

EZ-LIGHT™ K50LD Daylight Visible Indicators (AC)



Datasheet

AC-Operated Indicators for Outdoor Applications

For the latest technical information about this product, including specifications, dimensions, and wiring, see www.BannerEngineering.com.



- Intense levels of light output for outdoor applications
- Controlled field of view for signage and narrow lane use
- May also be used for low-cost vision sensor illumination
- Rugged, cost-effective, and easy to install
- Compact devices are completely self-contained, no controller needed
- Immune to EMI and RFI interference
- 50 mm (2 in) diameter with flat profile and 30 mm (1.2 in) mounting base
- 85 V ac to 130 V ac operation



Note: Optional sun shield model K50DS is available for enhanced visibility in desert sun brightness levels (see [Sun Shield -- MASTER](#) on page 4).

Model ¹	LED Function	Inputs
K50LDGA120Q	1 Color: Green	85 to 130 V ac
K50LDRA120Q	1 Color: Red	
K50LDYA120Q	1 Color: Yellow	
K50LDWA120Q	1 Color: White	
K50LDBA120Q	1 Color: Blue	



WARNING: Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

Specifications

Supply Voltage and Current

85 to 130 V ac or 75 to 120 V dc at 16 mA maximum

Supply Protection Circuitry

Protected against transient voltages

Indicators

Color	Typical Wavelength or Color Temperature	Typical Intensity (lm)
Green	525 nm	14
Red	625 nm	4
Yellow	590 nm	5
Blue	470 nm	5
White	6200 K	12

Input Response Time

Indicator ON/OFF: 500 µs maximum

Construction

Polycarbonate, 30 mm mount

Connections

Integral 3-pin Micro-style quick disconnect fitting or 2 m (6.5 ft) integral cable, depending on model

Environmental Rating

Fully encapsulated, IEC IP67

Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F)
90% at +55 °C maximum relative humidity (non-condensing)

Certifications

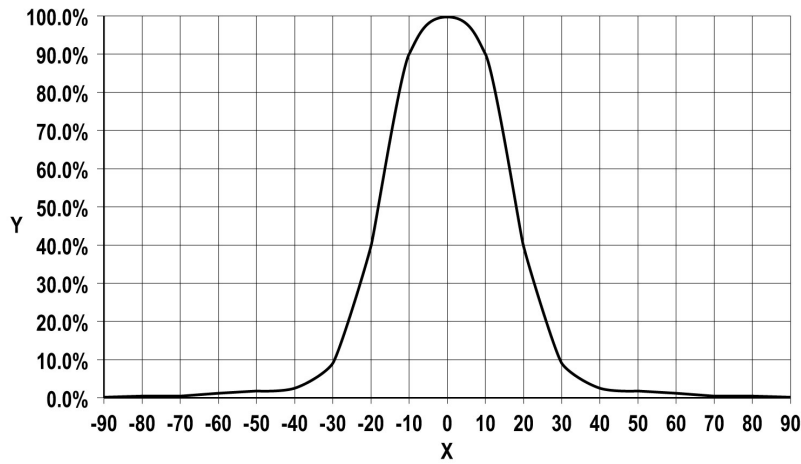


¹ Integral quick disconnect fitting models are listed.

- To order the 2 m (6.5 ft) cable model, omit the suffix **Q** from model number (example, **K50LDGA120**).
- Models with a quick disconnect fitting require a mating cable (see Accessories list).

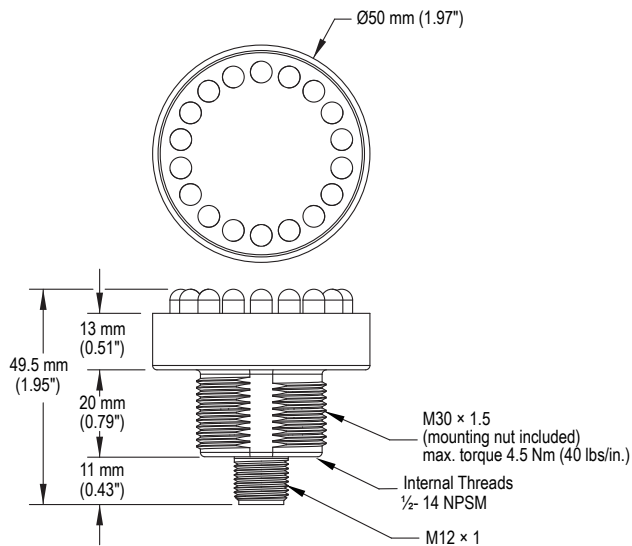


Percent of Maximum Intensity vs Viewing Angle



X: Viewing Angle (Deg)
Y: Intensity (Percent)

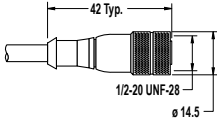
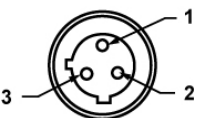
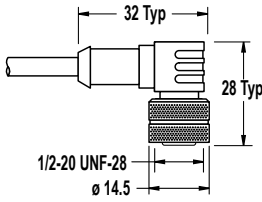
Dimensions



Wiring

Quick-Disconnect (QD) Models	Cabled Models
<p>Wiring Key: 1 = Green (not used) 2 = Red/Black 3 = Red/White</p>	<p>Wiring Key: 1 = Black 3 = White</p>

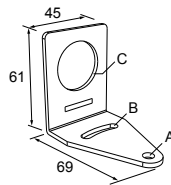
Accessories

3-Pin Micro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-306	1.83 m (6 ft)	Straight		 <p>1 = Green 2 = Red/Black 3 = Red/White</p>
MQDC-315	4.57 m (15 ft)			
MQDC-330	9.14 m (30 ft)			
MQDC-306RA	1.83 m (6 ft)	Right-Angle		
MQDC-315RA	4.57 m (15 ft)			
MQDC-330RA	9.14 m (30 ft)			

Mounting Brackets

SMB30A

- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel

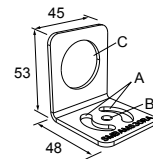


Hole center spacing: A to B=40

Hole size: A=∅ 6.3, B= 27.1 x 6.3, C=∅ 30.5

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

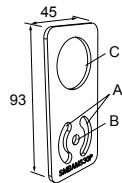


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 7.0, B=∅ 6.5, C=∅ 31.0

SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. 300 series stainless steel

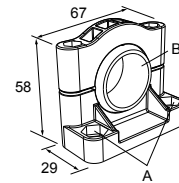


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 7.0, B=∅ 6.5, C=∅ 31.0

SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

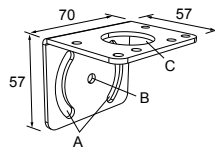


Hole center spacing: A=∅ 50.8

Hole size: A=∅ 7.0, B=∅ 30.0

SMB30MM

- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor

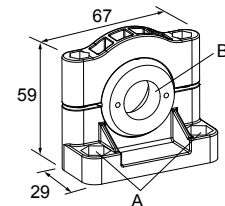


Hole center spacing: A = 51, A to B = 25.4

Hole size: A = 42.6 x 7, B = ∅ 6.4, C = ∅ 30.1

SMB3018SC

- 18 mm swivel side or barrel-mount bracket
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included



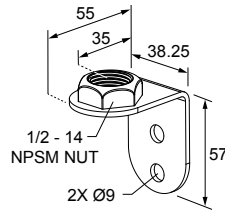
Hole center spacing: A = 50.8

Hole size: A = ∅ 7.0, B = ∅ 18.0

LMBE12RA35

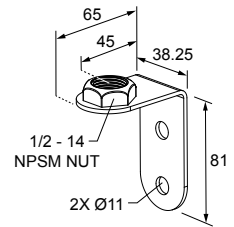
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

Hole center spacing: 20.0

**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



Sun Shield -- MASTER

K50DS

- Use for enhanced visibility in desert sun brightness levels
- Thermoplastic polyester

**K90DS**

- Use for enhanced visibility in direct sunlight conditions
- Polycarbonate



Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.