TL50BL Beacon Tower Light

BANNER®
more sensors, more solutions

Datasheet

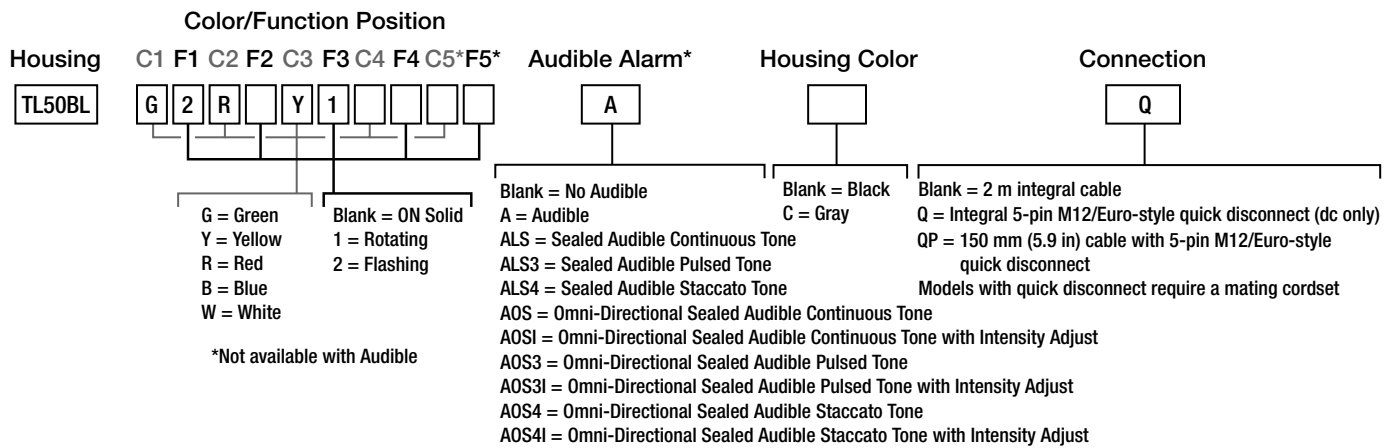*Compact Beacon Tower Light*

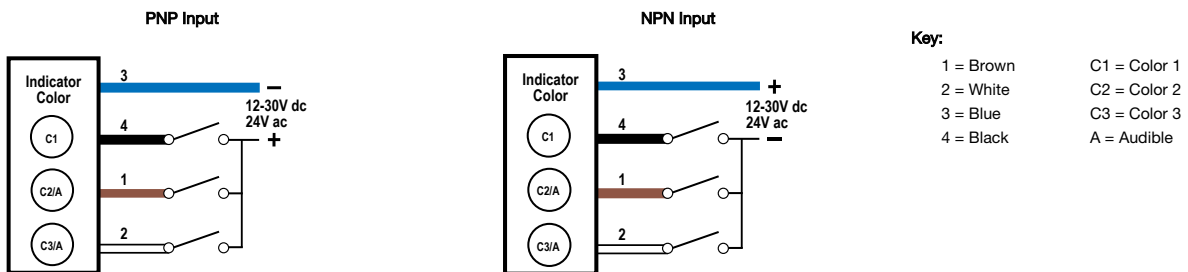Standard Audible

Sealed Audible

Omni-Directional
Sealed Audible

Standard

- Rugged, cost-effective, and easy-to-install multi-segment indicators
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Displays up to 5 colors
- Steady on, flashing, and rotating models available
- Audible models available with standard, sealed, or omni-directional audible element
- Available in black or light gray housing
- Continuous, pulsed, and staccato tones available
- 12 V dc to 30 V dc or 24 V ac operation
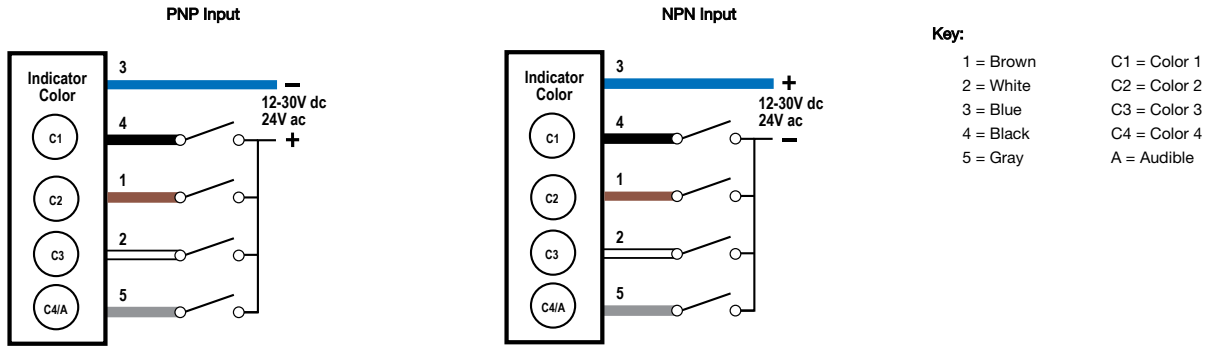- No assembly required

Models

Color/Function Position

Housing	C1	F1	C2	F2	C3	F3	C4	F4	C5*	F5*	Audible Alarm*	Housing Color	Connection
TL50BL	G	2	R		Y	1					A		Q

G = Green
Y = Yellow
R = Red
B = Blue
W = White

*Not available with Audible

Blank = ON Solid
1 = Rotating
2 = Flashing

Blank = No Audible
A = Audible
ALS = Sealed Audible Continuous Tone
ALS3 = Sealed Audible Pulsed Tone
ALS4 = Sealed Audible Staccato Tone
AOS = Omni-Directional Sealed Audible Continuous Tone
AOSI = Omni-Directional Sealed Audible Continuous Tone with Intensity Adjust
AOS3 = Omni-Directional Sealed Audible Pulsed Tone
AOS3I = Omni-Directional Sealed Audible Pulsed Tone with Intensity Adjust
AOS4 = Omni-Directional Sealed Audible Staccato Tone
AOS4I = Omni-Directional Sealed Audible Staccato Tone with Intensity Adjust

Blank = Black
C = Gray

Blank = 2 m integral cable
Q = Integral 5-pin M12/Euro-style quick disconnect (dc only)
QP = 150 mm (5.9 in) cable with 5-pin M12/Euro-style quick disconnect
Models with quick disconnect require a mating cordset

Wiring Diagrams — 4-Pin Models with 1 to 3 Segments

PNP Input

Indicator Color
C1
C2/A
C3/A

3
4
1
2

12-30V dc
24V ac
−
+

NPN Input

Indicator Color
C1
C2/A
C3/A

3
4
1
2

12-30V dc
24V ac
+
−

Key:

1 = Brown	C1 = Color 1
2 = White	C2 = Color 2
3 = Blue	C3 = Color 3
4 = Black	A = Audible

Pins 1 and 2 could activate the corresponding color or the audible function, if available.

Wiring Diagrams — 5-Pin Models with 4 Segments

PNP Input

NPN Input

Indicator Color

3 — 12-30V dc 24V ac +
4
C1
C2 1
C3 2
C4/A 5

Indicator Color

3 + 12-30V dc 24V ac —
4
C1
C2 1
C3 2
C4/A 5

Key:

1 = Brown	C1 = Color 1
2 = White	C2 = Color 2
3 = Blue	C3 = Color 3
4 = Black	C4 = Color 4
5 = Gray	A = Audible

Pin 5 could activate the corresponding color or the audible function, if available.

Wiring Diagrams — 8-Pin Models with 5 Segments

PNP Input

NPN Input

Indicator Color

7 — 12-30V dc 24V ac +
6
C1
C2 2
C3 1
C4 5
C5/A 4
8
3

Indicator Color

7 + 12-30V dc 24V ac —
6
C1
C2 2
C3 1
C4 5
C5/A 4
8
3

Key:

1 = White	C1 = Color 1
2 = Brown	C2 = Color 2
3 = Green	C3 = Color 3
4 = Yellow	C4 = Color 4
5 = Gray	C5 = Color 5
6 = Pink	A = Audible
7 = Blue	
8 = Red	
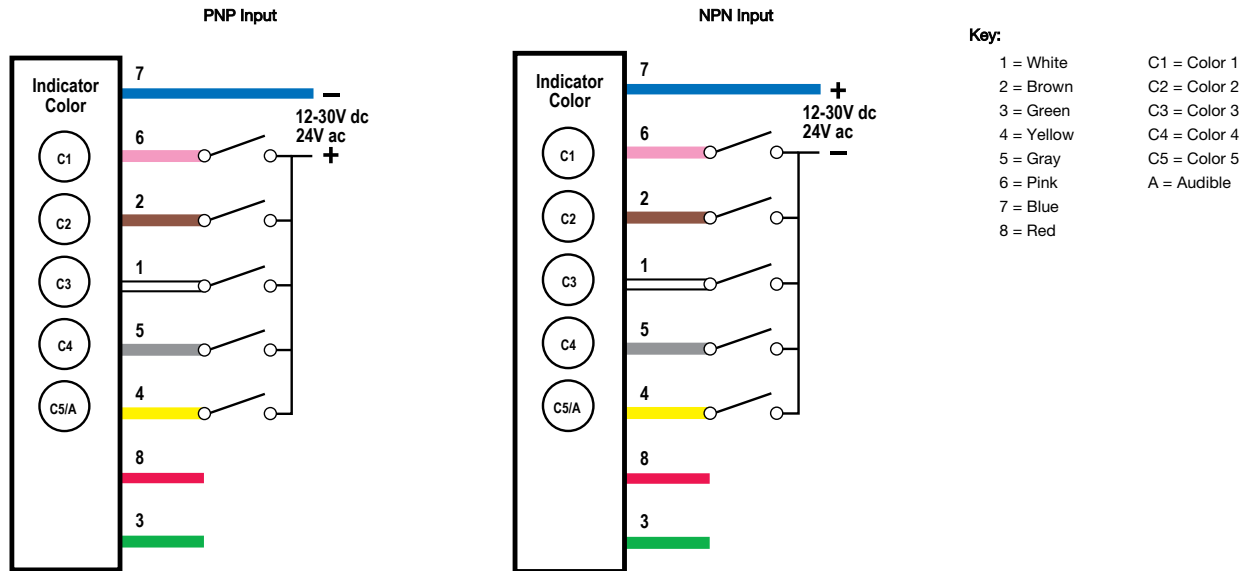
Pin 4 could activate the corresponding color or the audible function, if available. Pins 3 and 8 are not used.

www.bannerengineering.com - Tel: + 1 888 373 6767

Specifications

Supply Voltage and Current
12 V dc to 30 V dc; or 24 V ac (± 3 V) at 50 Hz to 60 Hz
Indicators—maximum current per LED color:
- 125 mA at 12 V dc
- 60 mA at 30 V dc
- 75 mA at 24 V ac

Standard Audible Alarm: 25 mA maximum current
Sealed Audible Alarm: 35 mA maximum current
Omni-Directional Sealed Audible Alarm: 45 mA maximum current
Use only with a suitable Class 2 power supply or transformer

Supply Protection Circuitry
Protected against transient voltages

Input Response Time
Indicator On/Off: 1 millisecond maximum

Audible Alarm
Standard Audible Alarm: 2.7 kHz ± 500 Hz oscillation frequency; maximum intensity 92 dB at 1 m (3.3 ft) (typical)
Sealed Audible Alarm: 2.9 kHz ± 250 Hz oscillation frequency; maximum intensity 94 dB at 1 m (3.3 ft) (typical)
Omni-Directional Sealed Audible Alarm: 2.1 kHz ± 250 Hz oscillation frequency; maximum intensity 99 dB at 1 m (3.3 ft) (typical)
Omni-Directional Sealed Audible Alarm with Intensity Adjustment: 2.1 kHz ± 250 Hz oscillation frequency; maximum intensity 95 dB at 1 m (3.3 ft) (typical)
Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum)
- **Standard Audible:** 30 dB
- **Sealed Audible:** 20 dB
- **Omni-Directional Sealed Audible:** 12 dB

Audible Adjustment
Standard Audible Alarm: Unscrew the cover (up to 1.5 turns maximum) to adjust the audible intensity. (Do not exceed 1.5 turns or the cover may detach during operation.) For maximum intensity, rotate the center plug 180° counterclockwise to remove it.
Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment: Rotate the front cover until the desired intensity is reached.
Omni-Directional Sealed Audible Alarm: No adjustment.

Connections
Integral 4-pin, 5-pin, or 8-pin M12/Euro-style quick disconnect, 150 mm (6 in) PVC cable with a M12/Euro-style quick disconnect, or 2 m (6.5 ft) integral PVC cable, depending on model
Models with a quick disconnect require a mating cordset

Construction
Bases and Covers: ABS
Light Segment: Polycarbonate

Vibration and Mechanical Shock
Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 1.0 mm amplitude, 5 minutes sweep, 30 minutes dwell)
Meets IEC 60068-2-27 requirements (Shock: 30G 11 ms duration, half sine wave)

Certifications

CE   c UL US LISTED

Indicators
LEDs are independently selected, 1 to 5 colors depending on model

Indicator Functions
A color designation followed by an LED option number, indicates the LED status. For example: TL50BLR2Q or TL50BLG1AQ.

LED Option	LED Status	Rotation or Flash Rate
Blank	Steady On	–
1	Rotating	200 RPM ± 15%
2	Flashing	1.6 Hz rate ± 15%

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	52
Red	626 nm	24
Yellow	590 nm	15
Blue	470 nm	16
White	5000 K	56

Operating Conditions
Non-Audible: –40 °C to +50 °C (–40 °F to +122 °F)
Standard and Sealed Audible: –20 °C to +50 °C (–4 °F to +122 °F)
95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating
UL Type 4X Indoor and UL Type 13
Non-Audible and Sealed Audible: IEC IP67
Standard Audible: IEC IP50

Required Overcurrent Protection

⚠️ **WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.
Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to *www.bannerengineering.com*.

Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions
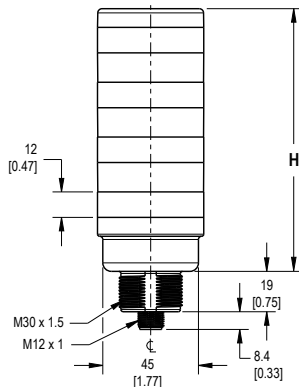
# of Colors	Tower Height (H)			
	Non-Audible	Standard Audible*	Sealed Audible	Omni-Directional Sealed Audible
1	46.2 mm (1.8 in)	77.1 mm (3.1 in)	100.2 mm (4.0 in)	114.2 mm (4.5 in)
2	72.0 mm (2.8 in)	102.9 mm (4.1 in)	126.0 mm (5.0 in)	140.0 mm (5.5 in)
3	97.8 mm (3.8 in)	128.7 mm (5.1 in)	151.8 mm (6.0 in)	165.8 mm (6.5 in)
4	123.6 mm (4.8 in)	154.5 mm (6.1 in)	177.6 mm (7.0 in)	191.6 mm (7.5 in)
5	149.4 mm (5.8 in)	-	-	-
* Tower height (H) with top unscrewed approximately 3.5 mm to allow sound to escape				

All measurements are listed in millimeters [inches], unless noted otherwise.

Accessories

Cordsets

4-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC2S-815	4.57 m (15 ft)			
MQDC2S-830	9.14 m (30 ft)			
MQDC2S-850	15.2 m (50 ft)			
MQDC2S-806RA	1.83 m (6 ft)	Right-Angle		
MQDC2S-815RA	4.57 m (15 ft)			
MQDC2S-830RA	9.14 m (30 ft)			
MQDC2S-850RA	15.2 m (50 ft)			

Mounting Brackets

All measurements are listed in millimeters [inches], unless noted otherwise.

SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel
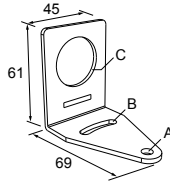
**Hole center spacing:** A to B=40
Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available
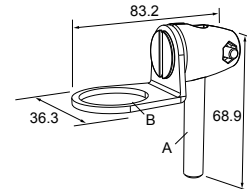
Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
Hole size: B= ø 30.1

SMB30MM
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
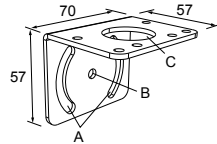
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMBAMS30P
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. 300 series stainless steel
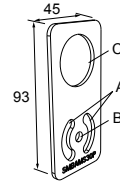
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMBAMS30RA
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. (2.6 mm) cold-rolled steel
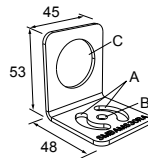
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included
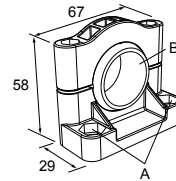
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

LMBE12RA35
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

Hole center spacing: 20.0
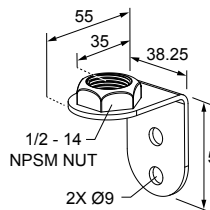
1/2 - 14 NPSM NUT
2X Ø9

LMBE12RA45
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm

Hole center spacing: 35.0

1/2 - 14 NPSM NUT
2X Ø11
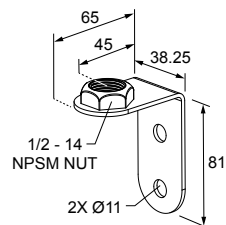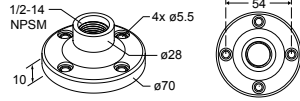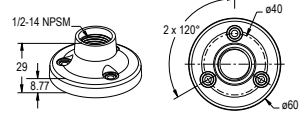
LMB Sealed Right-Angle Bracket

Model	Description	Construction	
LMB30RA	**Direct-Mount Models:** Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	Black polycarbonate	
LMB30RAC		Gray polycarbonate	
LMBE12RA	**Pipe-Mount Models:** Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets. For use with stand-off pipe (listed and sold separately).	Black polycarbonate	
LMBE12RAC		Gray polycarbonate	

Elevated Mount System

Model	Features	Components
SA-M30TE12 - Black Acetal **SA-M30TE12C** - White UHMW	• Streamlined black acetal or white UHMW stand-off pipe adapter/cover • Connects between 30 mm light base and ½ in. NPSM/DN15 pipe • Mounting hardware included	
Polished 304 Stainless Steel / **Black Anodized Aluminum** / **Clear Anodized Aluminum** **SOP-E12-150SS** 150 mm (6 in) long / **SOP-E12-150A** 150 mm (6 in) long / **SOP-E12-150AC** 150 mm (6 in) long **SOP-E12-300SS** 300 mm (12 in) long / **SOP-E12-300A** 300 mm (12 in) long / **SOP-E12-300AC** 300 mm (12 in) long **SOP-E12-900SS** 900 mm (36 in) long / **SOP-E12-900A** 900 mm (36 in) long / **SOP-E12-900AC** 900 mm (36 in) long	• Elevated-use stand-off pipe (½ in. NPSM/DN15) • Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface • ½ in. NPT thread at both ends • Compatible with most industrial environments	
SA-E12M30 - Black Acetal **SA-E12M30C** - White UHMW	• Streamlined black acetal or white UHMW mounting base adapter/cover • Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole • Mounting hardware included	

Pipe Mounting Flange

Pipe Mounting Flange			
Model	**Features**	**Construction**	
SA-F12	• Elevated-use stand-off pipes (½ in, NPSM/DN15) • M5 mounting hardware and nitrile gasket included	Die-cast zinc base with black paint	
SA-F12-3	• Elevated-use stand-off pipes (½ in, NPSM/DN15) • M4 mounting hardware and nitrile blend gasket included	Black Polycarbonate	

Banner Engineering Corp. Limited Warranty

FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Tower Lights *category:*

Click to view products by Banner *manufacturer:*

Other Similar products are found below :

5125 TL50BGYRQ TL50GYRAQ LD6A-3DQB-RYG LD6A-3DZQB-RYG 790520900 LD6A-3WQB-RYG LD6A-0PZQB 2994 TL50HRQP 4000-76501-5310000 TL50GRAQ TL50GYRQ TL50GYR LD6A-3WZQB-RYG TL70GYRQ C30-Q01 HD90-Q01 HD90-Q31 B-TL70B-Q5 B-TL70B-Q8 LCA130T3-TL50GYR300Q LCA130T3-TL50GYR600Q LCA130T3-TL50GYR900Q LCA130T3-TL50GYRAJ300Q LCA130T3-TL50GYRAJ600Q LCA130T3-TL50GYRAJ900Q LCA130T4-TL50BGYR300Q LCA130T4-TL50BGYR600Q LCA130T4-TL50BGYR900Q LCA130T4-TL50BGYRAJ300Q LCA130T4-TL50BGYRAJ600Q LCA130T4-TL50BGYRAJ900Q LCA130T4-TL50GYRA300Q LCA130T4-TL50GYRA600Q LCA130T4-TL50GYRA900Q LCA130T5-TL50BGYRA300Q LCA130T5-TL50BGYRA600Q LCA130T5-TL50BGYRA900Q SG-TL70-A SG-TL70B-A SG-TL70B-B SG-TL70B-G SG-TL70B-R SG-TL70B-W SG-TL70B-Y SG-TL70-W SG-TL70-G SG-TL70-O SG-TL70-Y