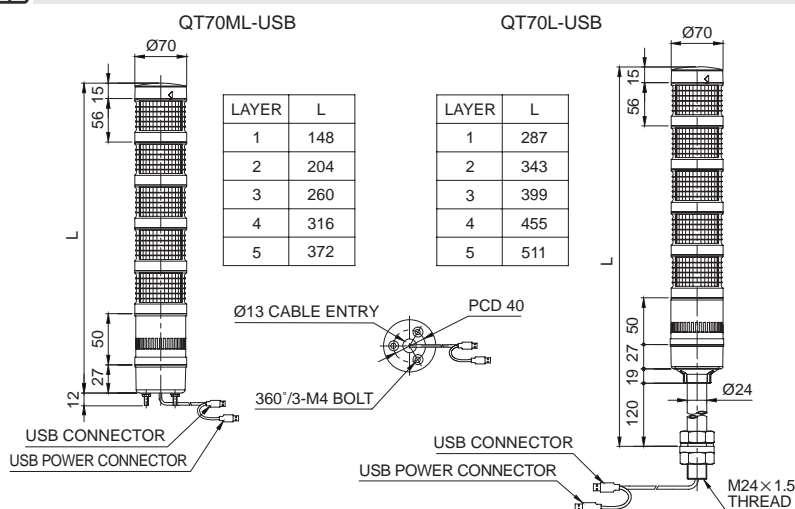
QT70L-USB Ø70mm Pole Mount USB Tower Light

Model number	Layer	Certificate	Color
QT70L-USB-BZ	1 layer	CE	1 layer : ●R
QT70L-USB-WS	2 layers		2 layers : ●R ●G
QT70L-USB-WM	3 layers		3 layers : ●R ●A ●G
QT70L-USB-WA	4 layers		4 layers : ●R ●A ●G ●B
QT70L-USB-WA	5 layers		5 layers : ●R ●A ●G ●B ●W

• Modules : Cover + LED Modules + USB Module + Base Module(BS) + Pole Module(PB)

Technical Diagram

(Units : mm)



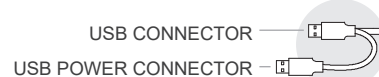
QT70ML-USB Ø70mm Direct Mount USB Tower Light

Model number	Layer	Certificate	Color
QT70ML-USB-BZ	1 layer	CE	1 layer : ●R
QT70ML-USB-WS	2 layers		2 layers : ●R ●G
QT70ML-USB-WM	3 layers		3 layers : ●R ●A ●G
QT70ML-USB-WA	4 layers		4 layers : ●R ●A ●G ●B
QT70ML-USB-WA	5 layers		5 layers : ●R ●A ●G ●B ●W

• Modules : Cover + LED Modules + USB Module + Base Module(BS)

Wiring Instructions

- Connect both USB connector and USB power connector to PC



Customization

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



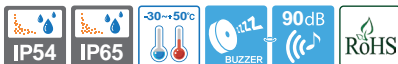
Ordering Specification

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

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

QTG50(M)L-USB

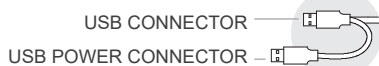
Ø50mm USB LED Tower Lights



QTG50(M)L-USB

Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

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



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45

Common Specifications

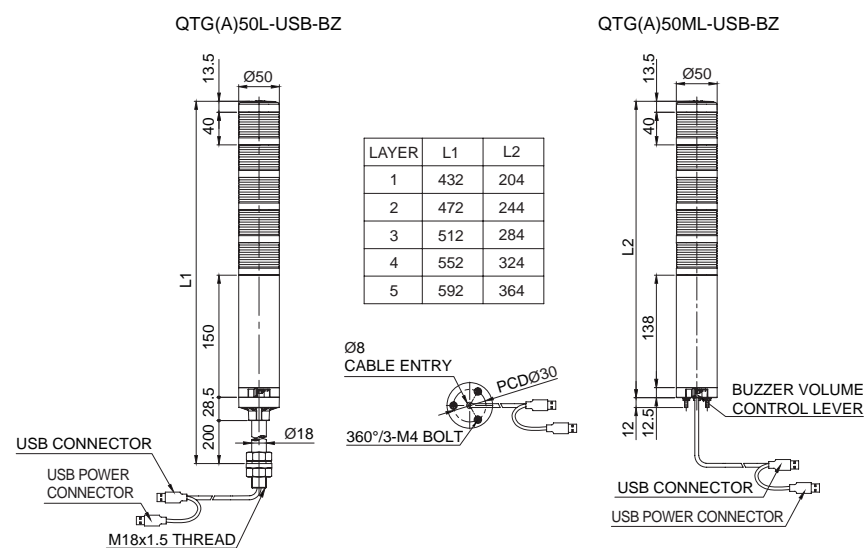
- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprise of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- When two or more USB products are used in one PC, it can be made to order specification
- Buzzer sound output : Max. 90dB at 1m
- Max. Two layers are activated simultaneously
- Compliant with RoHS directive
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)

QTG50(M)L-USB Ø50mm USB Tower Light

Model number	Layer	Certificate	Color
QTG50(M)L-USB-BZ QTGA50(M)L-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R 2 layers : ●R ●G 3 layers : ●R ●A ●G 4 layers : ●R ●A ●G ●B 5 layers : ●R ●A ●G ●B ●W

Technical Diagram

(Units : mm)

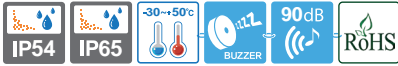


Ordering Specification

QTG50L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> QTG50L-USB-BZ QTG50ML-USB-BZ QTGA50L-USB-BZ QTGA50ML-USB-BZ 		<ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White 		<ul style="list-style-type: none"> None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

QTG60(M)L-USB

Ø60mm USB LED Tower Lights



QTG60(M)L-USB Ø60mm USB Tower Light

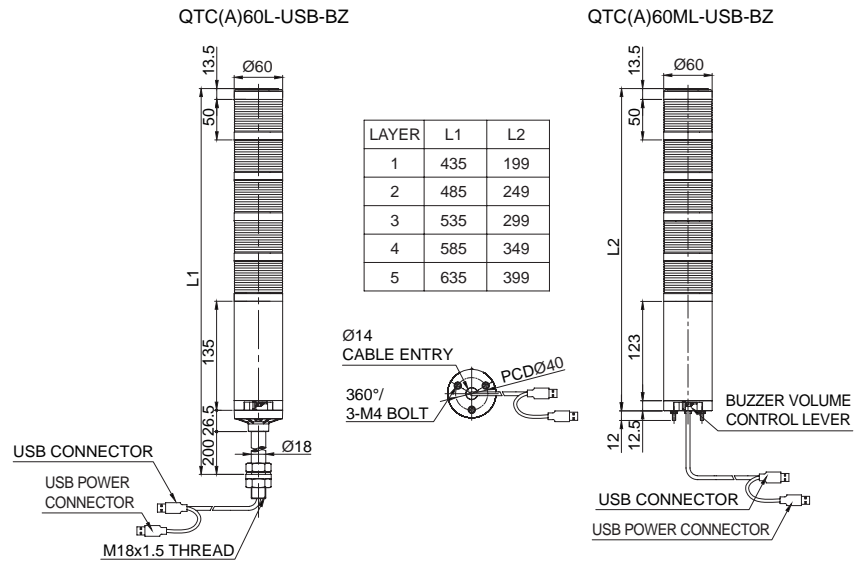
Model number	Layer	Certificate	Color
QTG60(M)L-USB-BZ QTGA60(M)L-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R 2 layers : ●R ●G 3 layers : ●R ●A ●G 4 layers : ●R ●A ●G ●B 5 layers : ●R ●A ●G ●B ●W



QTG60(M)L-USB

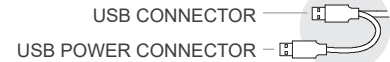
Technical Diagram

(Units : mm)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Customization

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



Mounting Bracket

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

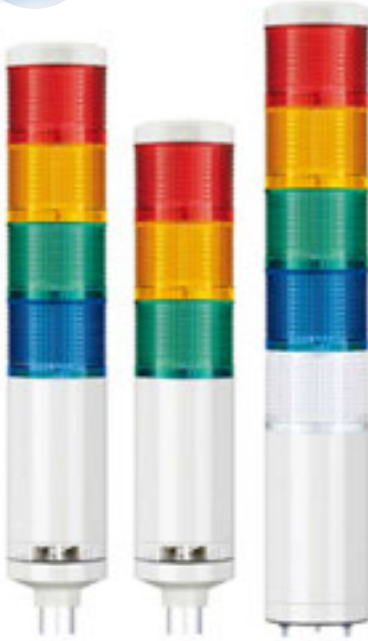
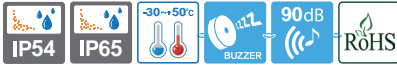
※ Please refer to page 190-195 for detailed dimensions.

Ordering Specification

QTG60L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> QTG60L-USB-BZ QTG60ML-USB-BZ QTGA60L-USB-BZ QTGA60ML-USB-BZ 		<ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White 		<ul style="list-style-type: none"> None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

QTG70(M)L-USB

Ø70mm USB LED Tower Lights



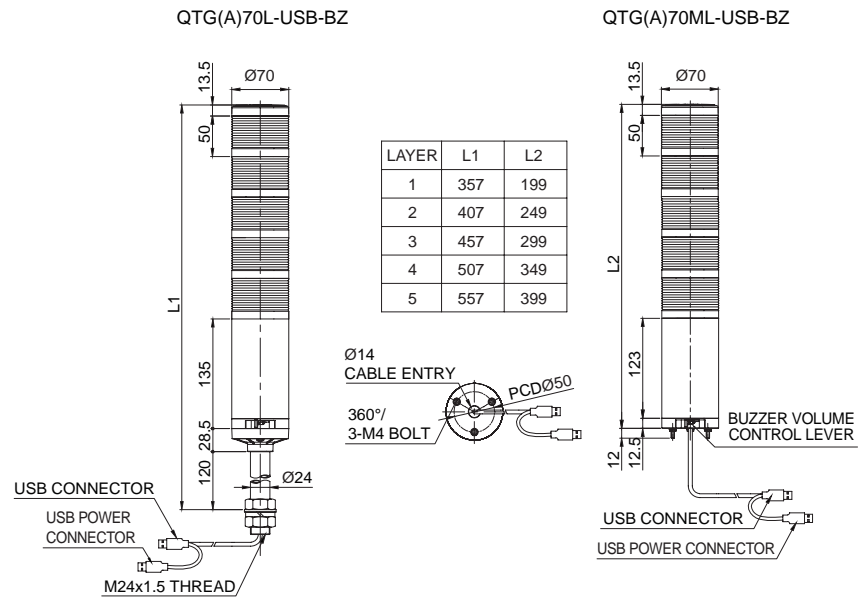
QTG70(M)L-USB

QTG70(M)L-USB Ø70mm USB Tower Light

Model number	Layer	Certificate	Color
QTG70(M)L-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R
QTGA70(M)L-USB-BZ			2 layers : ●R ●G
			3 layers : ●R ●A ●G
			4 layers : ●R ●A ●G ●B
			5 layers : ●R ●A ●G ●B ●W

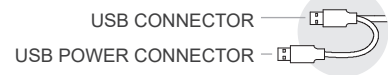
Technical Diagram

(Units : mm)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Customization

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



Wall Mount Bracket TWS80



Wall Mount Bracket TWA80

Mounting Bracket

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

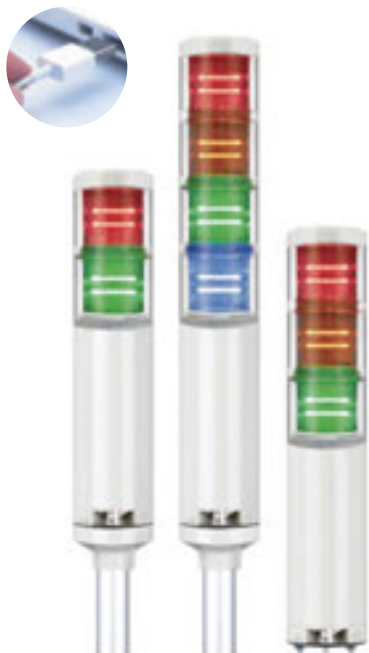
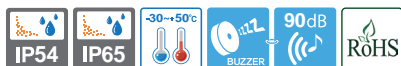
※ Please refer to page 190-195 for detailed dimensions.

Ordering Specification

QTG70L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTG70L-USB-BZ • QTG70ML-USB-BZ • QTGA70L-USB-BZ • QTGA70ML-USB-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24

QTC50(M)L-USB

Ø50mm USB LED Tower Lights



QTC50(M)L-USB

Common Specifications

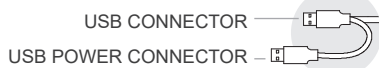
- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprise of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- When two or more USB products are used in one PC, it can be made to order specification
- Buzzer sound output : - Max. 90dB at 1m
- Max. Two layers are activated simultaneously
- Compliant with RoHS directive
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)

QTC50(M)L-USB Ø50mm USB Tower Light

Model number	Layer	Certificate	Color
QTC50(M)L-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R
QTC50(M)L-USB-BZ			2 layers : ●R ●G
			3 layers : ●R ●A ●G
			4 layers : ●R ●A ●G ●B
			5 layers : ●R ●A ●G ●B ●W

Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

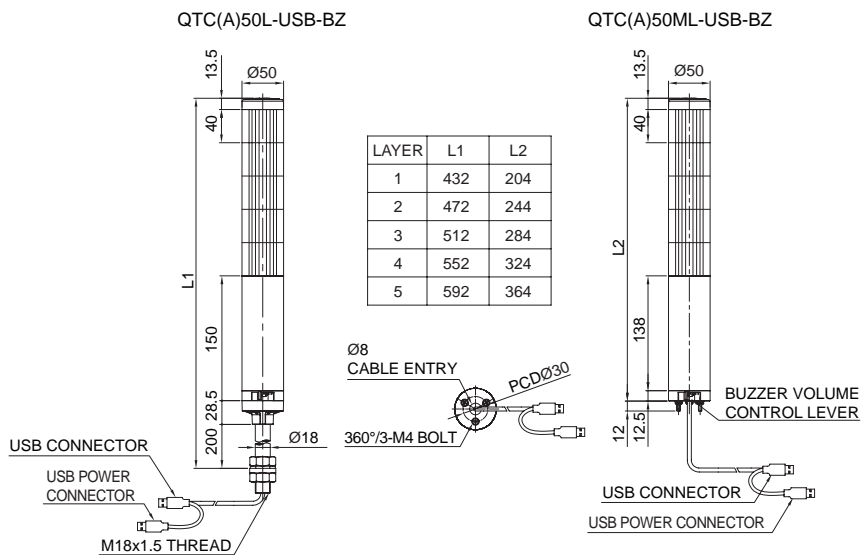
- Customized color arrangement available
- Customized pole length available
- Wall mount bracket available



Wall Mount Bracket TWS45 Wall Mount Bracket TWA45

Technical Diagram

(Units : mm)

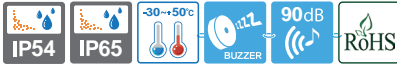


Ordering Specification

QTC50L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
• QTC50L-USB-BZ		• 1-1 layer		• R-Red		• None
• QTC50ML-USB-BZ		• 2-2 layers		• A-Amber		• Standard
• QTCA50L-USB-BZ		• 3-3 layers		• G-Green		• Bracket
• QTCA50ML-USB-BZ		• 4-4 layers		• B-Blue		-LB18 -LW18
		• 5-5 layers		• W-White		-QZ18 -SZ18
						-QL18 -SL18
						-QLA18

QTC60(M)L-USB

Ø60mm USB LED Tower Lights



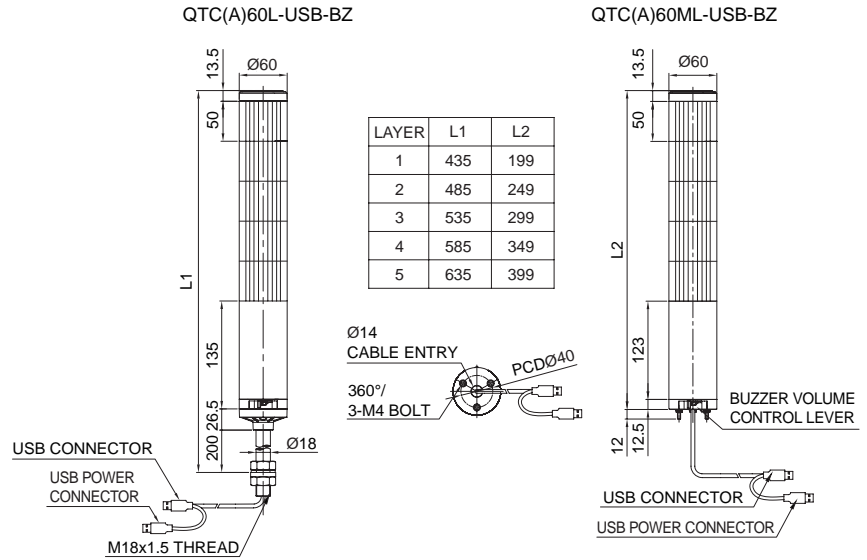
QTC60(M)L-USB

QTC60(M)L-USB Ø60mm USB Tower Light

Model number	Layer	Certificate	Color
QTC60(M)L-USB-BZ	1 layer	CE	1 layer : ●R
QTC60(M)L-USB-BZ	2 layers		2 layers : ●R ●G
QTC60(M)L-USB-BZ	3 layers		3 layers : ●R ●A ●G
QTC60(M)L-USB-BZ	4 layers		4 layers : ●R ●A ●G ●B
QTC60(M)L-USB-BZ	5 layers		5 layers : ●R ●A ●G ●B ●W

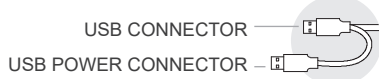
Technical Diagram

(Units : mm)



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

Customization

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

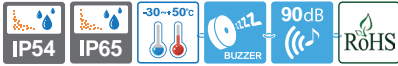


Ordering Specification

QTC60L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> QTC60L-USB-BZ QTC60ML-USB-BZ QTC60L-USB-BZ QTC60ML-USB-BZ 		<ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White 		<ul style="list-style-type: none"> None -Standard Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

QTC70(M)L-USB

Ø70mm USB LED Tower Lights

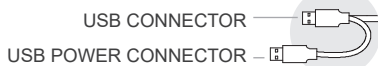


QTC70(M)L-USB



Wiring Instructions

- Connect both USB connector and USB power connector to PC



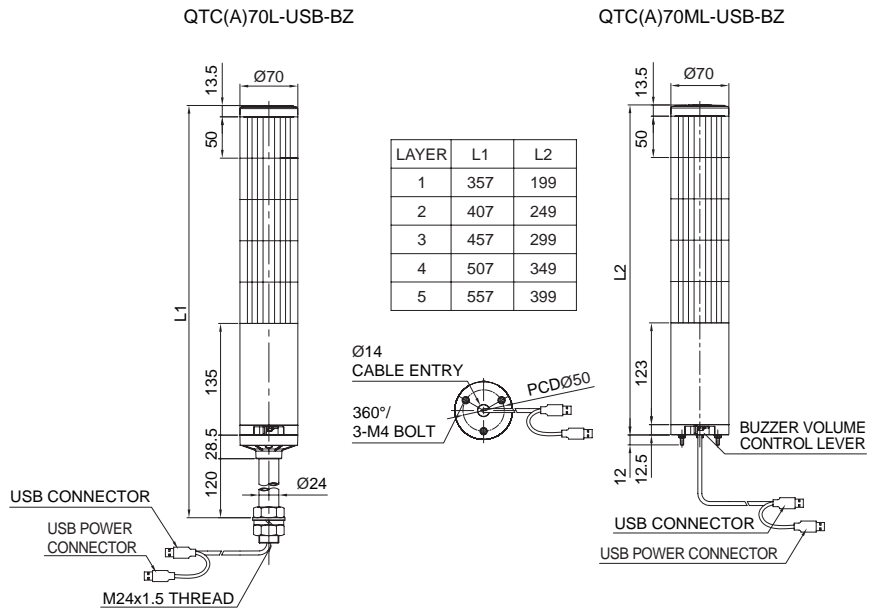
QTC70(M)L-USB Ø70mm USB Tower Light

Model number	Layer	Certificate	Color
QTC70(M)L-USB-BZ	5 Buzzer sounds	CE	1 layer : ●R
QTC70(M)L-USB-BZ			2 layers : ●R ●G
QTC70(M)L-USB-BZ			3 layers : ●R ●A ●G
QTC70(M)L-USB-BZ			4 layers : ●R ●A ●G ●B
QTC70(M)L-USB-BZ			5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



Mounting Bracket

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



Customization

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

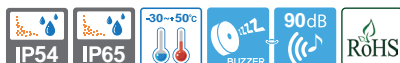


Ordering Specification

QTC70L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTC70L-USB-BZ • QTC70ML-USB-BZ • QTC70L-USB-BZ • QTC70ML-USB-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24

QTR50(M)L-USB

Ø50mm USB LED Tower Lights

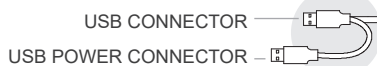


QTR50(M)L-USB



Wiring Instructions

- Connect both USB connector and USB power connector to PC



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



Customization

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



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45



Common Specifications

- The LED tower light that is fully controllable by the PC application program of a PC via a USB port connection
- The USB communication cable is comprised of VCC, D-, D+, GND, and Shield
- Uses 2 DC 5V/500mA rated Personal Computer (PC) USB for its power
- Available on hosts that support USB 1.1 or higher
- Provides MS Runtime libraries for developers to utilize on various PC applications
- Built-in 5 buzzer tones
- Software controls the steady/flashing function
- USB control port and power supply port are provided with product
- The number of activated LED lights are limited to the capacity of USB port current
- When two or more USB products are used in one PC, it can be made to order specification
- Buzzer sound output : - Max. 90dB at 1m
- Max. Two layers are activated simultaneously
- Compliant with RoHS directive
- Supported OS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported libraries : VC++, VB, Delphi(32bit only), C#(64bit only)



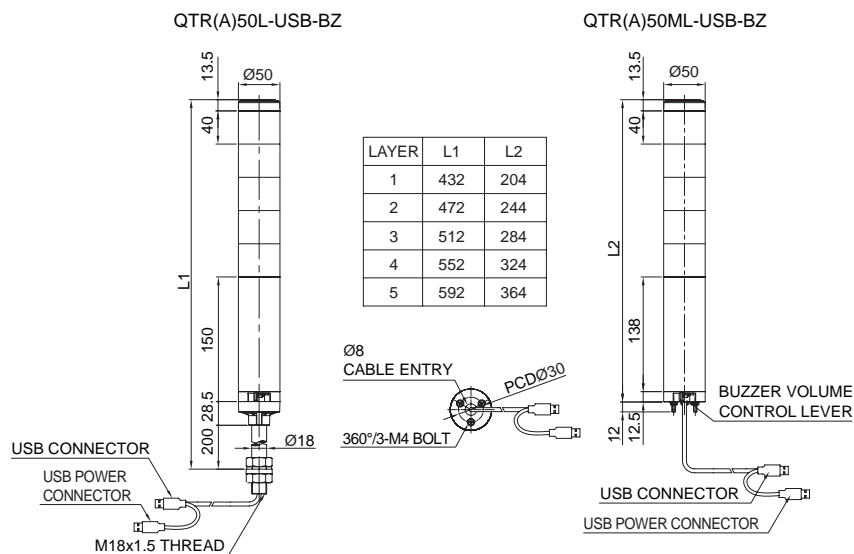
QTR50(M)L-USB Ø50mm USB Tower Light

Model number	Layer	Certificate	Color
QTR50(M)L-USB-BZ	1 layer	-	1 layer : ●R
QTRA50(M)L-USB-BZ	2 layers		2 layers : ●R ●G
	3 layers		3 layers : ●R ●A ●G
	4 layers		4 layers : ●R ●A ●G ●B
	5 layers		5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)

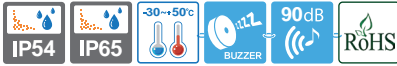


Ordering Specification

QTR50L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> QTR50L-USB-BZ QTR50ML-USB-BZ QTRA50L-USB-BZ QTRA50ML-USB-BZ 		<ul style="list-style-type: none"> 1-1 layer 2-2 layers 3-3 layers 4-4 layers 5-5 layers 		<ul style="list-style-type: none"> ● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White 		<ul style="list-style-type: none"> None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

QTR60(M)L-USB

Ø60mm USB LED Tower Lights

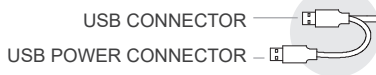


QTR60(M)L-USB



Wiring Instructions

- Connect both USB connector and USB power connector to PC



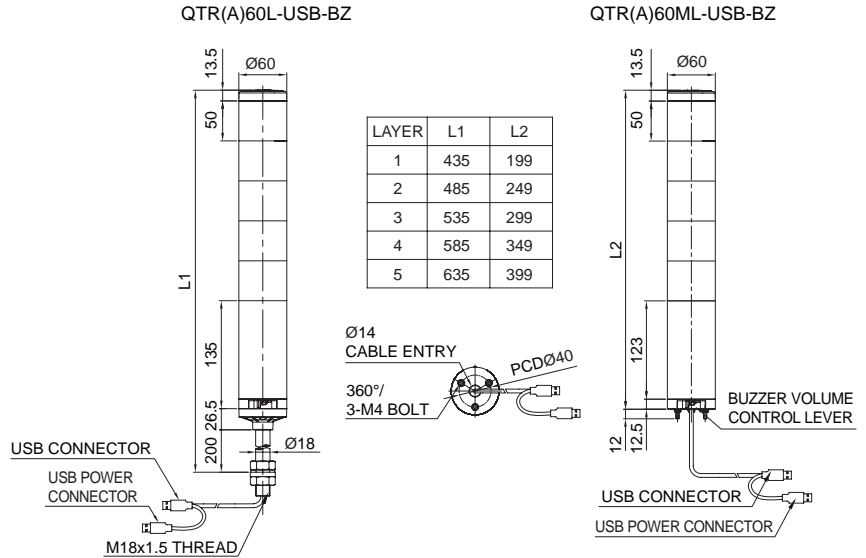
QTR60(M)L-USB Ø60mm USB Tower Light

Model number	Layer	Certificate	Color
QTR60(M)L-USB-BZ	1 layer	-	1 layer : ●R
QTRA60(M)L-USB-BZ	2 layers		2 layers : ●R ●G
	3 layers		3 layers : ●R ●A ●G
	4 layers		4 layers : ●R ●A ●G ●B
	5 layers		5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



Mounting Bracket

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



Customization

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

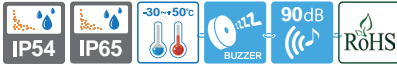


Ordering Specification

QTR60L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTR60L-USB-BZ • QTR60ML-USB-BZ • QTRA60L-USB-BZ • QTRA60ML-USB-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTR70(M)L-USB

Ø70mm USB LED Tower Lights

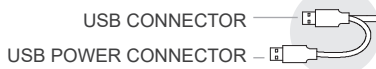


QTR70(M)L-USB



Wiring Instructions

- Connect both USB connector and USB power connector to PC



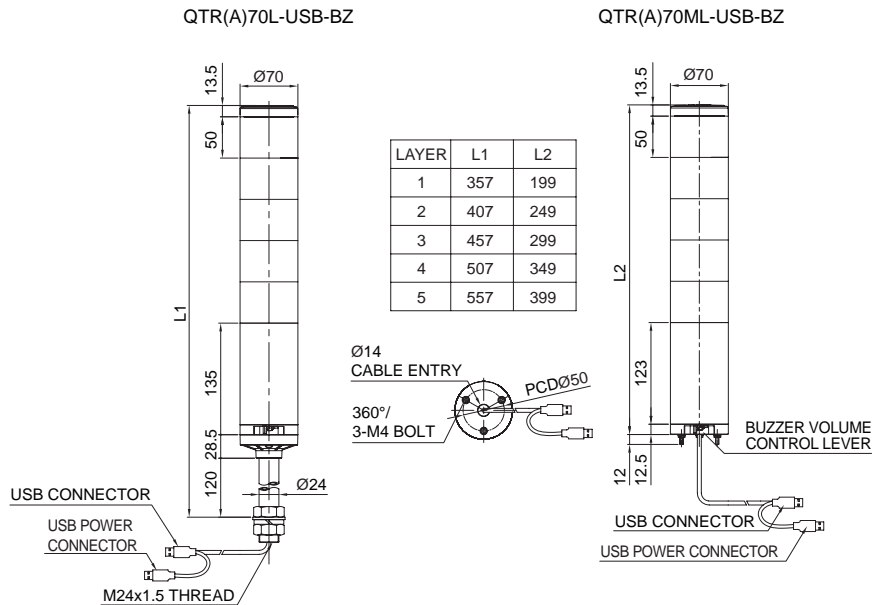
QTR70(M)L-USB Ø70mm USB Tower Light

Model number	Layer	Certificate	Color
QTR70(M)L-USB-BZ	1 layer	-	1 layer : ●R
QTRA70(M)L-USB-BZ	2 layers		2 layers : ●R ●G
	3 layers		3 layers : ●R ●A ●G
	4 layers		4 layers : ●R ●A ●G ●B
	5 layers		5 layers : ●R ●A ●G ●B ●W



Technical Diagram

(Units : mm)



Mounting Bracket

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



Customization

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



Ordering Specification

QTR70L-USB-BZ	-	3	-	RAG	-	LW18
[Model number]		[Layer]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTR70L-USB-BZ • QTR70ML-USB-BZ • QTRA70L-USB-BZ • QTRA70ML-USB-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24

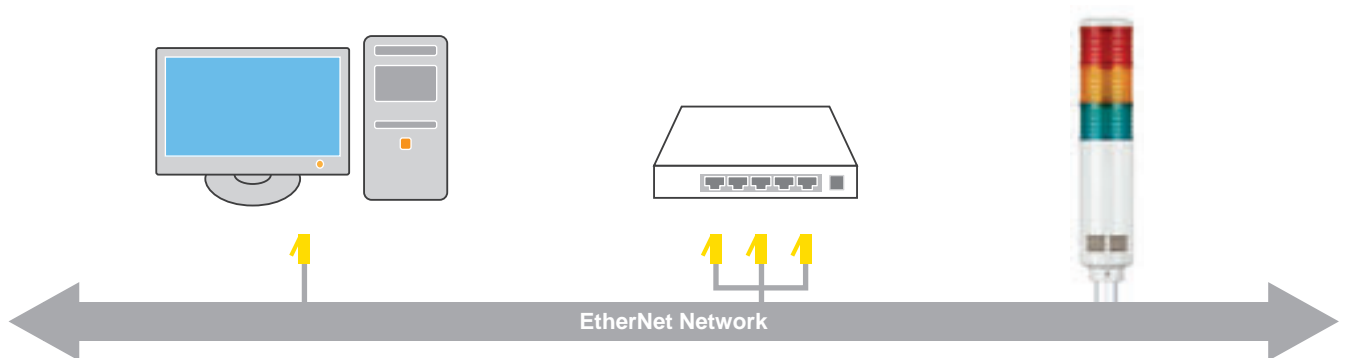
Technical Data of Ethernet LED Tower Light

Controllable LED tower light connected to the application program in the PC using a PC and ETN(Ethernet) interface



- ETN tower light is a controllable LED tower light connected to the application program in the PC using a PC and ETN(Ethernet) Interface.
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC.
- Provides MS runtime libraries for developers(VC ++, VB, Delphi(32bit), c#(64bit)) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose.
- Supported OS(32bit 64bit) : Windows XP, Windows 7, Windows 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)
- Communication speed : 10M/ half duplex method

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



1. What is Ethernet?

Ethernet is the most popular physical layer LAN technology in use today. It defines the number of conductors that are required for a connection, the performance thresholds that can be expected, and provides the framework for data transmission. A standard Ethernet network can transmit data at a rate up to 10 Megabits per second (10 Mbps). The Institute for Electrical and Electronic Engineers developed an Ethernet standard known as IEEE Standard 802.3. This standard defines rules for configuring an Ethernet network and also specifies how the elements in an Ethernet network interact with one another. By adhering to the IEEE standard, network equipment and network protocols can communicate efficiently.

2. What is TCP/IP Protocol?

TCP/IP (Transmission Control Protocol/Internet Protocol) is the basic communication language or protocol of the Internet. It can also be used as a communications protocol in a private network (either an intranet or an extranet)

TCP/IP is a two-layer program. The higher layer, Transmission Control Protocol, manages the assembling of a message or file into smaller packets that are transmitted over the Internet and received by a TCP layer that reassembles the packets into the original message. The lower layer, Internet Protocol, handles the address part of each packet so that it gets to the right destination. Each gateway computer on the network checks this address to see where to forward the message. TCP/IP communication is primarily point-to-point, meaning each communication is from one point (or host computer) in the network to another point or host computer.

Technical Data of Ethernet LED Tower Light

3. IP Address format

The format of an IP address is a 32-bit numeric address written as four numbers separated by periods. Each number can be zero to 255. For example, 203.172.12.7 could be an IP address. An IP address is divided into network address and computer address, and classified as Class A, B, C, D, and E depending on the size of the network or the number of host. Of these, only Class A, B, C are given to a general user.

The IP address what we are about to test is classified as C Class.



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



IP address assignment by class

GROUP	1 st address	2 nd address	3 rd address	4 th address
A CLASS	1-127	0.0.0-255.255.255		
B CLASS	128.0-191.255		0.0-255.255	
C CLASS	192.0.0-223.255.255			0-255

4. What is MAC Address?

MAC address (Media Access Control) is a global unique identifier assigned to network devices. In other words, you can use the Mac Address IP address to find a separate devices. It delivers Data Packet just like a postman delivers a letter.

So what would be the difference between IP address and Mac address? Both IP address and MAC address are the address of its destination. IP address is simply the address while Mac address is a social security number of people living in the house IP address can be changed dynamically, but Mac address only has one unique address per device.

- Mac Address : an address for computers to communicate with each other, and there is no other PC that has a same Mac Addr as yours.
- IP Address: needed routing when other computers are searching for your computer address, that is an address of your computer for others to search.

An IP address is assigned to every device on a network so that device can be located on the network. The internet is a network, and Every device on an TCP/IP network must have a unique IP address. IP addresses are assigned, either automatically by DHCP, or by manual configuration. That number is used by the network routing equipment so that when you ask for a page from the site, that request is routed to the right server. MAC addresses are typically used only to direct packets in the device-to-device portion of a network transaction. That means that your computer's MAC address will be in network packets only until the next device in the chain. If you have a router, then your machine's MAC address will go no further than that. Your router's MAC address will show up in packets sent further upstream, until that too is replaced by the MAC address of the next device.

5. What is PORT?

A port (noun) is a "logical connection place" and specifically, using the Internet's protocol and TCP/IP, the way a client's program specifies a particular server program on a computer in a network. Higher-level applications that use TCP/IP such as the Web protocol, Hypertext Transfer Protocol, have ports with preassigned numbers. These are known as "well-known ports" that have been assigned by the Internet Assigned Numbers Authority (IANA). Other application processes are given port numbers dynamically for each connection. When a service (server program) initially starts, it is said to be bound to its designated port number. As any client's program wants to use that server, it also must request to bind to the designated port number.

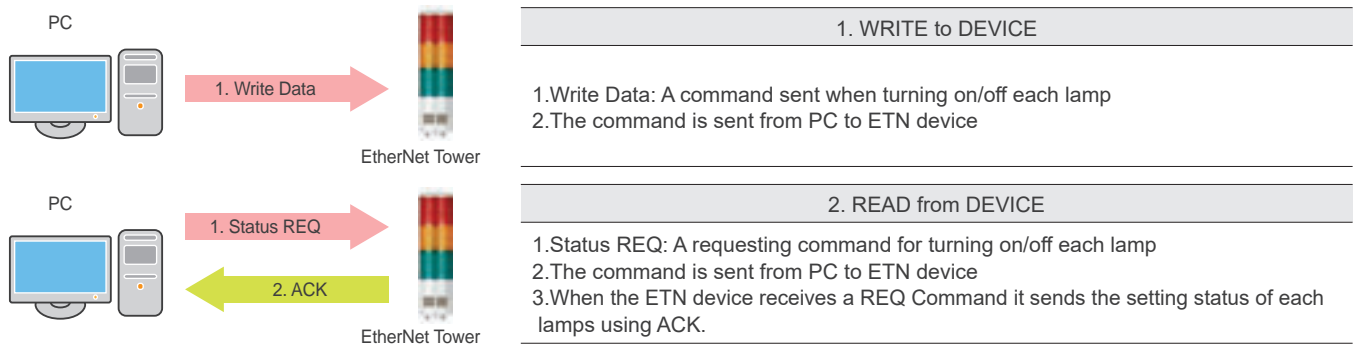
Port numbers are from 0 to 65535. Ports 0 to 1024 are reserved for use by certain privileged services. For the HTTP service, port 80 is defined as a default and it does not have to be specified in the Uniform Resource Locator.

Technical Data of Ethernet LED Tower Light

6. What is Socket Program?

It is to implement a program to send and receive data between host PCs that are apart from each other in network programming. However, the connection between host PCs are far away so a device is that has a feature of connecting the two at a software level is required, and that device is the socket. Generally, the terms “socket programming” and “network programming” have the same meaning. We have provided a library file for users so that they can easily use the socket program.

※ The figure below show the sequence of our ETN Tower Lamp.



7. Applying the Ethernet Device

1. Proceed to check the current network and the assigned IP address of your PC.
Start(run) -> CMD – ipconfig/all

```

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.10.101
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.10.1
    
```

2. Because the ETN tower light is connected to a hub with the PC that is same as the picture on the front page, ETN tower light and the PC are now connected with the same network.
3. Download the library file, test programs and manuals from the CD provided or from our website.
4. When you unzip the file, there will be a file with the same name below. The instructions are listed inside the file.

Download

[PDF Catalogue](#)

[Operating Manual](#)

➔

[Test Program](#)

[Manual & Library](#)

1.Dev. ETN Program Sample
 Program Sample needed when developing
 (x32bit/x64bit compatibility)

2.How to use
 Instructions of how to use the product and library file

Technical Data of Ethernet LED Tower Lamp

5. When you unzip “ETN TEST PROGRAM.zip” file, following folders are created.

1. ETN Test Program

A program for setting IP before testing the ETN device

2. IP Set Program

A program for setting testing the ETN device

6. Run the “Mac_Setting.exe” program that is inside the IP Set Program Folder .

- When the program is running such as the right figure, click the “Mac Find” button in the “Find Mac Address / Select” section
- MAC Address of the connected device appears when you click the Device List combo box . (If the Mac Addr does not appear, make sure that the connection status or the power supply is functional and then retry.)
- Select the MAC Addr of the device you want to change, and then click on the “Read” button.
- Check the information and settings from the “Mac config status”
- Set the value of users network information identified in the previous chapter (subnet mask, gateway) in each text box, and set a different IP_Addr than your PC Apply the settings by pressing the Write button
- The port is set to “20000” by default and the port number can be changed if necessary
- Reconnect After Disconnecting the power from the tower light.



7. ETN Test Program Files folder includes the followings.



Test Program

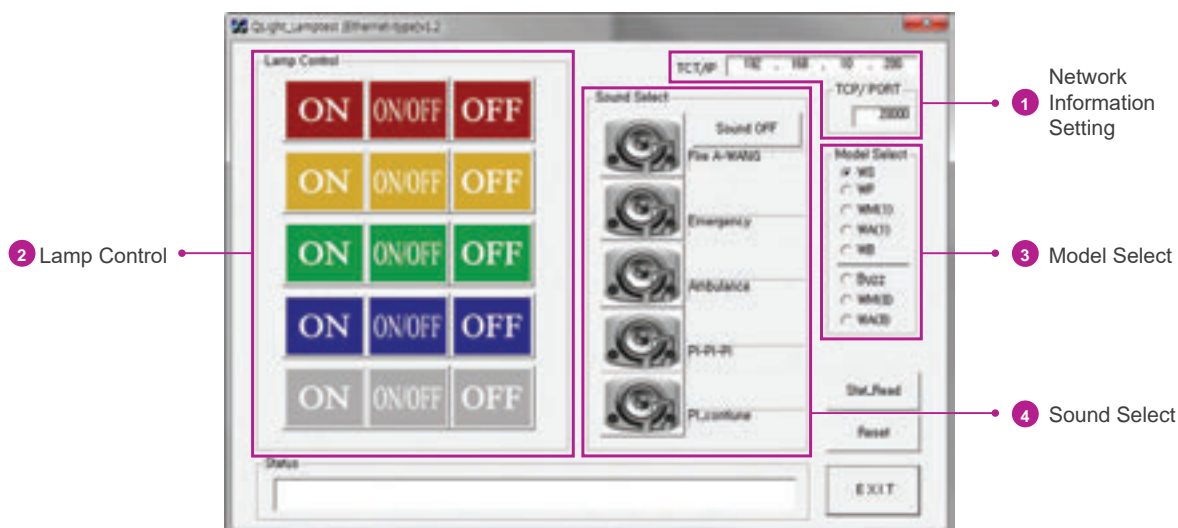


Library required for the test program

8. Run the “QLight_Lamptest_TCP” program.

Article	Detailed specification
1 Network Information Setting	- Input port on TCP/PORT and IP address on TCP/IP that set on Ethernet tower lights
2 Lamp Control	- ON : Click the button Lamp ON - ON/OFF : Click the button Lamp Flash - OFF : Click the button Lamp OFF
3 Model Select	- WS : 5 warning sounds(mono) - WP : 5 special warning sounds(mono) - WM(1) : 5 Melodies(mono) - WA(1) : 5 alarms(mono) - WB : Software Buzzer 5 sounds(speaker type) - Buzzer : 5 Buzzer sounds
4 Sound Select	- Select 5 sounds based on model which is fixed on “Model select

- User can select appropriate sound pattern by using ‘Model select’ menu. There’re WS, WP, WM, WA and WB sound patterns and user can choose the option when placing order.



Specification List for Ethernet LED Tower Lights



Model number(series)	ST45ML-ETN	ST45L-ETN	ST56MEL-ETN	ST56EL-ETN	ST80MEL-ETN	ST80EL-ETN
Voltage	DC12V, DC24V AC110V-AC220V	DC12V, DC24V AC110V-AC220V	DC12V, DC24V AC110V-AC220V	DC12V, DC24V AC110V-AC220V	DC12V, DC24V AC110V-AC220V	DC12V, DC24V AC110V-AC220V
Dimension (mm)	Diameter	Ø45	Ø45	Ø56	Ø56	Ø80
	Height	244-404	458-618	257-517	471-731	230-390
	Depth					
Materials	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS	Lens-AS Housing-ABS
Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
	LED Simulated revolving					
Sound & volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 Signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m	Max 85dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QLA18	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QLA24
Protection rating	IP23	IP23	IP23	IP23	IP23	IP23
Certificates	-	-	CE, KCC	CE, KCC	-	-
Customization	Customized color arrangements, Wall mount brackets	Customized color arrangements, Customized pole length	Customized color arrangements, 70mm lens height, Wall mount brackets	Customized color arrangements, 70mm lens height, Customized pole length	Customized color arrangements, 70mm lens height, Wall mount brackets	Customized color arrangements, 70mm lens height, Customized pole length
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Model number(series)	QT50ML-ETN	QT50L-ETN	QT70ML-ETN	QT70L-ETN
Voltage	DC12V, DC24V	DC12V, DC24V	DC12V, DC24V	DC12V, DC24V
Dimension (mm)	Diameter	Ø50	Ø50	Ø70
	Height	208-372	422-586	148-372
	Depth			
Materials	Lens-PC Housing-PC	Lens-PC Housing-PC	Lens-PC Housing-PC	Lens-PC Housing-PC
Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing			
	LED Steady			
	LED Steady/Flashing	•	•	•
	LED Strobe	•	•	•
	LED Simulated revolving	•	•	•
Sound & volume	1 buzzer sound	Max 90dB at 1m	Max 90dB at 1m	Max 90dB at 1m
	5 Signal sounds	Max 85dB at 1m	Max 85dB at 1m	Max 90dB at 1m
Layer color change	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QLA24
Protection rating	IP54	IP54	IP54	IP54
Certificates	CE	CE	CE	CE
Customization	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized Pole Length	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Wall mount brackets	Customized color arrangements, Beige color, LED strobe, LED simulated revolving, Customized Pole Length
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Specification List for Ethernet LED Tower Lights



Model number(series)	QTG50(M)L-ETN	QTG60(M)L-ETN	QTG70(M)L-ETN	QTC50(M)L-ETN	QTC60(M)L-ETN	QTC70(M)L-ETN
Voltage	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V
Dimension (mm)	Diameter	Ø50	Ø60	Ø70	Ø50	Ø60
	Height	116-364	126-399	126-399	116-364	126-399
	Depth					
Materials	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens, filter lens-PC Housing-ABS	Lens, filter lens-PC Housing-ABS	Lens, filter lens-PC Housing-ABS
	Layer	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing					
	LED Steady					
	LED Steady/Flashing	•	•	•	•	•
	LED Strobe					
Sound & volume	LED Simulated revolving					
	1 buzzer sound 5 Signal sounds	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m	Max. 90dB at 1m
Layer color change	Yes	Yes	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Direct mount	Direct mount	Direct mount	Direct mount	Direct mount
Bracket	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates	CE	CE	CE	CE	CE	CE
Customization	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets	Customized color arrangements, Customized pole length, Wall mount brackets
Page	P150-151	P152	P153	P154-155	P156	P157



Model number(series)	QTR50(M)L-ETN	QTR60(M)L-ETN	QTR70(M)L-ETN
Voltage	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V
Dimension (mm)	Diameter	Ø50	Ø60
	Height	116-364	126-399
	Depth		
Materials	Lens-PC Housing-ABS	Lens-PC Housing-ABS	Lens-PC Housing-ABS
	Layer	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/Flashing		
	LED Steady		
	LED Steady/Flashing	•	•
	LED Strobe		
Sound & volume	LED Simulated revolving		
	1 buzzer sound 5 Signal sounds	Max. 90dB at 1m	Max. 90dB at 1m
Layer color change	Yes	Yes	Yes
Mount bracket	Direct mount	Direct mount	Direct mount
Bracket	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB18, LW18, QZ18, SZ18, QL18, QLA18	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates			
Customization	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets	Customized color arrangements, Black housing, Customized pole length, Wall mount brackets
Page	P158-159	P160	P161

ST45(M)L-ETN

Ø45mm Ethernet LED Tower Lights



Can Control Remotely Through Internet or Local Area Network



ST45(M)L-ETN series

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

Customization

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



Wall Mount Bracket TWS45



Wall Mount Bracket TWA45

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

- Software controls the steady/flashing function
- Please refer to page 160 for detailed information about selectable sound patterns.
- Ethernet port and power cable are provided with product
- Volume : Buzzer – Max 90dB at 1m/ Signal Sound – Max 85dB at 1m

ST45(M)L-ETN Ø45mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
ST45L-ETN ST45ML-ETN	1	DC12V DC24V AC110V-220V	0.200A 0.135A Max. 0.053A	-	• R-Red
	2	DC12V DC24V AC110V-220V	0.210A 0.145A Max. 0.056A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.220A 0.155A Max. 0.058A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.230A 0.165A Max. 0.061A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.240A 0.175A Max. 0.055A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Signal Sound Current (Per Layer)

Voltage	DC12V	DC24V	AC110V-220V
Current	0.200A	0.135A	Max. 0.053A

Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Ordering Specification

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

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

ST56(M)EL-ETN

Ø56mm Ethernet LED Tower Lights



Remote control through internet or local area network



ST56(M)EL-ETN series



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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

ST56EL-ETN Ø56mm Ethernet Tower Light

• Certificates : CE, KCC Compliant

Model number	Layer	Voltage	Current	Certificate	Color
ST56EL-ETN ST56MEL-ETN	1	DC12V DC24V AC110V-220V	0.215A 0.150A Max. 0.060A	 (ST56EL-ETN only) DC24V, AC110V-V230V only	• R-Red
	2	DC12V DC24V AC110V-220V	0.245A 0.170A Max. 0.065A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.275A 0.190A Max. 0.070A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.305A 0.210A Max. 0.075A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.335A 0.230A Max. 0.080A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Signal Sound Current (Per Layer)

Voltage	DC12V	DC24V	AC110V-220V
Current	0.215A	0.150A	Max. 0.060A

Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Customization

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



Ordering Specification

ST56EL-ETN-WS	-	3	-	24	-	RAG	-	QZ18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • ST56EL-ETN-BZ • ST56EL-ETN-WS • ST56EL-ETN-WM • ST56EL-ETN-WA • ST56MEL-ETN-BZ • ST56MEL-ETN-WS • ST56MEL-ETN-WM • ST56MEL-ETN-WA 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QLA18

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

ST80(M)EL-ETN

Ø80mm Ethernet LED Tower Lights



Remote control through internet or local area network



ST80(M)EL-ETN series



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

Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.

ST80EL-ETN Ø80mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
ST80EL-ETN ST80MEL-ETN	1	DC12V DC24V AC110V-220V	0.230A 0.155A Max. 0.060A	-	● R-Red
	2	DC12V DC24V AC110V-220V	0.260A 0.180A Max. 0.065A		● R-Red ● G-Green
	3	DC12V DC24V AC110V-220V	0.290A 0.205A Max. 0.075A		● R-Red ● A-Amber ● G-Green
	4	DC12V DC24V AC110V-220V	0.320A 0.230A Max. 0.085A		● R-Red ● A-Amber ● G-Green ● B-Blue
	5	DC12V DC24V AC110V-220V	0.350A 0.255A Max. 0.090A		● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White

Signal Sound Current (Per Layer)

Voltage	DC12V	DC24V	AC110V-220V
Current	0.230A	0.155A	Max. 0.060A

Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Customization

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



Ordering Specification

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

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

QT50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Remote control through internet or local area network



QT50(M)L-ETN series

QT50L-ETN Ø50mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QT50L-ETN QT50ML-ETN	1	DC12V DC24V	0.210A 0.110A	CE DC24V only	• R-Red
	2	DC12V DC24V	0.280A 0.150A		• R-Red • G-Green
	3	DC12V DC24V	0.350A 0.190A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V	0.420A 0.230A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V	0.490A 0.270A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Signal Sound Current (Per Layer)

Voltage	DC12V	DC24V
Current	0.210A	0.110A

Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Customization

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



Wall Mount Bracket
TWS45

Wall Mount Bracket
TWA45

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Ordering Specification

QT50L-ETN-WS	3	24	RAG	QZ18
[Model number]	[Layer]	[Voltage]	[Color]	[Mount bracket]
<ul style="list-style-type: none"> • QT50L-ETN-BZ • QT50L-ETN-WS • QT50L-ETN-WM • QT50L-ETN-WA • QT50ML-ETN-BZ • QT50ML-ETN-WS • QT50ML-ETN-WM • QT50ML-ETN-WA 	<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 	<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220 -AC110V-220V 	<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 	<ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QLA18

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

QT70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Remote control through internet or local area network



QT70(M)L-ETN series

QT70L-ETN Ø70mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QT70L-ETN QT70ML-ETN	1	DC12V DC24V	0.210A 0.110A	CE DC24V only	● R-Red
	2	DC12V DC24V	0.290A 0.160A		● R-Red ● G-Green
	3	DC12V DC24V	0.370A 0.210A		● R-Red ● A-Amber ● G-Green
	4	DC12V DC24V	0.450A 0.260A		● R-Red ● A-Amber ● G-Green ● B-Blue
	5	DC12V DC24V	0.530A 0.310A		● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White

Signal Sound Current (Per Layer)

Voltage	DC12V	DC24V
Current	0.210A	0.110A

Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Customization

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



Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Ordering Specification

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

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

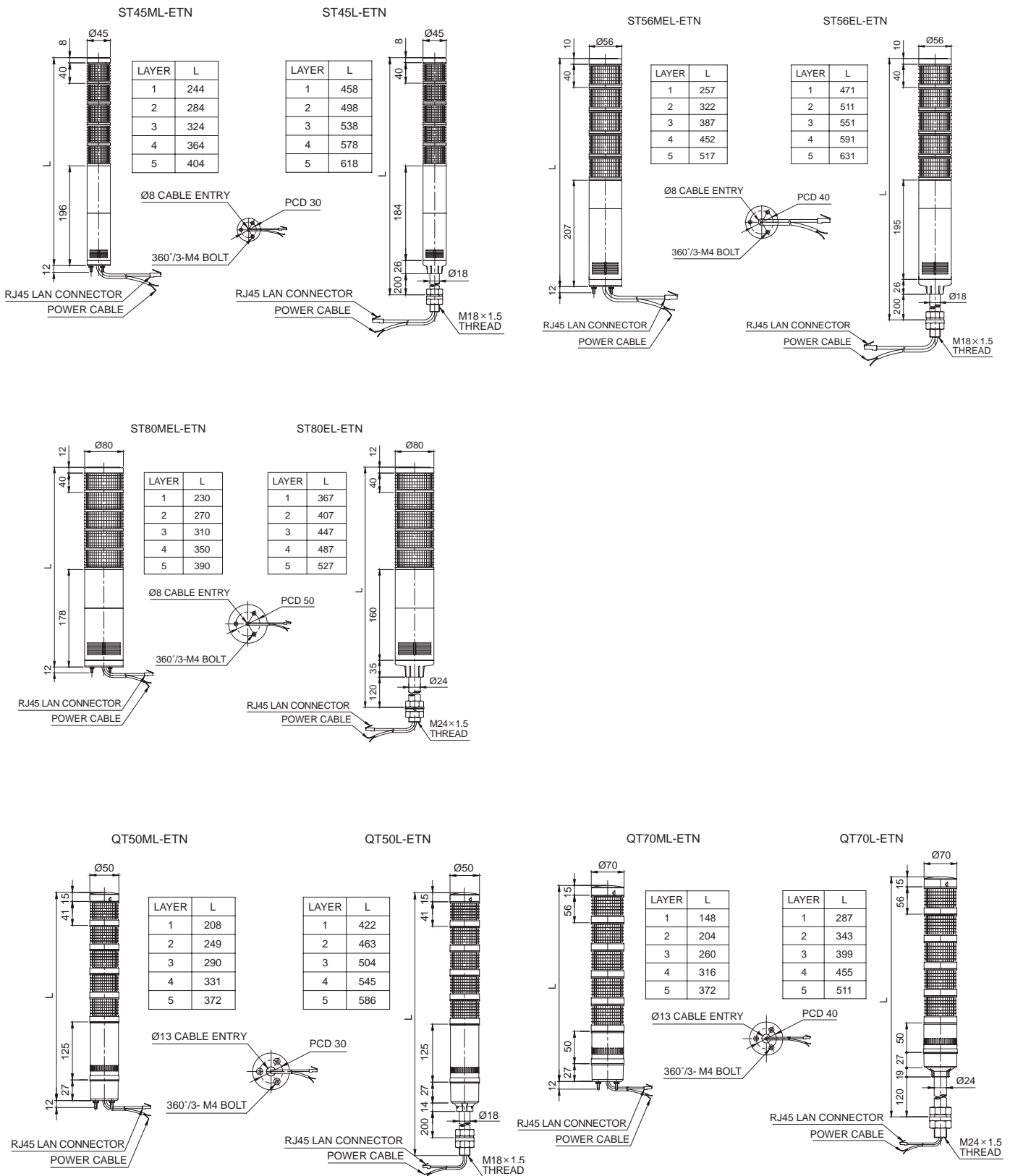
ST-ETN/ QT-ETN series

Ethernet LED Tower Lights



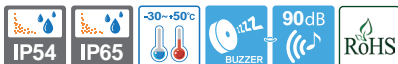
Technical Diagram

(Units : mm)



QTG50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTG50(M)L-ETN series

Common Specifications

- LED tower lamp capable of remote control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Brower) and TCP/IP protocol.
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC ++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- Communication speed : 10M/Half Duplex method
- Software controls the steady/flashing function
- Ethernet port and power cable are provided with product
- Buzzer sound output : - Max. 90dB at 1m
- Compliant with RoHS directive
- SupportedOS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)

QTG50(M)L-ETN Ø50mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTG50(M)L-ETN-BZ QTGA50(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.225A 0.155A Max. 0.070A	CE	• R-Red
	2	DC12V DC24V AC110V-220V	0.300A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.375A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.450A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.525A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Mounting Bracket

Standard	LB18	LW18	QZ18	SZ18	QL18	QLA18
Steel	Steel	PC	PC	Al	PC	PC

※ Please refer to page 190-195 for detailed dimensions.

Customization

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



Wall Mount Bracket
TWS45

Wall Mount Bracket
TWA45

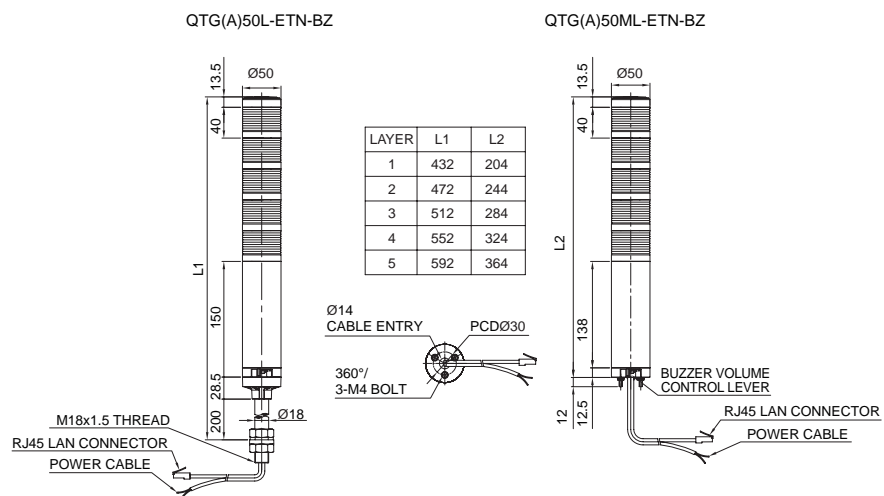
QTG50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Technical Diagram

(Units : mm)



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq) × 2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

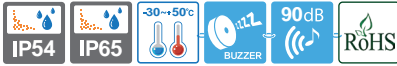


Ordering Specification

QTG50L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTG50L-ETN-BZ • QTG50ML-ETN-BZ • QTGA50L-ETN-BZ • QTGA50ML-ETN-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220-AC110V-220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None -Standard • Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -QLA18

QTG60(M)L-ETN

Ø60mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTG60(M)L-ETN

Mounting Bracket

Standard	LB18	LW18	QZ18
Steel	Steel	PC	PC
SZ18	QL18	QLA18	
Al	PC	PC	

* Please refer to page 190-195 for detailed dimensions.

Customization

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



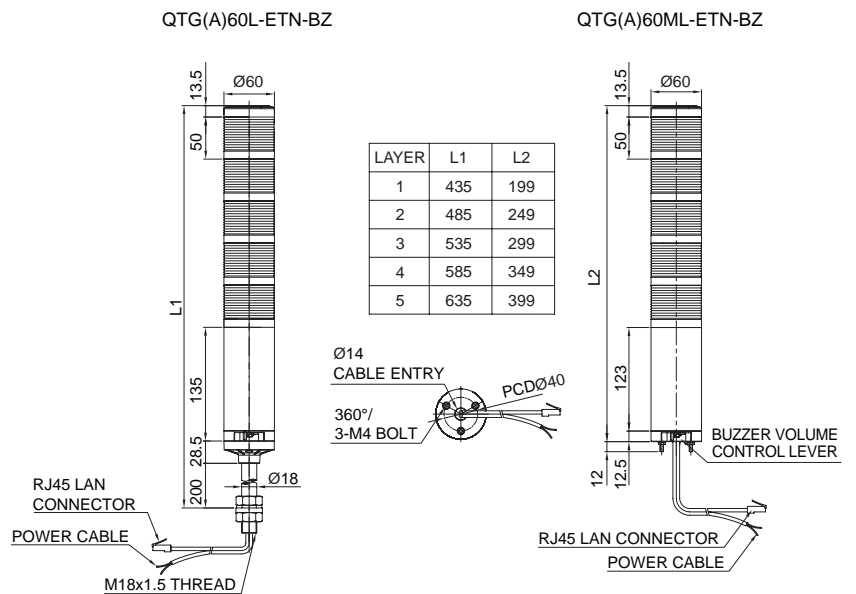
Wall Mount Bracket TWS45 Wall Mount Bracket TWA45

QTG60(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTG60(M)L-ETN-BZ QTGA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	CE	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram

(Units : mm)



Wiring Instructions

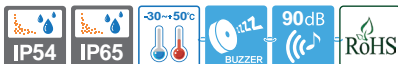
- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Ordering Specification

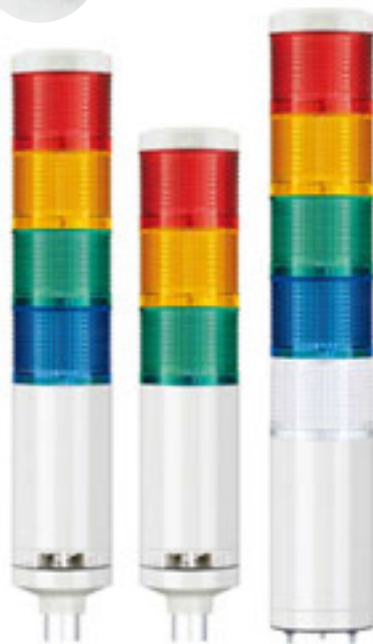
QTG60L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
• QTG60L-ETN-BZ • QTG60ML-ETN-BZ • QTGA60L-ETN-BZ • QTGA60ML-ETN-BZ		• 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers		• 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTG70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTG70(M)L-ETN

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

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



Wall Mount Bracket TWS80



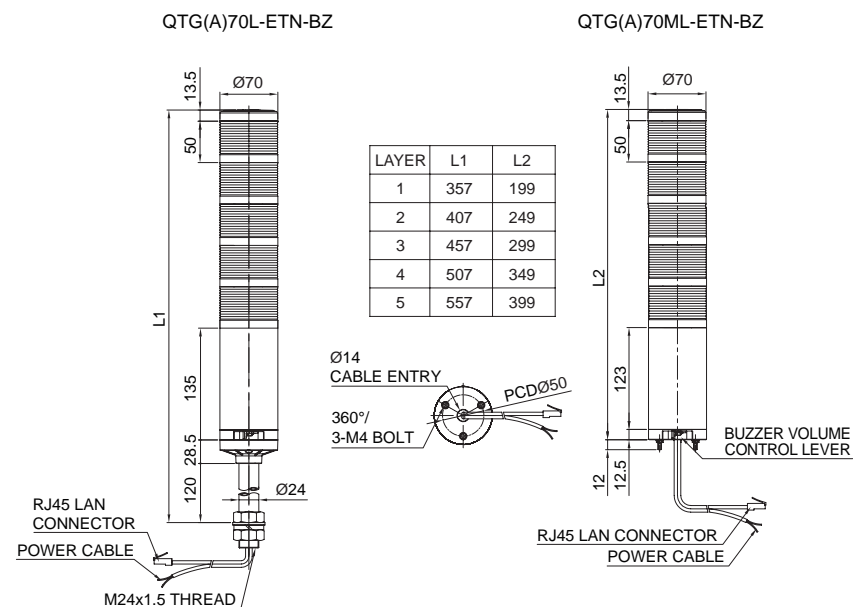
Wall Mount Bracket TWA80

QTG70(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTG60(M)L-ETN-BZ QTGA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	CE	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram

(Units : mm)



Wiring Instructions

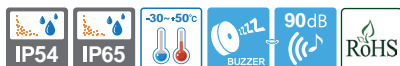
- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Ordering Specification

QTG70L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
• QTG70L-ETN-BZ • QTG70ML-ETN-BZ • QTGA70L-ETN-BZ • QTGA70ML-ETN-BZ		• 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers		• 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24

QTC50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTC50(M)L-ETN series



Common Specifications

- LED tower lamp capable of remote control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Brower) and TCP/IP protocol.
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC ++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- Communication speed : 10M/Half Duplex method
- Software controls the steady/flashing function
- Ethernet port and power cable are provided with product
- Buzzer sound output : - Max. 90dB at 1m
- Compliant with RoHS directive
- SupportedOS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)



QTC50(M)L-ETN Ø50mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTC50(M)L-ETN-BZ QTC50(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.225A 0.155A Max. 0.070A	CE	● R-Red
	2	DC12V DC24V AC110V-220V	0.300A 0.200A Max. 0.090A		● R-Red ● G-Green
	3	DC12V DC24V AC110V-220V	0.375A 0.245A Max. 0.110A		● R-Red ● A-Amber ● G-Green
	4	DC12V DC24V AC110V-220V	0.450A 0.290A Max. 0.130A		● R-Red ● A-Amber ● G-Green ● B-Blue
	5	DC12V DC24V AC110V-220V	0.525A 0.335A Max. 0.150A		● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White



Mounting Bracket

Standard	LB18	LW18	QZ18	SZ18	QL18	QLA18
Steel	Steel	PC	PC	Al	PC	PC

※ Please refer to page 190-195 for detailed dimensions.



Customization

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



Wall Mount Bracket
TWS45



Wall Mount Bracket
TWA45

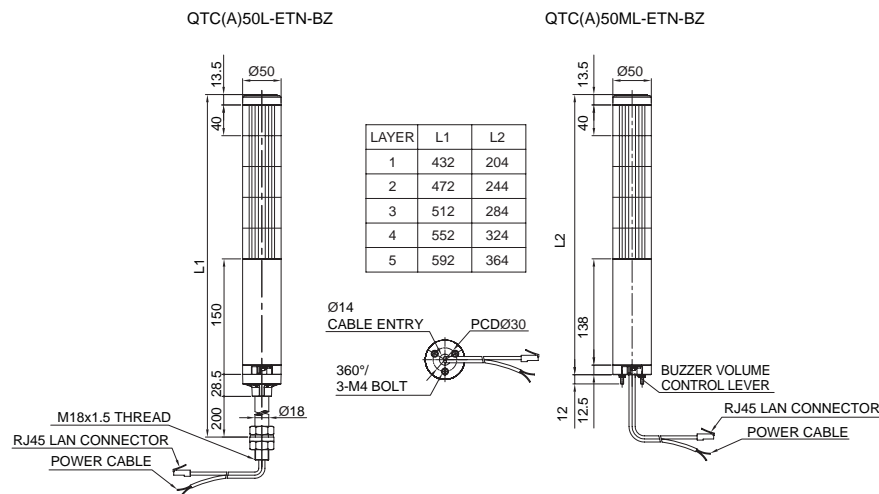
QTC50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Technical Diagram

(Units : mm)



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

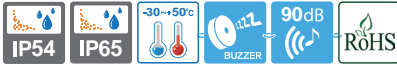


Ordering Specification

QTC50L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTC50L-ETN-BZ • QTC50ML-ETN-BZ • QTCA50L-ETN-BZ • QTCA50ML-ETN-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220-AC110V-220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTC60(M)L-ETN

Ø60mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTC60(M)L-ETN

Mounting Bracket			
Standard	LB18	LW18	QZ18
Steel	Steel	PC	PC
SZ18	QL18	QLA18	
AI	PC	PC	

* Please refer to page 190-195 for detailed dimensions.

Customization

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

Wall Mount Bracket
TWS45

Wall Mount Bracket
TWA45

QTC60(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTC60(M)L-ETN-BZ QTCA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	CE	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

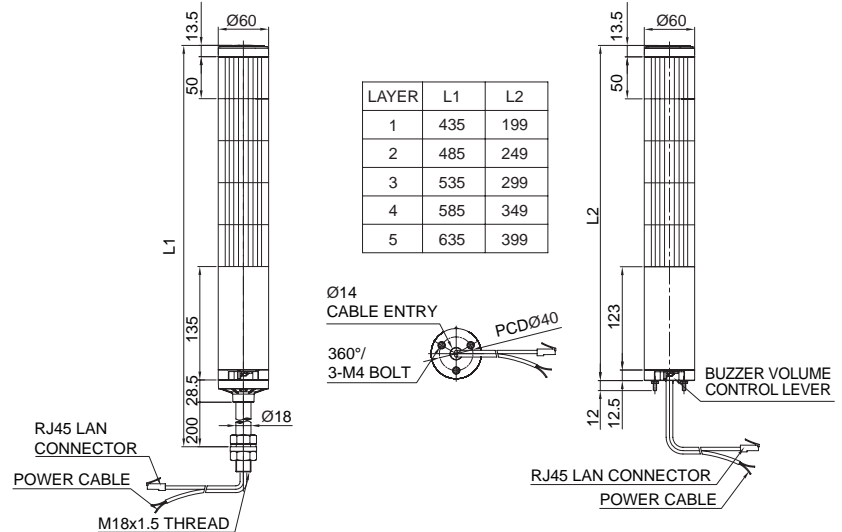


Technical Diagram

(Units : mm)

QTC(A)60L-ETN-BZ

QTC(A)60ML-ETN-BZ



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

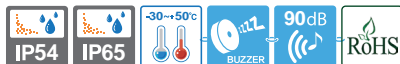


Ordering Specification

QTC60L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
• QTC60L-ETN-BZ • QTC60ML-ETN-BZ • QTCA60L-ETN-BZ • QTCA60ML-ETN-BZ		• 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers		• 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTC70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTC70(M)L-ETN

Mounting Bracket

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

* Please refer to page 190-195 for detailed dimensions.

Customization

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

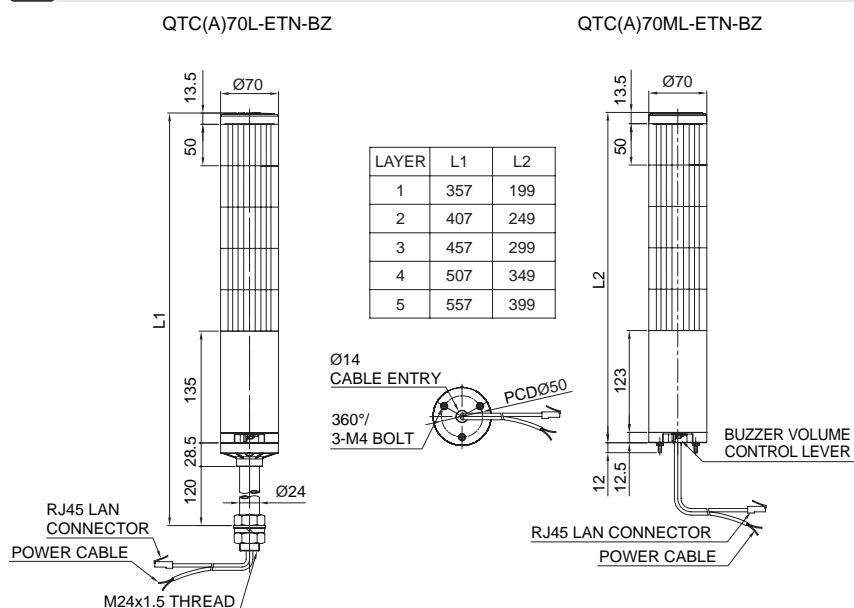


QTC70(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTC60(M)L-ETN-BZ QTCA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	CE	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

Technical Diagram

(Units : mm)



Wiring Instructions

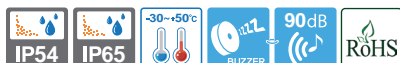
- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

Ordering Specification

QTC70L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
• QTC70L-ETN-BZ • QTC70ML-ETN-BZ • QTCA70L-ETN-BZ • QTCA70ML-ETN-BZ		• 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers		• 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None • -Standard • Bracket • -LB24 -LW24 • -QZ24 -SZ24 • -QL24 -SL24 • -QLA24

QTR50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTR50(M)L-ETN series



Common Specifications

- LED tower lamp capable of remote control using LAN communication
- ETN tower light is a controllable LED tower light connected to the application program in the PC supported with HTTP(Web Brower) and TCP/IP protocol.
- You can monitor or control the product from a remote location because it is controllable by using a web browser or application on a PC
- Provides MS runtime libraries for developers(VC ++, VB, Delphi) to utilize on various applications of a PC, and a sample program (VC++) is available for testing purpose
- Communication speed : 10M/Half Duplex method
- Software controls the steady/flashing function
- Ethernet port and power cable are provided with product
- Buzzer sound output : - Max. 90dB at 1m
- Compliant with RoHS directive
- SupportedOS(32bit/64bit) : Windows XP, Win 7, Win 10
- Supported Program : VC++, VB, Delphi(32bit only), C#(64bit only)



QTR50(M)L-ETN Ø50mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTR50(M)L-ETN-BZ QTRA50(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.225A 0.155A Max. 0.070A	-	• R-Red
	2	DC12V DC24V AC110V-220V	0.300A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.375A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.450A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.525A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White



Mounting Bracket

Standard	LB18	LW18	QZ18	SZ18	QL18	QLA18
Steel	Steel	PC	PC	Al	PC	PC

※ Please refer to page 190-195 for detailed dimensions.



Customization

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



Wall Mount Bracket
TWS45



Wall Mount Bracket
TWA45

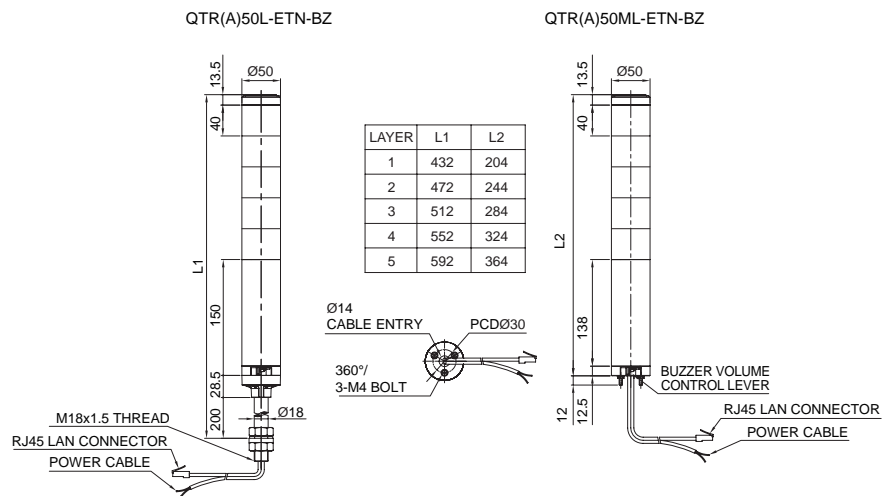
QTR50(M)L-ETN

Ø50mm Ethernet LED Tower Lights



Technical Diagram

(Units : mm)



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

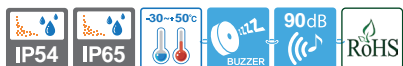


Ordering Specification

QTR50L-ETN-BZ [Model number]	-	3 [Layer]	-	24 [Voltage]	-	RAG [Color]	-	LW18 [Mount bracket]
<ul style="list-style-type: none"> • QTR50L-ETN-BZ • QTR50ML-ETN-BZ • QTRA50L-ETN-BZ • QTRA50ML-ETN-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220-AC110V-220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTR60(M)L-ETN

Ø60mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTR60(M)L-ETN



Mounting Bracket

Standard	LB18	LW18	QZ18
Steel	Steel	PC	PC
SZ18	QL18	QLA18	
AI	PC	PC	

* Please refer to page 190-195 for detailed dimensions.



Customization

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



Wall Mount Bracket TWS45

Wall Mount Bracket TWA45



QTR60(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTR60(M)L-ETN-BZ QTRA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	-	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White

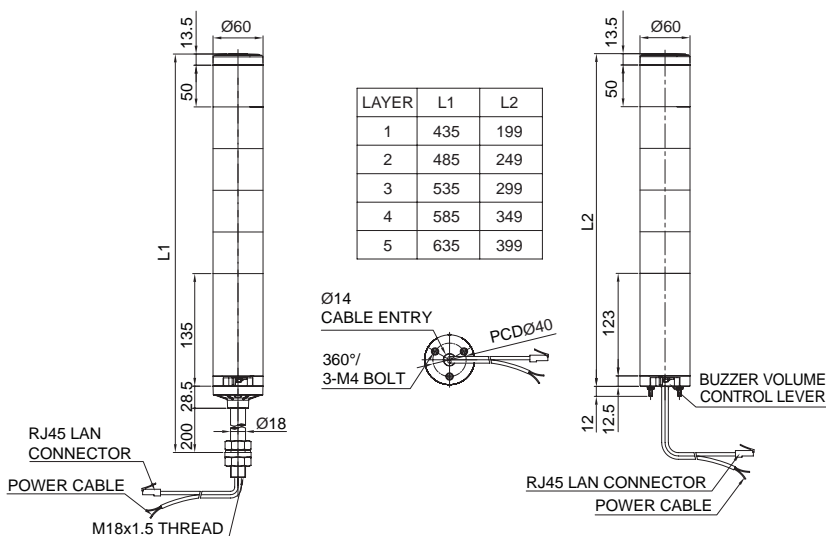


Technical Diagram

(Units : mm)

QTR(A)60L-ETN-BZ

QTR(A)60ML-ETN-BZ



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable

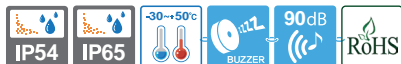


Ordering Specification

QTR60L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
• QTR60L-ETN-BZ • QTR60ML-ETN-BZ • QTRA60L-ETN-BZ • QTRA60ML-ETN-BZ		• 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers		• 12-DC12V • 24-DC24V • 110/220 • -AC110V-220V		• R-Red • A-Amber • G-Green • B-Blue • W-White		• None • -Standard • Bracket • -LB18 -LW18 • -QZ18 -SZ18 • -QL18 -SL18 • -QLA18

QTR70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Remote control through internet or local area network



QTR70(M)L-ETN

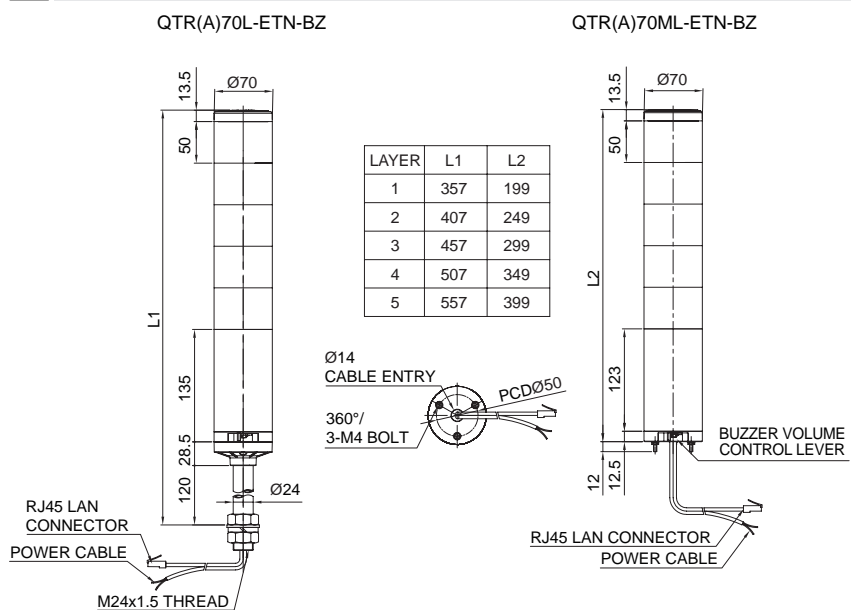
QTR70(M)L-ETN Ø60mm Ethernet Tower Light

Model number	Layer	Voltage	Current	Certificate	Color
QTR60(M)L-ETN-BZ QTRA60(M)L-ETN-BZ	1	DC12V DC24V AC110V-220V	0.245A 0.155A Max. 0.070A	-	• R-Red
	2	DC12V DC24V AC110V-220V	0.335A 0.200A Max. 0.090A		• R-Red • G-Green
	3	DC12V DC24V AC110V-220V	0.425A 0.245A Max. 0.110A		• R-Red • A-Amber • G-Green
	4	DC12V DC24V AC110V-220V	0.515A 0.290A Max. 0.130A		• R-Red • A-Amber • G-Green • B-Blue
	5	DC12V DC24V AC110V-220V	0.605A 0.335A Max. 0.150A		• R-Red • A-Amber • G-Green • B-Blue • W-White



Technical Diagram

(Units : mm)



Mounting Bracket

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

※ Please refer to page 190-195 for detailed dimensions.



Customization

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



QTR70(M)L-ETN

Ø70mm Ethernet LED Tower Lights



Wiring Instructions

- Apply properly rated voltage through the POWER CABLE
- Connect the RJ45 connector of the UTP cable into the PC's Ethernet port or router
- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- Power plug will be provided in case of AC type
- UTP cable : Category 5 cable



Ordering Specification

QTR70L-ETN-BZ	-	3	-	24	-	RAG	-	LW24
[Model number]		[Layer]		[Voltage]		[Color]		[Mount bracket]
<ul style="list-style-type: none"> • QTR70L-ETN-BZ • QTR70ML-ETN-BZ • QTRA70L-ETN-BZ • QTRA70ML-ETN-BZ 		<ul style="list-style-type: none"> • 1-1 layer • 2-2 layers • 3-3 layers • 4-4 layers • 5-5 layers 		<ul style="list-style-type: none"> • 12-DC12V • 24-DC24V • 110/220-AC110V-220V 		<ul style="list-style-type: none"> • R-Red • A-Amber • G-Green • B-Blue • W-White 		<ul style="list-style-type: none"> • None -Standard • Bracket -LB24 -LW24 -QZ24 -SZ24 -QL24 -SL24 -QLA24

CATALOGUE

Wireless Network System

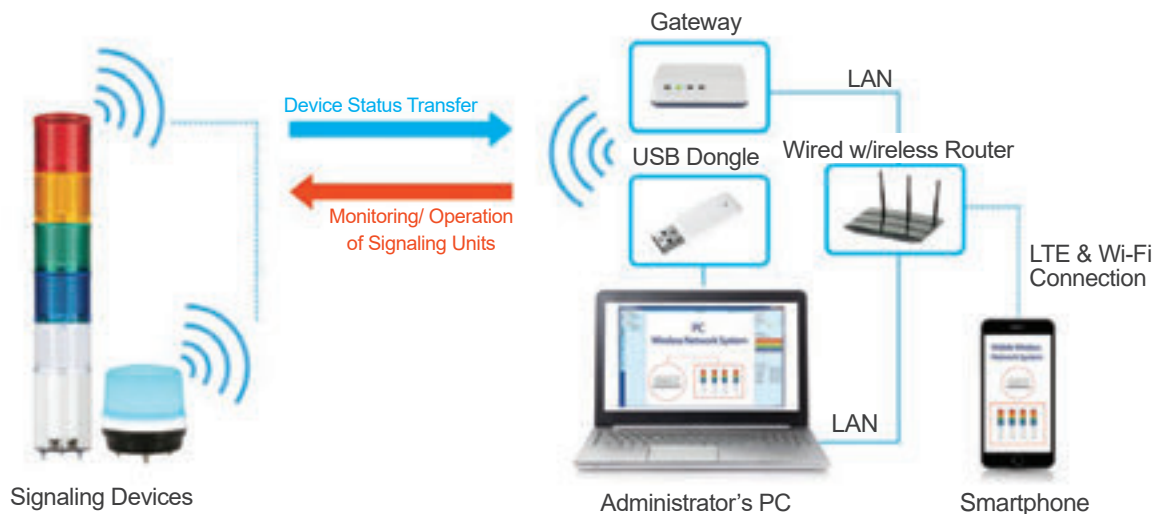
INNOVATION IN ALARM & SIGNAL



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Product Information	171

Wireless Network System Features

Wireless network system uses wireless network to remotely monitor and control the operation status of a signaling device through a PC or smartphone. By applying wireless communication between production equipment, users can build an advanced production system.

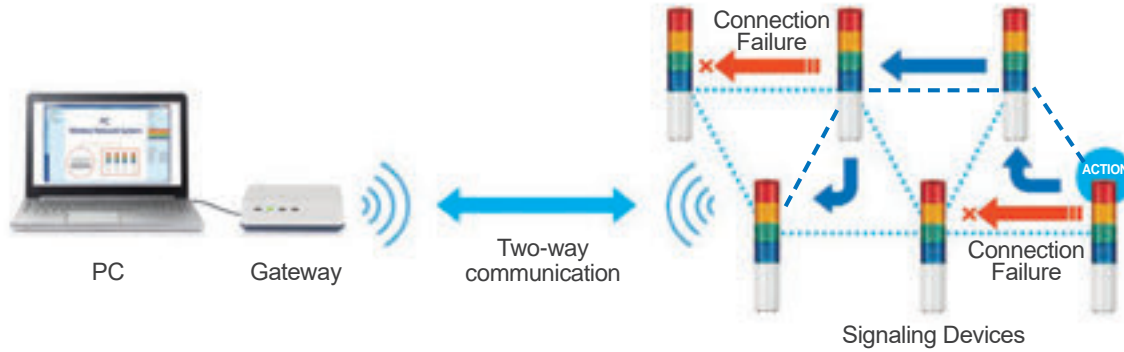


- Uses a Mesh Topology that operates in 2.4 GHz short-range wireless technology which ensures the communication reliability in harsh environments
- Multi-hop function of the signaling device enables stable long-distance communication (with up to 100M between devices)
- Conform to International Standard IEEE802.15.4g

Wireless Network System Application

◆ Routing function that automatically navigates the optimum communication path

- Mesh network selects the strongest signal path for traffic and automatically steers signals around interference to ensure high availability of mesh links.
- Once there's a problem with wireless communication, the signaling device will find a new communication route in order to maintain smooth communication.



◆ Building an advanced production network system with a low cost

- Combining a new network system to existing production lines can be easily done by connecting wireless signal devices.
- Cost-effectiveness by requiring no additional cable when change the layout of production lines.



Wireless Network System Concept

· Components

Application	Gateway	USB Dongle	Signaling Devices

1. Connection Types

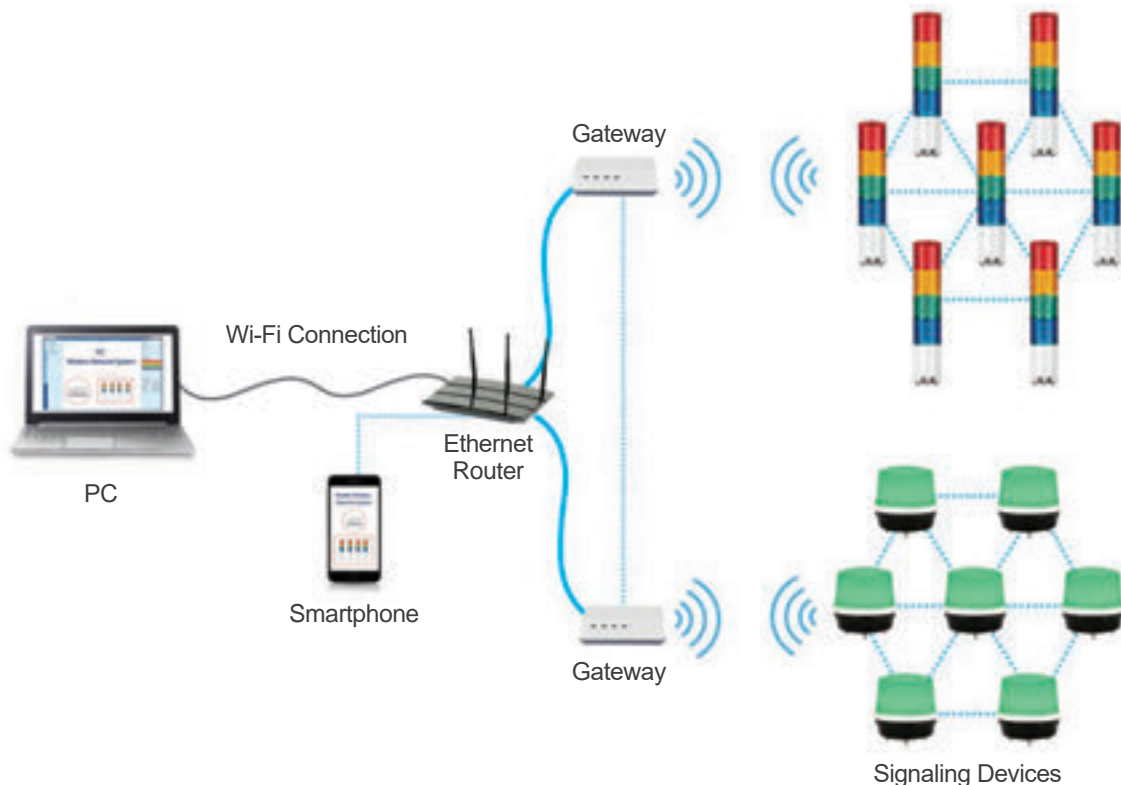
1) Connection via USB Dongle

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



2) Connection via Gateway

- Connecting multiple gateways allow 768 wireless signaling devices to be connected to the network, suitable for large-scaled production facilities.
- Can monitor or control the status of signaling devices with smartphones.



Wireless Network System Instructions

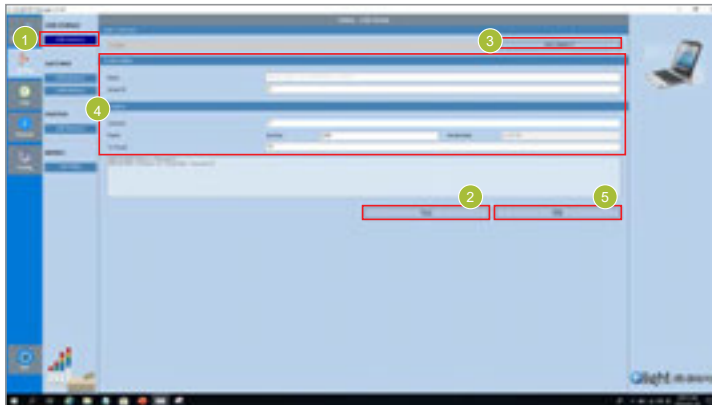
2. Connection Instructions

1) USB Dongle

- PC program allows you to configure wireless devices such as gateways, USB dongles and signaling devices, and can also monitor or control the status of the signaling devices.
- Check the COM port after the USB Dongle is connected(RS-232).
- Click Start -> Control Panel -> Device Manager -> Port (COM & LPT)

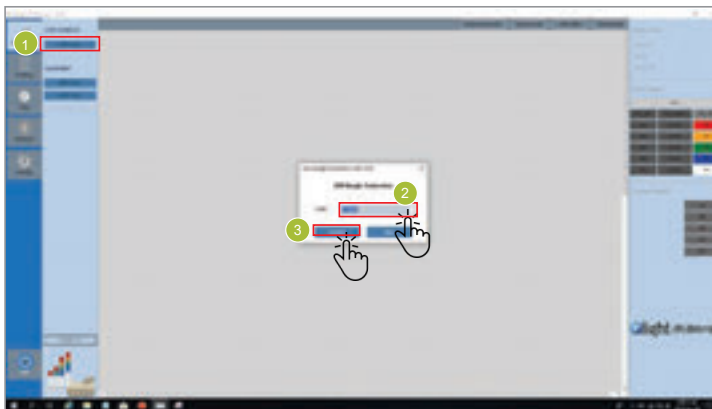


• USB DONGLE SETTING



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

• USB DONGLE CONNECTION



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

• DEVICE MONITORING & CONTROL



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

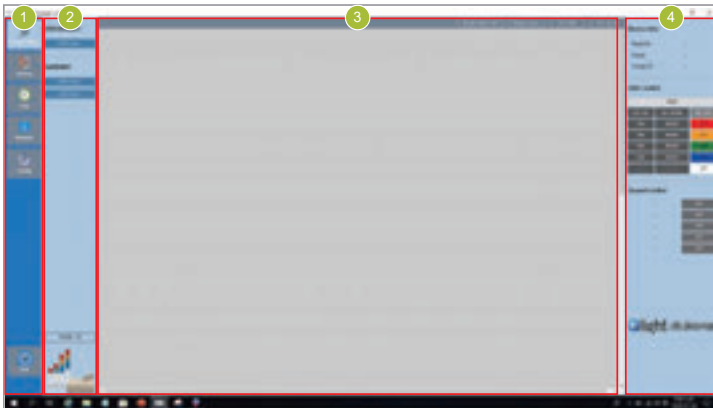
Wireless Network System Instructions

2) Gateway

• Setting and Usage

- The PC program allows you to configure wireless devices such as gateways, USB dongles and signaling devices, and can also monitor or control the status of the signaling devices.
- With the Gateway linked to the Ethernet Network users can check or control the operation status of devices by smartphone. The control PC uses IIS function to enable access to the smartphone in WINDOW XP or later versions.

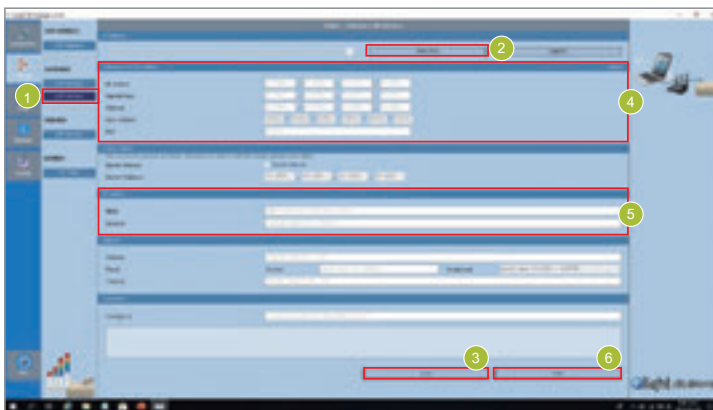
- What is IIS? IIS stands for Microsoft's Internet Information Services which is a WINDOWS service used for web service. With IIS, services such as FTP, SMTP, NNTP, and HTTP/ HTTPS are available.



※ Please refer to an operation manual for detailed settings and instruction

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

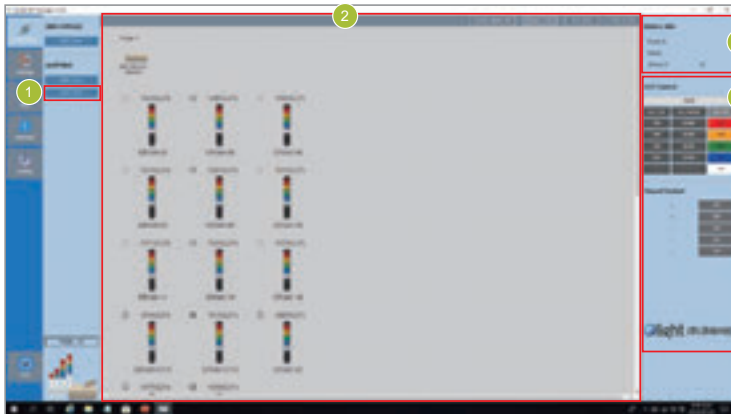
• GATEWAY SETTING



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

Wireless Network System Instructions

• GATEWAY CONNECTION



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

※ The way of USB connection via Gateway is exactly same as the way of USB connection via USB Dongle.

3) Smartphone

- In order to use smartphone, the gateway and wired/wireless router should be connected each other.
- Please connect to webview page on the smartphone by using an administrator's PC that IIS is already configured.
- Log into your account in the login page and select the connected Gateway.
- Monitor or control the device by selecting the signaling device connected to the gateway.



Specification List For Wireless Products

Wireless LED Tower Lights



Model number	QTG60ML-WIZ	QTG60L-WIZ	QTG70ML-WIZ	QTG70L-WIZ
Voltage	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V	DC12V, DC24V AC110V-220V
Dimension (mm)	Diameter	Ø60	Ø60	Ø70
	Height	199-399	435-625	199-399
	Depth			357-557
Material	Lens-PC	Lens-PC	Lens-PC	Lens-PC
	Housing-ABS	Housing-ABS	Housing-ABS	Housing-ABS
Layers	1-5 Layers	1-5 Layers	1-5 Layers	1-5 Layers
Light source & Operation	Bulb Steady/ Flashing			
	LED Steady			
	LED Steady/ Flashing	•	•	•
	LED Strobe			
	LED Simulated revolving			
Sound & Volume	1 buzzer sound	Max. 85dB at 1m	Max. 85dB at 1m	Max. 85dB at 1m
	5 signal sounds			
Layer color change	Yes	Yes	Yes	Yes
Mount bracket	Direct mount	Pole mount	Direct mount	Pole mount
Bracket	TWS45, TWA45	LB18, LW18, QZ18, SZ18, QL18, SL18, QLA18	TWS80, TWA80	LB24, LW24, QZ24, SZ24, QL24, SL24, QLA24
Protection rating	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)	IP54(Buzzer type), IP65(Standard)
Certificates	KC	KC	KC	KC
Customization	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing	2 buzzer sounds, Wall mount bracket, Strong buzzer, Black housing	2 buzzer sounds, Pole length adjustment, Strong buzzer, Black housing
Transistor	NPN	NPN	NPN	NPN
Communication	Wireless	Wireless	Wireless	Wireless
Page	P171	P172	P173	P174

Wireless LED Signal Lights



Model number	QMCL125-WIZ	GW768(GATEWAY)	WIZ32 (USB Dongle)
Voltage	DC12V, DC24V	DC12V-24V AC110V-220V	USB 5V
Dimension (mm)	Diameter	Ø116	151x80
	Height	110	48.4
Volume	Max. 80dB at 1m		49x23
Material	Lens-AS Housing-ABS	Housing-ABS	10
Mount bracket	Self stand		
Protection rating	IP65		
Certificates		KC	KC
Customization	Wall mount		
Transistor	NPN		
Communication	Wireless		
Page	P179	P182	P183

QTG60ML-WIZ

Wireless LED Steady/ Flashing Tower Light



QTG60ML-WIZ series



QTGA60ML-WIZ series

PC Connection Components

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



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

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

- Allows you to build an advanced production network system with a low cost
- Uses a Mesh Topology that operates in 2.4 GHz Short-Range wireless technology which ensures the communication reliability in harsh environments
 - * Multi-hop function of the signaling device enables a stable long-distance communication (with up to 100M between devices)
 - * Cost-effective by requiring no additional cable when change the layout of production lines



QTG60ML-WIZ Ø60mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificate	Weight	Color
QTG60ML-WIZ Steady	1	DC12V	0.150A	CE, DC24V only	0.29kg	• R-Red
QTG60ML-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.110A		0.29kg	
QTG60ML-WIZ-BZ Steady w/ built-in buzzer		AC110V-220V	Max. 0.070A		0.39kg	
QTG60MLF-WIZ Steady/Flashing	2	DC12V	0.240A	CE, DC24V only	0.37kg	• R-Red • G-Green
QTG60MLF-WIZ Steady/Flashing w/ built-in buzzer		DC24V	0.160A		0.37kg	
QTG60MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.100A		0.47kg	
QTGA60ML-WIZ Steady	3	DC12V	0.330A	CE, AC, DC24V only	0.46kg	• R-Red • A-Amber • G-Green
QTGA60ML-WIZ Steady w/ built-in buzzer		DC24V	0.220A		0.46kg	
QTGA60ML-WIZ Steady w/ built-in buzzer		AC110V-220V	Max. 0.120A		0.56kg	
QTGA60MLF-WIZ Steady/Flashing	4	DC12V	0.420A	FC, AC, DC24V only	0.54kg	• R-Red • A-Amber • G-Green • B-Blue
QTGA60MLF-WIZ Steady/Flashing w/ built-in buzzer		DC24V	0.270A		0.54kg	
QTGA60MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.150A		0.64kg	
QTGA60MLF-WIZ Steady/Flashing w/ built-in buzzer	5	DC12V	0.510A	FC, AC, DC24V only	0.62kg	• R-Red • A-Amber • G-Green • B-Blue • W-White
QTGA60MLF-WIZ Steady/Flashing w/ built-in buzzer		DC24V	0.320A		0.62kg	
QTGA60MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V	Max. 0.170A		0.72kg	

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



Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 176-178 for detailed wiring information.



Customization

- High buzzer module equipped on top(Lens should be within 4 layers)
- Black housing tower lights
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

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

QTG60L-WIZ

Wireless LED Steady/ Flashing Tower Light





QTG60L-WIZ series



QTGA60L-WIZ series

· PC Connection Components

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

QTG60L-WIZ Ø60mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificate	Weight	Color
QTG60L-WIZ Steady	1	DC12V	0.150A	DC24V only	0.44kg	● R-Red
QTG60L-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.110A		0.44kg	
QTG60LF-WIZ Steady/Flashing	2	DC12V	0.240A	DC24V only	0.53kg	● R-Red ● G-Green
QTG60LF-WIZ-BZ Steady/Flashing w/ built-in buzzer		DC24V	0.160A		0.53kg	
QTGA60L-WIZ Steady	3	DC12V	0.330A	AC,DC24V only	0.61kg	● R-Red ● A-Amber ● G-Green
QTGA60L-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.220A		0.61kg	
QTGA60LF-WIZ Steady/Flashing	4	DC12V	0.420A	AC,DC24V only	0.70kg	● R-Red ● A-Amber ● G-Green ● B-Blue
QTGA60LF-WIZ-BZ Steady/Flashing w/ built-in buzzer		DC24V	0.270A		0.70kg	
QTGA60LF-WIZ-BZ Steady/Flashing w/ built-in buzzer	5	DC12V	0.510A		0.78kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
		DC24V	0.320A		0.88kg	
		AC110V-220V	Max. 0.170A			

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- ※ Please refer to page 176-178 for detailed wiring information.

Mounting Bracket

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

※ Please refer to page 22-27 for detailed dimensions.

Customization

- Customized pole length available
- Black housing tower lights

Ordering Specification

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

QTG70ML-WIZ

Wireless LED Steady/Flashing Tower Light



QTG70ML-WIZ series



QTGA70ML-WIZ series

QTG70ML-WIZ Ø70mm Direct Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificate	Weight	Color
QTG70ML-WIZ Steady	1	DC12V	0.150A	 DC24V only AC,DC24V only FCC only	0.45kg	● R-Red
QTG70ML-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.110A		0.45kg	
QTG70ML-WIZ Steady	2	AC110V-220V	Max. 0.070A		0.59kg	● R-Red ● G-Green
QTG70MLF-WIZ Steady/Flashing		DC12V	0.240A		0.59kg	
QTG70MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer		DC24V	0.160A		0.69kg	
QTG70ML-WIZ Steady	3	DC12V	0.330A	CE AC,DC24V only FCC only	0.80kg	● R-Red ● A-Amber ● G-Green
QTG70ML-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.220A		0.80kg	
QTGA70ML-WIZ Steady	4	AC110V-220V	Max. 0.120A		0.90kg	● R-Red ● A-Amber ● G-Green ● B-Blue
QTGA70ML-WIZ-BZ Steady w/ built-in buzzer		DC12V	0.420A		0.95kg	
QTGA70MLF-WIZ Steady/Flashing		DC24V	0.270A		0.95kg	
QTGA70MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer	5	DC12V	0.510A	FCC only AC,DC24V only	1.10kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White
QTGA70MLF-WIZ-BZ Steady/Flashing w/ built-in buzzer		DC24V	0.320A		1.10kg	
		AC110V-220V	Max. 0.170A		1.20kg	

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

Wiring Instructions

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

* Please refer to page 176-178 for detailed wiring information.

Customization

- Black housing tower lights
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



PC Connection Components

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

Ordering Specification

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

QTG70L-WIZ

Wireless LED Steady/ Flashing Tower Light



QTG70L-WIZ series

QTG70L-WIZ Ø70mm Pole Mount, LED Steady/Flashing Type

Model number	Layer	Voltage	Current	Certificate	Weight	Color
QTG70L-WIZ Steady	1	DC12V	0.150A	 DC24V only AC,DC24V only AC,DC24V only	0.57kg	● R-Red
QTG70L-WIZ-BZ Steady w/ built-in buzzer		DC24V	0.110A		0.57kg	
QTG70L-WIZ-BZ Steady/Flashing	2	DC12V	0.240A		0.69kg	● R-Red ● G-Green
QTG70LF-WIZ		DC24V	0.160A		0.69kg	
QTG70LF-WIZ-BZ Steady/Flashing w/ built-in buzzer	3	DC12V	0.330A		0.84kg	● R-Red ● A-Amber ● G-Green
QTGA70L-WIZ		DC24V	0.220A	0.84kg		
QTGA70L-WIZ-BZ Steady w/ built-in buzzer	4	DC12V	0.420A	0.99kg	● R-Red ● A-Amber ● G-Green ● B-Blue	
QTGA70LF-WIZ		DC24V	0.270A	0.99kg		
QTGA70LF-WIZ-BZ Steady/Flashing w/ built-in buzzer	5	DC12V	0.510A	1.23kg	● R-Red ● A-Amber ● G-Green ● B-Blue ● W-White	
QTGA70LF-WIZ-BZ		DC24V	0.320A	1.23kg		
		AC110V-220V	Max. 0.170A	1.32kg		

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

Wiring Instructions

- External power line : UL1015 AWG18(0.75sq)×2C 400mm
- External signal line : UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wiring with external contact and transistor
- * Please refer to page 176-178 for detailed wiring information.

Mounting Bracket

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

* Please refer to page 22-27 for detailed dimensions.

Customization

- Customized pole length available
- Black housing tower lights

Ordering Specification

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

PC Connection Components

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

QTG-WIZ series

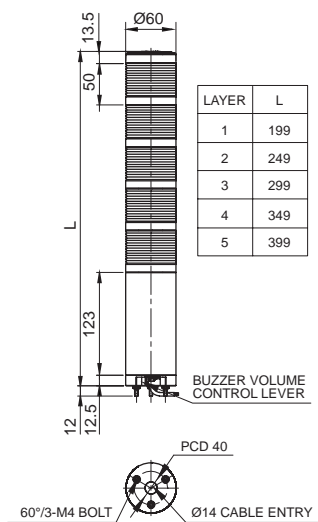
Wireless LED Steady/ Flashing Tower Light



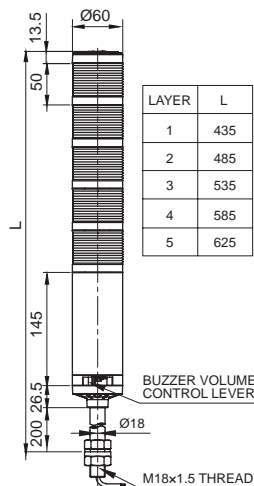
Technical Diagram

(Units : mm)

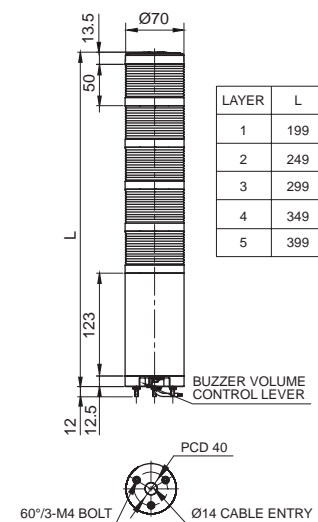
QTG60ML(F)-WIZ-Series



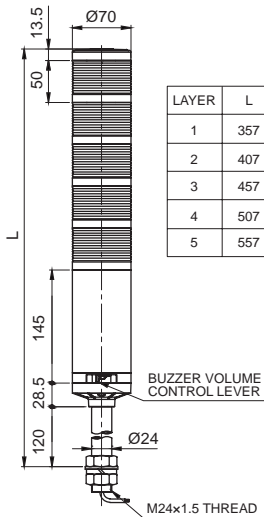
QTG60L(F)-WIZ-Series



QTG70ML(F)-WIZ-Series



QTG70L(F)-WIZ-Series



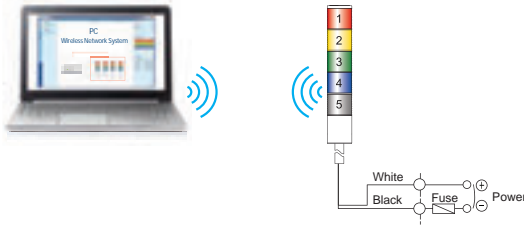
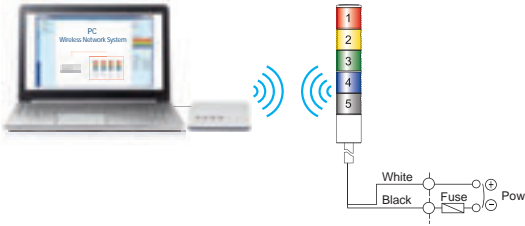
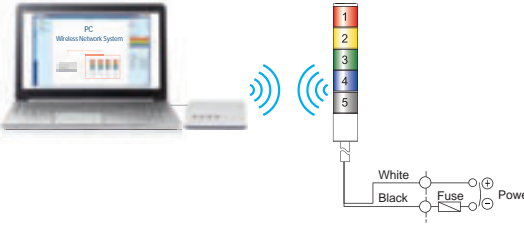
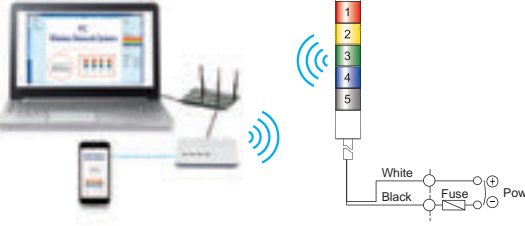
QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

• Please wire the product as followings when control via wireless network

Applied products	Connection by USB	
AC/DC Steady/ Flashing QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Connection via USB Dongle</p>  </div> <div style="text-align: center;"> <p>Connection via Gateway</p>  </div> </div> <p style="text-align: center;">Suitable for single or small-scaled network. Can connect up to 32 devices</p>	
Applied products	Connection by Ethernet	
AC/DC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Ethernet connection via Gateway</p>  </div> <div style="text-align: center;"> <p>Connection via Gateway and Ethernet Router</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>Suitable for single or small-scaled network. Can connect up to 32 devices</p> </div> <div style="text-align: center;"> <p>Suitable for large-scaled network. One gateway unit is a single group, can connect up to 24 groups, 768 devices (each group can connect to 32 devices)</p> </div> </div>	

• AC Steady type, AC/DC Steady/ Flashing type : External power line - UL1015 AWG18(0.75sq)×2C 400mm

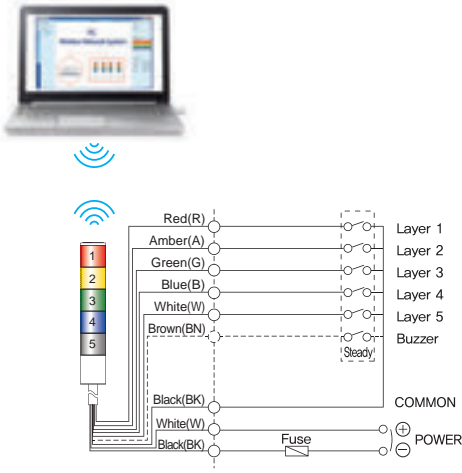
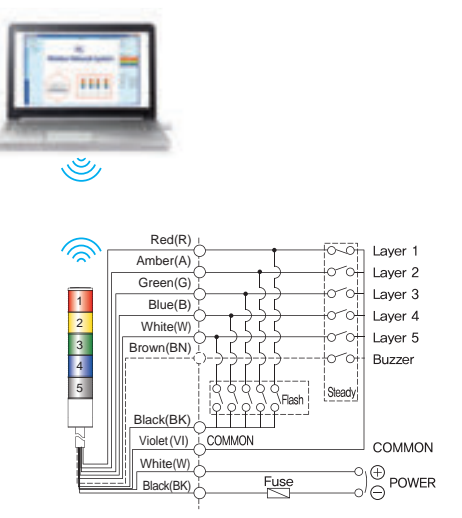
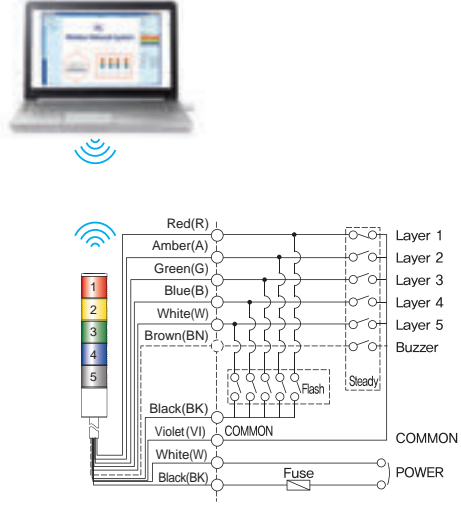
QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

- Please wire the product by referring below instruction.
- You can monitor status of tower light and control them via wireless network.

Applied products	External Contact	
AC/DC Steady/ Flashing QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ	 <p> <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L </p>	
AC/DC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ	 <p> <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L </p>	AC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ  <p> <ul style="list-style-type: none"> • QTG(A)□□(M)L - WIZ : Same wiring including buzzer type • QTG□□L ↳ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L </p>

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

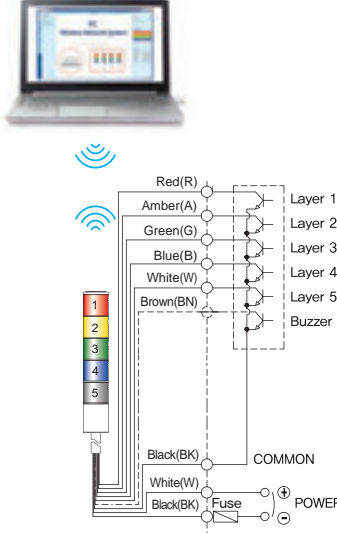
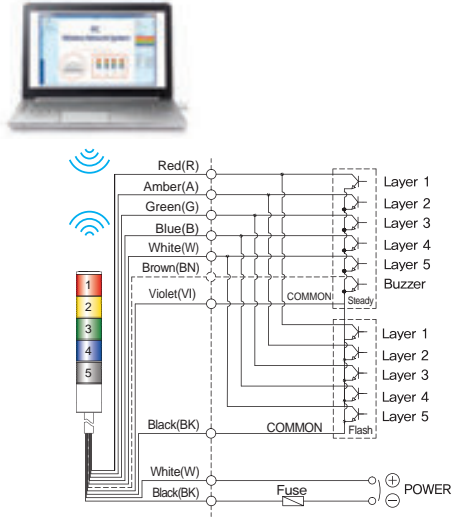
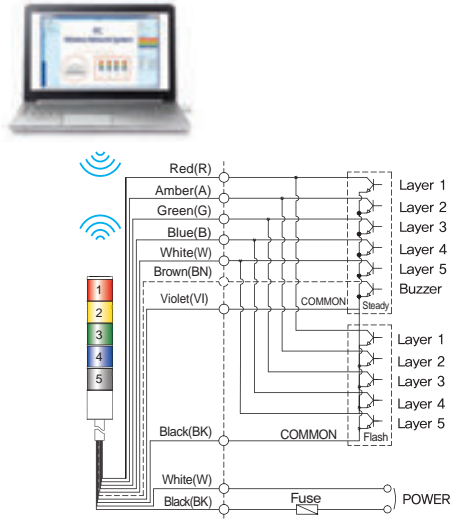
QTG-WIZ series

Wireless LED Steady/ Flashing Tower Light



Wiring Instructions

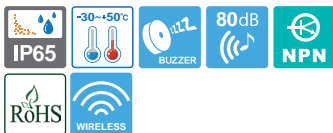
• Wiring to transistor, use the NPN transistor. Please wire properly based on wiring instructions below.

Applied products	External Contact	
AC/DC Steady/ Flashing QTG60ML-WIZ QTG60L-WIZ QTG70ML-WIZ QTG70L-WIZ	 <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L 	
AC/DC Steady/ Flashing QTG60MLF-WIZ QTG60LF-WIZ QTG70MLF-WIZ QTG70LF-WIZ	 <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L 	 <ul style="list-style-type: none"> • QTG(A) □□ (M)L - WIZ : Same wiring including buzzer type • QTG □□ L <ul style="list-style-type: none"> └ Lens diameter 60(60mm) : QTG60(M)L 70(70mm) : QTG70(M)L

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

QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



QMCL125-WIZ



Common Specifications

Can remotely monitor and control the status of light units using a PC or smartphone

- Allows you to build an advanced production network system with a low cost
- Uses a Mesh Topology that operates in 2.4 GHz Short-Range wireless technology which ensures the communication reliability in harsh environments
- ※ Multi-hop function of the signaling device enables a stable long-distance communication (with up to 100M between devices)
- ※ Cost-effective by requiring no additional cable when change the layout of production lines
- Wireless communication standard : IEEE802.15.4
- Can generate 7 color light signals in one light unit
- Milky translucent color when off, the soft LED illuminates designated colors when on
- Materials : Lens-AS, Body-ABS
- Ambient operating temperature : -30°C to +50°C
- Protection rating : IP65
- Certificates : CE RED, FCC
- Compliant with RoHS directive



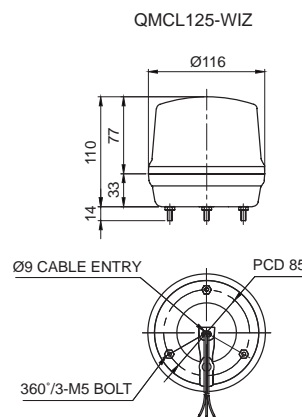
QMCL125-WIZ Ø125mm Wireless Multiple Color LED Steady Signal Lights

Model number	Voltage	Current	Certificate	Weight	Color
QMCL125-WIZ	DC12V	0.300A	CE FC	0.34kg	7 Color
QMCL125-WIZ-BZ	DC24V	0.200A			



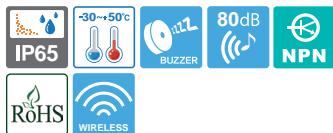
Technical Diagram

(Units : mm)





QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



QMCL125-WIZ

· PC Connection Components

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

Wiring Instructions

- External signal line : Signal line 4P(R,G,B,K) threading, signal line standard UL1007 AWG22(0.3sq) 400mm
- Please refer to Wiring Instructions diagram to properly configure color options
- ※ Please refer to page 181 for detailed wiring information.

Customization

- Wall mounting bracket options : Bracket structure allows for threading through the bracket hole or into the wall mount



Ordering Specification

QMCL125-WIZ	-	BZ	-	24
[Model number]		[Buzzer option]		[Voltage]
• QMCL125-WIZ		• None - No buzzer • BZ- Built-in buzzer		• 12-DC12V • 24-DC24V

QMCL-WIZ series

Wireless Multiple Color LED Steady Signal Lights



Wiring Instructions

- Please refer to Wiring Instructions diagram to properly configure wireless network option.

Applied products	Connection by USB
QMCL125-WIZ	
Applied products	Connection by Ethernet
QMCL125-WIZ	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Ethernet connection via Gateway</p> </div> <div style="text-align: center;"> <p>Connection via Gateway and Ethernet Router</p> </div> </div>

- Please refer to below wiring Instructions diagram to properly configure external contact and transistor options.

Applied products	External Contact																								
QMCL125-WIZ	<div style="display: flex; align-items: center;"> <div style="margin-left: 20px;"> <p>< Wiring Configuration for Signal Color ></p> <table border="1"> <thead> <tr> <th>No.</th> <th>Color</th> <th>Wiring</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Red</td> <td>1(Red)</td> </tr> <tr> <td>2</td> <td>Green</td> <td>2(Green)</td> </tr> <tr> <td>3</td> <td>Blue</td> <td>3(Blue)</td> </tr> <tr> <td>4</td> <td>Amber</td> <td>1(Red)+2(Green)</td> </tr> <tr> <td>5</td> <td>Cyan</td> <td>2(Green)+3(Blue)</td> </tr> <tr> <td>6</td> <td>Purple</td> <td>1(Red)+3(Blue)</td> </tr> <tr> <td>7</td> <td>White</td> <td>1(Red)+2(Green)+3(Blue)</td> </tr> </tbody> </table> </div> </div>	No.	Color	Wiring	1	Red	1(Red)	2	Green	2(Green)	3	Blue	3(Blue)	4	Amber	1(Red)+2(Green)	5	Cyan	2(Green)+3(Blue)	6	Purple	1(Red)+3(Blue)	7	White	1(Red)+2(Green)+3(Blue)
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7	White	1(Red)+2(Green)+3(Blue)																							
Applied products	External Transistor																								
QMCL125-WIZ	<div style="display: flex; align-items: center;"> <div style="margin-left: 20px;"> <p>< Wiring Configuration for Signal Color ></p> <table border="1"> <thead> <tr> <th>No.</th> <th>Color</th> <th>Wiring</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Red</td> <td>1(Red)</td> </tr> <tr> <td>2</td> <td>Green</td> <td>2(Green)</td> </tr> <tr> <td>3</td> <td>Blue</td> <td>3(Blue)</td> </tr> <tr> <td>4</td> <td>Amber</td> <td>1(Red)+2(Green)</td> </tr> <tr> <td>5</td> <td>Cyan</td> <td>2(Green)+3(Blue)</td> </tr> <tr> <td>6</td> <td>Purple</td> <td>1(Red)+3(Blue)</td> </tr> <tr> <td>7</td> <td>White</td> <td>1(Red)+2(Green)+3(Blue)</td> </tr> </tbody> </table> </div> </div>	No.	Color	Wiring	1	Red	1(Red)	2	Green	2(Green)	3	Blue	3(Blue)	4	Amber	1(Red)+2(Green)	5	Cyan	2(Green)+3(Blue)	6	Purple	1(Red)+3(Blue)	7	White	1(Red)+2(Green)+3(Blue)
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7	White	1(Red)+2(Green)+3(Blue)																							

GW768

Wireless network system receiving device

A device that receives data wirelessly in connection with a wireless signal information device



GW768(GATEWAY)

GW768(GATEWAY) Wireless network system receiving device

- A device that receives data from wireless signal information devices, suitable for large-scale business sites
- Control of wireless signal information devices through two-way communication
- Up to 32ea of wireless signal information devices can be connected per gateway
- Up to 24ea of device can be connected via LAN using Ethernet communication (Maximum 768ea of wireless signal information devices can be connected)
- Information transmission to administrators and controlling real-time using a mobile app
- Wireless communication standard: IEEE 802.15.4 Standard
- Certificates : KC
- Data rate: 250Kbps
- Material: ABS



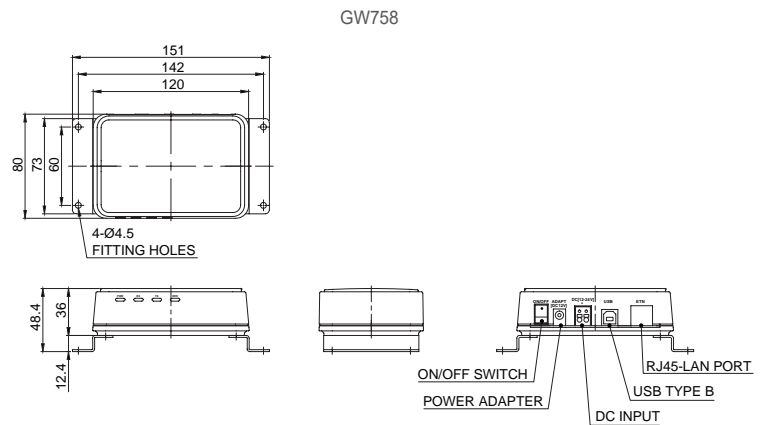
Specification

Model number	Voltage	Current	Interface	Wireless standard	Radio frequency/ number of channels	Certificates	Weight
GW768	DC12-24V AC110-220V	Max. 0.510A Max. 0.115A	USB2.0/ Ethernet	IEEE 802.15.4 Standard	2405MHz-2480MHz(16ch)	DC12V	0.25kg



Technical Diagram

(Units : mm)



Ordering Specification

GW768

[Model number]

- GW768

12/24

[Voltage]

- 12/24-DC12V-24V
- 110/220-AC110V-220V

WIZ32

USB receiver device of wireless network system

A device that receives data wirelessly in connection with a wireless signal information device



WIZ32(USB Dongle)

WIZ32(USB Dongle) USB receiver device of wireless network system

- A device that receives data from a wireless signal information device, suitable for a small single wireless network.
- Controlling of wireless signal information devices through two-way communication
- Up to 32ea of wireless signal information devices can be connected
- Separate power supply is not required, and only USB Dongle is connected to PC.
- Wireless communication standard: IEEE 802.15.4 Standard
- Certificates : KC
- Data rate: 250Kbps



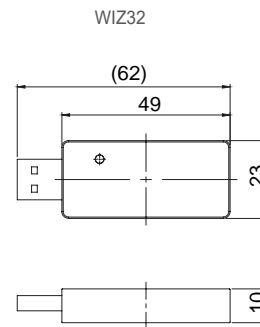
Specification

Model numbe	Voltage	Current	Interface	Wireless standard	Radio frequency/ number of channels	Certificates	Weight
WIZ32	USB 5V	Max. 0.050A	USB2.0	IEEE 802.15.4 Standard	2405MHz-2480MHz(16ch)		0.01kg



Technical Diagram

(Units : mm)



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.

 <p>ISO International Organization for Standardization</p> <p>Qlight quality assurance systems have been certified by ISO by applying the ISO 9001:2008, KS Q ISO 9001:2009 regulation.</p>	 <p>IECEX International Explosion Proof Certification (IECEX)</p> <p>Certified that Qlight's products are being manufactured and manage according to international standards.</p>
 <p>ATEX The European Regulatory Framework or Manufacture, Installation and Use of Equipment in Explosive Atmospheres</p> <p>Qlight explosion proof products comply with ATEX Directives 94/9/EC.</p>	 <p>NEPSI National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation</p> <p>Qlight's design and manufacturing system meets the People's Republic of China National explosion proof Standard. (Chinese Standard-GB3836/GB12476)</p>
 <p>KCs Explosion proof device safety Certification System</p> <p>The safety performance of machines and equipment subject to safety certification and Technical capability and production system have been certified safety certification standards.</p>	 <p>TIIS Japan Explosion-proof Certification</p> <p>Japan explosion-proof certification is an international mutual certification system for explosion-proof electrical equipment. Qlight have been certified that explosion-proof products are manufactured and managed according to international standards.</p>
 <p>CCS China Classification Society</p> <p>Qlight design and quality assurance system has been certified by the China Classification Society.</p>	 <p>RMRS Russian Maritime Register of Shipping</p> <p>Qlight design and quality assurance system has been certified from Russian Maritime Register of Shipping.</p>
 <p>KC Korea Safety Certification</p> <p>Qlight products are certified by KC for preventing accident caused by fire.</p>	 <p>KR Korean Register of Shipping</p> <p>Qlight design and quality assurance system has been certified by the Korean Register of Shipping.</p>
 <p>LR Lloyd's Register</p> <p>Qlight design and quality assurance system has been certified from Lloyd's Register.</p>	 <p>E-mark Commission Directive Regarding Vehicle Industry</p> <p>Qlight has obtained EU mark for approved vehicles and vehicle components sold into the EU(EEA : European Economic Area)</p>
 <p>ICAO International Civil Aviation Organization</p> <p>Qlight guarantees our products satisfy the criteria regulated by the International Civil Aviation Organization(ICAO, FAA).</p>	 <p>KCC Conformity assessment of broadcasting communication equipments</p> <p>Qlight have been certified to protect the electromagnetic environment that causes unwanted electro-magnetic waves from the device, communication failure due to other devices or external radio waves, and malfunction of the device.</p>
 <p>CCC China Compulsory Certificate</p> <p>Qlight has obtained CCC which guarantees safety, protection against fraud, environment, etc.</p>	 <p>CCCF China Certification Center for Security & Protection</p> <p>Qlight have 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.</p>
 <p>UL Underwriters Laboratories</p> <p>Qlight design and quality assurance system has been certified from UL to ensure the stability of consumption goods and to protect consumers.</p>	 <p>CE European Commission</p> <p>Qlight has been certified by the European Commission.</p>
 <p>RoHS2 Restriction of Hazardous Substances Directive</p> <p>Qlight complies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.</p>	

Bulb Specification

The table below summarizes bulb specifications that are equipped with Qlight's products. Please carefully review the bulb specification in case bulb replacement is needed. Otherwise it may cause part malfunction.

Layout	Part#	Feature	Spec	Voltage	Current	Product
	1	14V 5W	G14 9S	12V	0.357A	S50, ST45
	2	27V 5W	G14 9S	24V	0.185A	
	3	120V 5W	T16×28 9S	110V	0.042A	S50, ST45
	4	240V 5W	T16×28 9S	220V	0.021A	
	5	14V 5W	T16×35 15S	12V	0.357A	S60 S80, SR SJ, SJD
	6	27V 5W	T16×35 15S	24V	0.185A	
	7	120V 5W	T16×35 15D	110V	0.042A	S60
	8	240V 5W	T16×35 15D	220V	0.021A	
	9	14V 10W	T16×35 15S	12V	0.714A	S100 S125 SE ST56 ST80
	10	27V 10W	T16×35 15S	24V	0.370A	
	11	52V 10W	T16×35 15S	48V	0.192A	
	12	120V 10W	T16×35 15S	110V	0.083A	S100 S125 ST56 ST80
	13	240V 10W	T16×35 15S	220V	0.042A	
	14	52V 10W	T16×35 15D	48V	0.192A	S100E S125E
	15	120V 10W	T16×35 15D	110V	0.083A	
	16	240V 10W	T16×35 15D	220V	0.042A	
	17	14V 15W	G23 15S	12V	1.071A	SK S150, SH1 SH2, SED SD, SHD SHD2 SMD, SESA SEBA, SEA
	18	27V 15W	G23 15S	24V	0.556A	
	19	52V 15W	G23 15S	48V	0.288A	
	20	120V 15W	G23 15S	110V	0.125A	
	21	240V 15W	G23 15S	220V	0.063A	
	22	120V 15W	G23 15D	110V	0.125A	S150, SH1 SH2, SED SD, SHD SHD2 SMD, SESA SEBA, SEA
	23	240V 15W	G23 15D	220V	0.063A	
	24	12V 23W	S25 15S	12V	1.916A	S150, SH2 SD, SMD SESA SEBA, SEA
	25	24V 23W	S25 15S	24V	0.958A	
	26	52V 25W	T23×62 15D	48V	0.481A	S150, SH2 SD, SMD SESA SEBA, SEA
	27	120V 25W	T23×62 15D	110V	0.208A	
	28	240V 25W	T23×62 15D	220V	0.104A	
	29	14V 35W	RP35 15S	12V	2.500A	S180
	30	27V 35W	RP35 15S	24V	1.296A	

Layout	Part#	Feature	Spec	Voltage	Current	Product
	31	120V 35W	RP35 15S	110V	0.292A	S180
	32	240V 35W	RP35 15S	220V	0.146A	
	33	110V 60W	E26 ES	110V	0.545A	S150, SH2 SD, SMD SESA, SE SEBA, SEA
	34	220V 60W	E26 ES	220V	0.272A	
	35	12V 30W	A60 E26	12V	2.500A	S150, SH2 SD, SMD
	36	24V 60W	A60 E26	220V	2.500A	
	37	110V 60W	A60 E26	110V	0.545A	S150, SH2 SD, SMD
	38	220V 60W	A60 E26	220V	0.272A	
	39	14V 35W	15S Halogen	12V	2.500A	SKH
	40	27V 35W	15S Halogen	24V	1.296A	
	41	120V 35W	15D Halogen	110V	0.292A	S150, SH2 SD, SMD SESA, SE SEBA, SEA
	42	240V 35W	15D Halogen	220V	0.146A	
	43	14V 55W	15S Halogen	12V	3.929A	S150, SH2 SD, SMD SESA, SE SEBA, SEA
	44	27V 55W	15S Halogen	24V	2.037A	
	45	120V 55W	15D Halogen	110V	0.458A	S150, SH2 SD, SMD SESA, SE SEBA, SEA
	46	240V 55W	15D Halogen	220V	0.229A	
	47	220V -350V	BGA2120 -BBC I Type xenon lamp		4W	S80S, S80AS
	48	200V -550V	EUB0641 -1A(G) U Type xenon lamp		6W	S100S, S125S S150S, SJS SH1S, SH2S SEDS, SDS SHDS, SHD2S SMDs, SCDWS, SNE-S, SNES-S SESAS, SE-S SEBAS, SEAS ELMS, ELRS, ELPS
	49	280V -400V	BH0647(G) W Type xenon lamp		16W	S125HS, S150HS S180US, S180UHS SH1HS, SH2HS SEDHS, SDHS SHDHS, SHD2HS SMDHS SESAHS, SEAHS ELVS

Light Source of Warning Light/ Signal Light

SELECTION OF WARNING LIGHT

The selection of signaling devices will depend on the particular situation and environment.

- Whether the location of installation is dark or bright.
- Whether the signal transmission range should be short or long, or should have good visibility.
- Whether you need an economical but short lifetime product or upscale product with longer lifetime.
- Whether the environment is harsh with vibration and shock, or the environment is stable so that the life of the lights can be guaranteed.
- The selection of signaling device can be different depending on the situation and environment. The convenience and efficiency of maintenance should also be considered.

* Factors to consider in signal selection

1. Purpose
2. Signal transmission
3. Environment
4. Budget
5. Ease of maintenance

TYPE OF LIGHT SOURCE

Bulb



Light bulb is a light source that uses temperature reflection generated by the current flowing through the light bulb filament (thin line of metal), tungsten wire coil filament is often used. The hot filament is protected from oxidation with a glass sphere injected with inert gas (Argon gas, etc.). Typical characteristics of the gas injected bulb is described below.

1. If the input voltage decreases more than 10% of the rated voltage, the bulb life increases four times than before, and the power consumption are reduced by 85%.
2. On the other hand, If input voltage is 10% higher than the rated voltage, the life of the bulb is shortened by about 30% and the power consumption increases about 16%, and the brightness is increased by about 40%. The standard service life of a normal bulb is about 1,000 - 1,500 hours.

LED



The LED is a light emitting diode which emits light by injecting a current in the PN junction of the special semiconductor, semiconductors such as GaAs, GaP that Maximizes the electro-optical conversion effects are used. Like other semiconductors, over-voltage or ambient temperature affects the lifetime, but due to the absence of mechanical abrasion of the part, LED is shock/ vibration resistant so there are no need for proper seismic design. The standard service life of an LED is about 50,000 hours.

Xenon Lamp



Xenon lamp is a flash type light source that emits bright light instantly by inserting high energy into the lamp. Compared with the steady type lamp, xenon lamps need a lot of input power instantly and a extremely large amount of light is diffused.

The lamp is filled with xenon(Xe) gas due to the convenience of the production(choice of materials), its use, xenon lamp was named after the xenon gas that it uses. xenon lamps are also resistant to vibration due to its mounting method. In addition, it is visible even in bright environments not only because the spectacle distribution of the visible light is close to the sunlight, it uses the same method as the strobe of the camera.

Warning Light/ Indicator Light Operating Principle



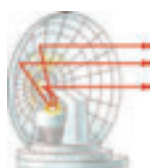
Bulb Steady/ Flashing Type

- Highly diffusible light bulb that refracts light through a special lens and can be used in a steady or flashing state



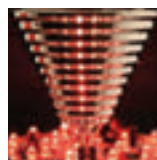
Bulb Revolving Type

- By combining a highly diffusible light bulb and a reflector, light is reflected in a parallel beam with a rotating cycle
- Our bulb revolving model has a long lifetime enabled by using a high durability bulb and a power transfer system that minimizes noise and abrasion



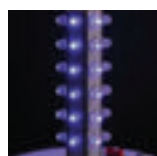
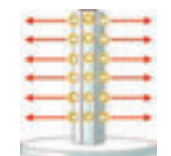
LED Revolving Type

- The combination of an LED and a reflector creates a parallel light beam with a rotating cycle
- Our LED revolving model is patented for emitting light with the same level of uniformity and brightness compared to the bulb reflecting type



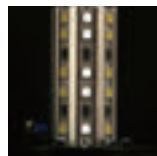
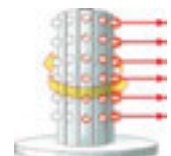
LED Steady/ Flashing Type

- The indirect light distribution system uses a special structure to radiate a uniform light signal throughout the entire body of the lens by using a multi-stage reflector
- The direct light distribution system uses a high-intensity LED light and diffusion lens to transfer signal over a long distance. Qlight LED lights / flashing lights are equipped with two structures depending on the model type, Steady or Flashing Type



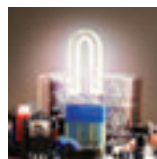
LED Strobe-Type

- By shortening the LED flashing period and supplying the Maximum current to the LED, it produces a flash effect just like the xenon lamp



LED Simulated Revolving Type

- By uniformly arranging the LED lens in a 360 degree circumferential direction, it will produce a flash in a regular rotating sequence
- The visual effect looks just the same as the revolving model



Xenon Lamp Strobe-Type

- The strobe type model uses a xenon lamp that instantly emits a high brightness light by supplying large energy
- Requires more power than other flashing type models, and the flash is brighter in comparison
- Has excellent vibration resistance compared to regular light bulbs but is not superior to LEDs
- Can spread strong light signals in all directions because of the light projecting structure

Pre-recorded Sound Tone and Sound Combination Chart

■ 17 pre-recorded sound tones for standard type products

Sound Number	Sound Tone	Sound Number	Sound Tone
SND01	Fire.A-ANG	SND10	Cuckoo's Waltz
SND02	Emergency WA-U(Yelp)	SND11	Piano Sonata
SND03	Ambulance PI-PO(Hi-low)	SND12	Turkish March
SND04	Abandon Alarm	SND16	Beep Intermittent
SND05	Machinery Fault	SND17	Door Chime
SND06	High Expansion	SND18	Phone Ring
SND07	7 Short Pl. / 1 Long	SND19	Pl.PI.PI Short
SND08	Sweet Home	SND20	Tripping Beat
SND09	For Elise		

• Standard sound combination for WS/ WP/ WM/ WA type products

ON = 1 / OFF = 0

17 sounds per combination can be selected according to your preference.
4 combinations are available.

No.	1	2	3	Ch1	Ch2	Ch3	Ch4	Ch5
1	0	0	0	No sound				
2	0	0	1	SND01 Fire.A-ANG	SND02 Emergency WA-U	SND03 Ambulance PI-PO	SND05 Machinery Fault	SND06 High Expansion
3	0	1	0	SND01 Fire.A-ANG	SND04 Abandon Alarm	SND05 Machinery Fault	SND06 High Expansion	SND07 7 Short Pl. / 1 Long
4	0	1	1	SND08 Sweet Home	SND09 For Elise	SND10 Cuckoo's Waltz	SND11 Piano Sonata	SND12 Turkish March
5	1	0	0	SND16 Beep Intermittent	SND17 Door Chime	SND18 Phone Ring	SND19 Pl.PI.PI Short	SND20 Tripping Beat

※ You can select sound tones using the 3P switches located on the circuit board of the WS/ WP/ WM/ WA Type products.

Pre-recorded Sound Tone and Sound Combination Chart

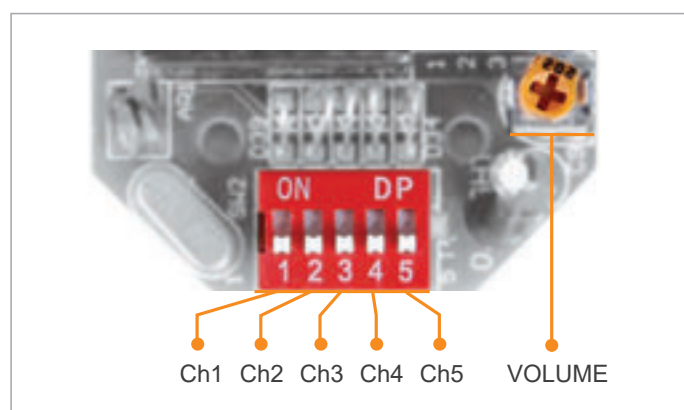
■ Sound tone combinations for standard type products

For standard type products, user can select from a variety of 5 pre-recorded sound combinations including 5 warning sounds, 5 special warning sounds, 5 melodies, 5 alarms, and 5 customizable sound.

	Sound Category	Channel	Sound Tone	Sound Combination #
WS	5 warning sounds	Ch1 Ch2 Ch3 Ch4 Ch5	Fire.A-ANG Emergency WA-U(Yelp) Ambulance PI-PO(Hi-low) Machinery Fault High Expansion	WS/ WP/ WM/ WA No.1
WP	5 special warning sounds	Ch1 Ch2 Ch3 Ch4 Ch5	Fire.A-ANG Abandon Alarm Machinery Fault High Expansion 7 Short Pl. / 1 Long	WS/ WP/ WM/ WA No.2
WM	5 melodies	Ch1 Ch2 Ch3 Ch4 Ch5	Sweet Home For Elise Cuckoo's Waltz Piano Sonata Turkish March	WS/ WP/ WM/ WA No.3
WA	5 alarms	Ch1 Ch2 Ch3 Ch4 Ch5	Beep Intermittent Door Chime Phone Ring PI.PI.PI Short Tripping Beat	WS/ WP/ WM/ WA No.4
WV	5 customizable sound	Ch1 Ch2 Ch3 Ch4 Ch5	1. Voice messages are pre-recorded and provided from factory upon user's request 2. Each channel has recording space for 16 sec 3. 5 channels available 4. When only one channel is used, maximum recordable space is 80 sec	-

※ Please refer to page 24 for detailed information about selectable sound patterns.

■ Sound Selection of Signal Sounds



Standard specification : Use internal switches

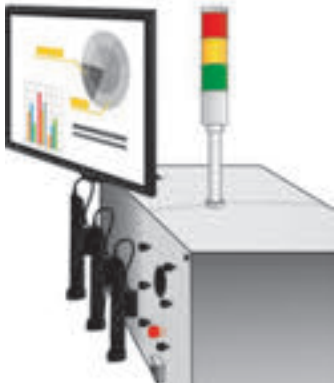

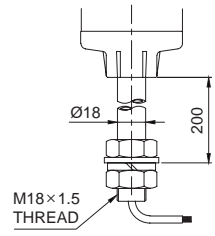


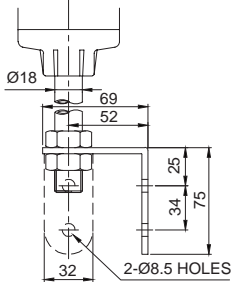

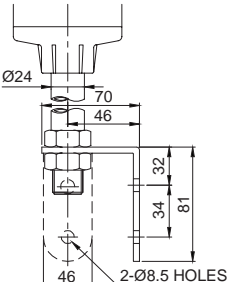
Turn on dip switches of each channel, designated sound will be played.

Tower Light Mounting Brackets

Tower Light Mounting Brackets



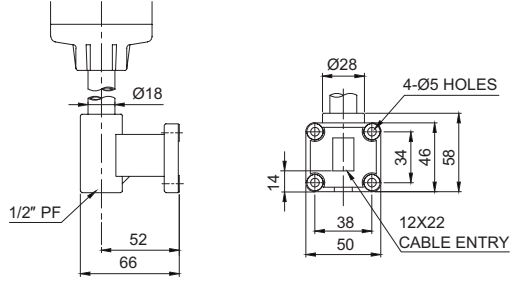


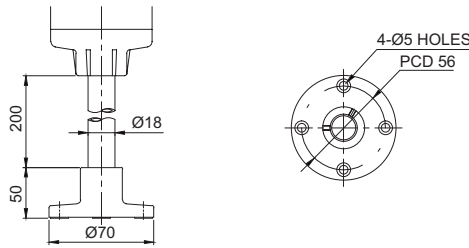

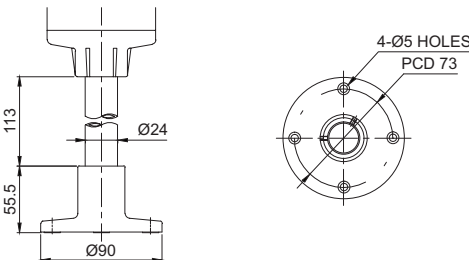
User can select from a variety of mounting brackets options depending on their application conditions.

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>Standard type pole mount installation. There is a screw at the end of the pole and it is equipped with nut for installation.</p> <p>Material : Steel</p> 	 <p>18mm SCREW & NUT (Standard Type)</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, ST45L-ETN, ST56EL-ETN, ST56L-ETN, ST45L-USB, ST56EL-USB, ST56L-USB</p>
<p>L-type bracket is attached to the pole mount tower light for installation to the side of the equipment.</p> <p>Material : Steel</p> 	 <p>LB18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, ST56WL, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, ST45L-ETN, ST56EL-ETN, ST56L-ETN, ST45L-USB, ST56EL-USB, ST56L-USB</p>
	 <p>LB24</p>	 <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR, ST80EL-ETN, ST80L-ETN, ST80EL-USB, ST80L-USB</p>



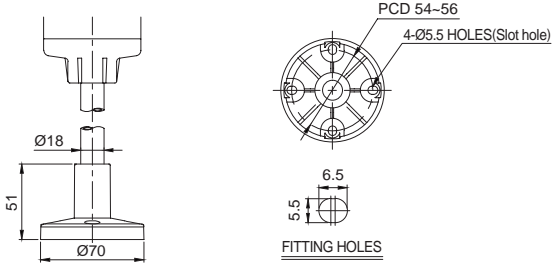


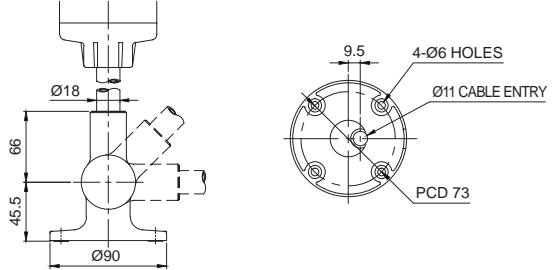

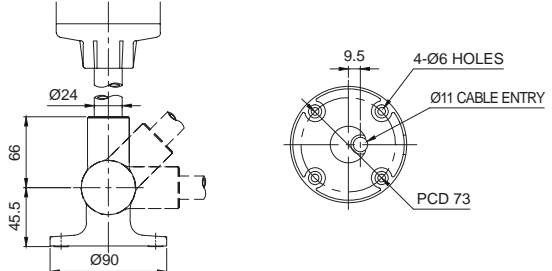
Tower Light Mounting Brackets

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>High-end L-type bracket is attached to the pole mount tower light for side of equipment installations. Wires can be threaded through the side of the bracket or come out at the bottom. The threads inside the bottom of the bracket can enable use of cable connectors.</p> <p>Material : PC Color : Ivory</p> 	 <p>LW18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p>
<p>Round-shaped bracket for horizontal surface installation.</p> <p>Material : Al Color : Silver</p> 	 <p>SZ18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p>
	 <p>SZ24</p>	 <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p>



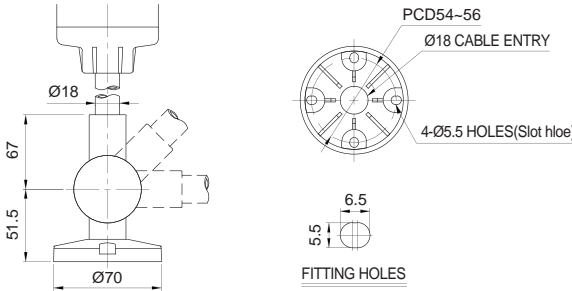



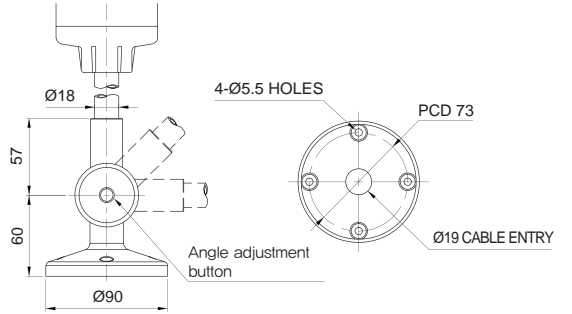
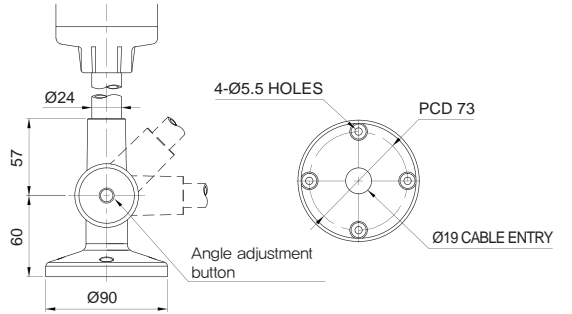
Tower Light Mounting Brackets

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>Round-shaped bracket for horizontal surface installation.</p> <p>Material : PC Color : Black</p> 	 <p style="text-align: center;">QZ18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p>
<p>A angle adjustable bracket (15 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.</p> <p>Material : Al Color : Silver</p> 	 <p style="text-align: center;">SL18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45L, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p>
	 <p style="text-align: center;">SL24</p>	 <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p>



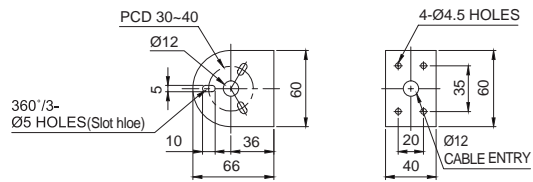


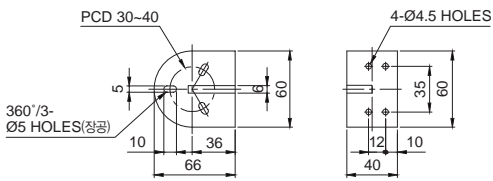


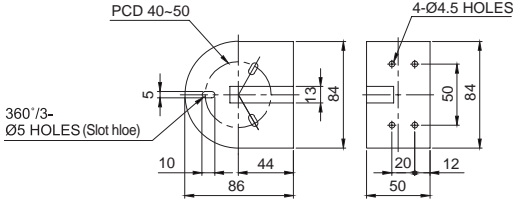
Tower Light Mounting Brackets

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>A angle adjustable bracket (5 degree intervals for a range of 0-180 degrees) enables easy vertical, horizontal, and slanted installation.</p> <p>Material : PC Color : Black</p> 	 <p>QL18</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF</p>
<p>QLA bracket is angle-adjustable with the adjustment button located on the side. It enables 3 angle adjustments at 0, 45, 90 degrees.</p> <p>Material : PC Color : Black</p> 	 <p>QLA18</p>  <p>QLA24</p>	 <p>ST45B, ST45BF, ST45L, ST45LF, ST56B, ST56BF, ST56L, ST56LF, ST56EL, ST56ELF, STC45, STC56EL, STC56L, QT50L, QT50LF, QT50LS, QT50LR, STG40L, STG40LF, STG50L, STG50LF, STG40L, STG40LF, STG50L, STG50LF</p>  <p>ST80B, ST80BF, ST80L, ST80LF, ST80EL, ST80ELF, STC80L, STC80LF, STC80EL, STC80ELF, QT70L, QT70LF, QT70LS, QT70LR</p>



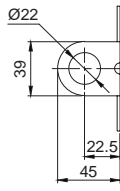
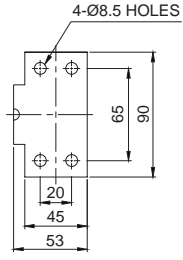

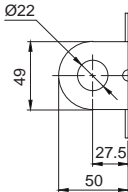
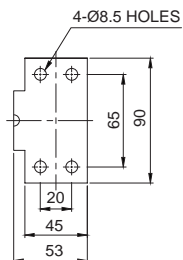
Tower Light Mounting Brackets

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>Bracket options for direct mount tower light installation.</p> <p>Material : Steel Color : Silver, Ivory</p> 	 <p>TWS45</p>	 <p>ST45MB, ST45MBF, ST45ML, ST45MLF, ST56MB, ST56MBF, ST56ML, ST56MLF, ST56MEL, ST56MELF, STG40ML, STG40MLF, STG50ML, STG50MLF, STC45ML, STC45MLF, STC56ML, STC56MLF, STC56MEL, STC56MELF, QTG50ML, QTG50MLF, QTG60ML, QTG60MLF, QTC50ML, QTC50MLF, QTC60ML, QTC60MLF, QTR50ML, QTR50MLF, QTR60ML, QTR60MLF, QT50ML, QT50MLF, QT50MLS, QT50MLR</p>
<p>High-end bracket options for direct mount tower light installation.</p> <p>Bracket structure allows for contained and tidy wiring with no exposed wires.</p> <p>Material : PC Color : Black, Ivory</p> 	 <p>TWA45</p>	 <p>ST45MB, ST45MBF, ST45ML, ST45MLF, ST56MB, ST56MBF, ST56ML, ST56MLF, ST56MEL, ST56MELF, STG40ML, STG40MLF, STG50ML, STG50MLF, STC45ML, STC45MLF, STC56ML, STC56MLF, STC56MEL, STC56MELF, QTG50ML, QTG50MLF, QTG60ML, QTG60MLF, QTC50ML, QTC50MLF, QTC60ML, QTC60MLF, QTR50ML, QTR50MLF, QTR60ML, QTR60MLF, QT50ML, QT50MLF, QT50MLS, QT50MLR</p>
<p>High-end bracket options for direct mount tower light installation.</p> <p>Bracket structure allows for contained and tidy wiring with no exposed wires.</p> <p>Material : PC Color : Black, Ivory</p> 	 <p>TWA80</p>	 <p>ST80MB, ST80MBF, ST80ML, ST80MLF, STC80ML, STC80MLF, QTG70ML, QTG70MLF, QTC70ML, QTC70MLF, QTR70ML, QTR70MLF, QT70ML, QT70MLF, QT70MLS, QT70MLR</p>

Tower Light Mounting Brackets

(Units : mm)

Features	Product Image	Technical Diagram for Applicable Models
<p>Bracket options for installation of the direct mount slim tower light to the side of equipment.</p> <p>Material : Steel Color : Silver, Ivory</p> 	 <p style="text-align: center;">STAWB25</p>	  <p style="text-align: center;">STA25SLM, STA35SL, STA35SLM</p>
	 <p style="text-align: center;">STAWB45</p>	  <p style="text-align: center;">STA45SLM</p>

Icon Description

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

Light Source and Operating Mode Icons

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

Acoustic Signal Icons

Icon	Operating Mode	Icon	Operating Mode
	Buzzer		Speaker
	Horn		Bell
	Motor siren		MP3
	Decibel		

Specifications Icons

Icon	Operating Mode	Icon	Operating Mode
	Magnet type		Ambient operating temperature
	NPN type transistor		PNP type transistor
	IP rating		Wireless Network

Detail Icons

Icon	Operating Mode	Icon	Operating Mode
	Common specification		External view drawing
	Wiring		Mounting
	User specifications		Model selection

Qlight Catalogue Introduction

Qlight produces a wide variety of product categories which offers the customer the ability to select the suitable device for their application needs and environments.

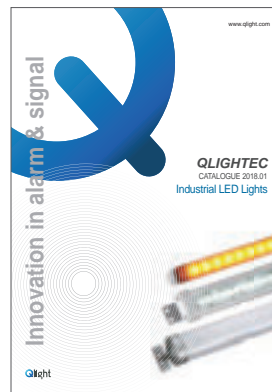
There are warning/signal lights, electric signal horns, signal tower lights, warning light bars, PC control tower lights, industrial LED lights, aviation obstruction lights, and limit switches.



Total Catalogue



Simple Catalogue



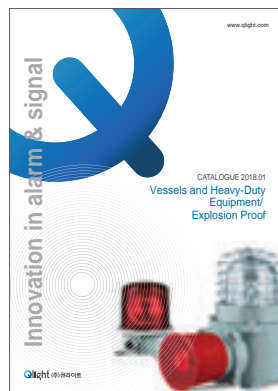
Industrial LED Lights



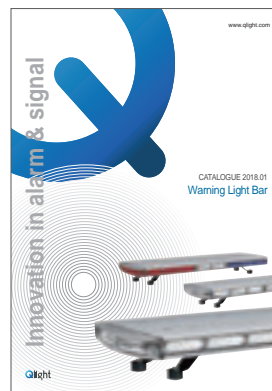
Signal Tower Lights



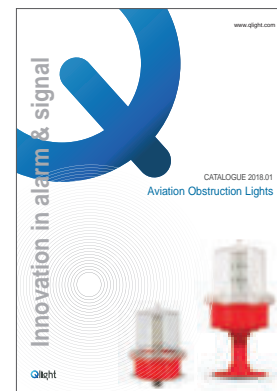
Warning/ Signal Electric Horn



Vessels and Heavy-Duty Signalings/ Explosion Proof



Warning Light Bar



Aviation Obstruction Lights



Wireless Network System



Agriculture Machine Warning Light



Limit Switch



For Steel Manufacturing Facilities



FOR YOUR SAFETY

Specification and dimensions listed in this catalogue are subject to change without prior notice for product quality improvement. The newest product information is available on our web site. (www.qlight.com) Please read the Instruction Manual attached to the product carefully before installation and use.

Qlight Catalogue Introduction

Signal Tower Lights

Warning/ Signal & Electric Horn

Vessels and Heavy-Duty & Equipment/ Explosion Proof

Warning Light Bar

Aviation Obstruction Lights

Industrial LED Lights

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WARNING LIGHT | ELECTRONIC HORN | SIGNAL TOWER LIGHT | EMERGENCY LIGHT BAR | LED OBSTRUCTION LIGHT | LED WORK LIGHT

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