

# EZ-LIGHT™ Indicators - Daylight Visible



## Datasheet



- 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
- Up to three colors in one housing
- Immune to ambient light, EMI, and RFI interference
- 50 mm diameter with flat profile and 30 mm mounting base
- PNP (sourcing) or NPN (sinking) input type, depending on model
- 15 to 30 V dc operation



Contact Factory for more information



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

Model <sup>1</sup>	LED Function <sup>2</sup>	Inputs <sup>3</sup>
K50LDGRYPQ	3 Color: Green, Red, Yellow	PNP
K50LDGRYNQ		NPN
K50LDGRBPQ	3 Color: Green, Red, Blue	PNP
K50LDGRBNQ		NPN

Model*	LED Function <sup>2</sup>	Inputs <sup>3</sup>
K50LDXGXPQ	1 Color: Green	PNP/NPN
K50LDXRXQPQ	1 Color: Red	PNP/NPN
K50LDXYXPQ	1 Color: Yellow	PNP/NPN
K50LDXWXPQ	1 Color: White	PNP/NPN
K50LDXBXPQ	1 Color: Blue	PNP/NPN

Contact factory for other colors and color combinations.



### 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.

<sup>1</sup> Integral QD models only are listed.

- To order the 150 mm PVC pigtail with QD model, replace Q with QP in model number (example, K50LDGRYPQP).
- To order the 2 m (6.5 ft) cable model, omit suffix Q from model number (example, K50LDGRYP).
- A model with a QD requires a mating cable (see [4-pin Euro-Style Cordsets](#)).

<sup>2</sup> 3-color models: 6 LEDs per color; 1-color models: 18 LEDs per color

<sup>3</sup> 1-color models are PNP/NPN selectable, depending on hookup.



## Specifications

### Supply Voltage and Current

- 15 to 30 V dc at 120 mA maximum (1-color models)
- 15 to 30 V dc at 40 mA maximum per LED color (3-color models)
- 12 V dc minimum voltage to -20 °C for both models

### Supply Protection Circuitry

- Protected against reverse polarity and transient voltages

### Indicators

- LED colors are independently selected, depending on mode

### Input Response Time

- Indicator ON/OFF: 1 ms maximum

### Environmental Rating

- Fully encapsulated, rated IEC IP67

### Construction

- Base and covers: polycarbonate

### Connections

- Integral 4-pin M12/Euro-style quick disconnect fitting, 150 mm PVC pigtail with QD, or 2 m (6.5 ft) integral cable, depending on model

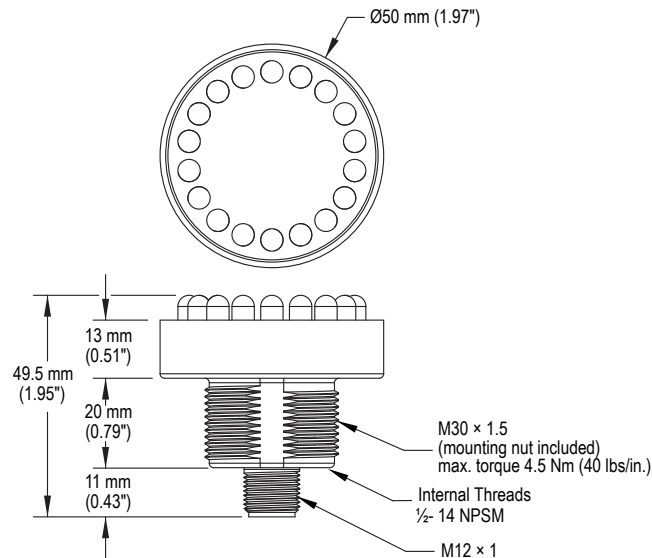
### Operating Conditions

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

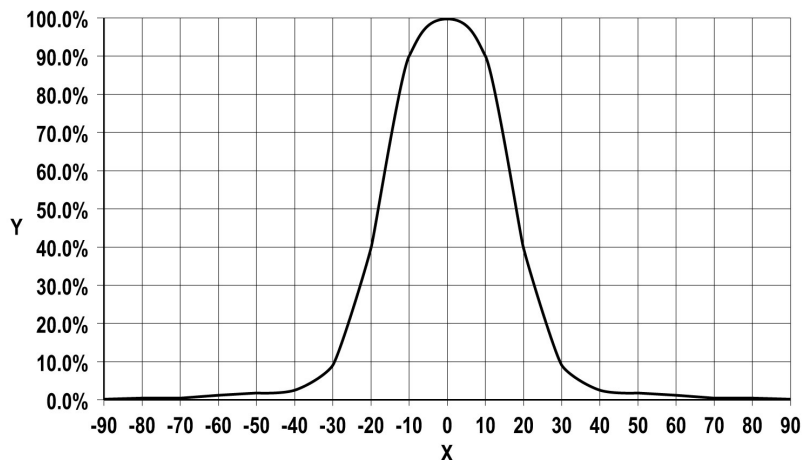
### Certifications



## Dimensions



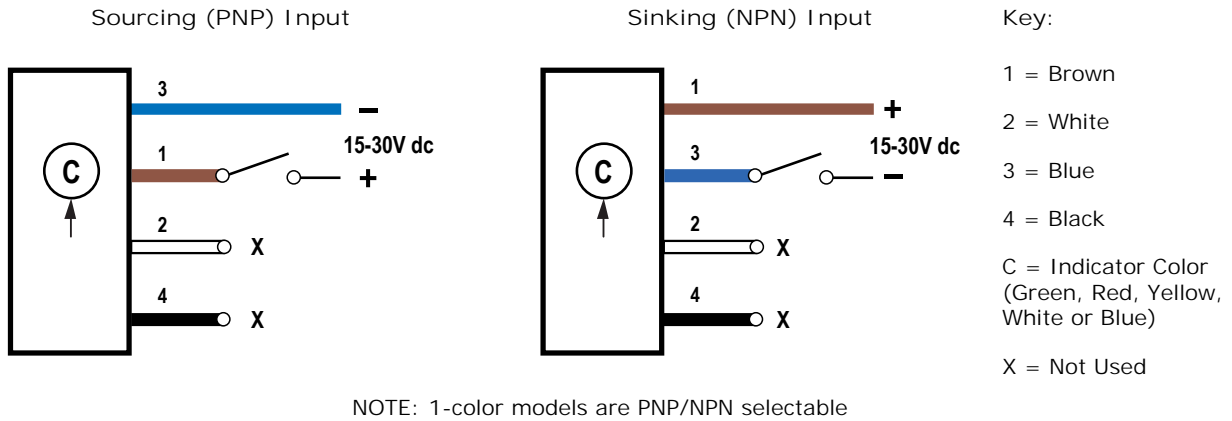
## Percent of Maximum Intensity vs Viewing Angle



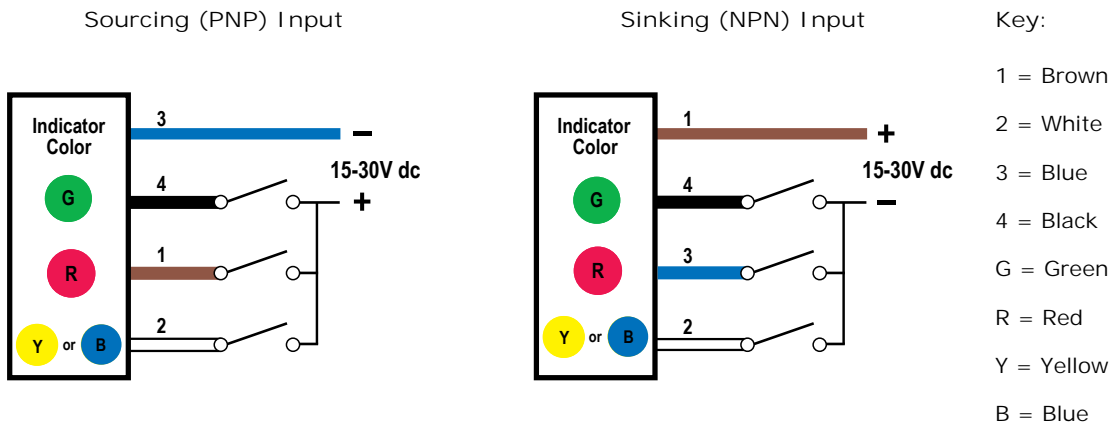
X: Viewing Angle (Deg)

Y: Intensity (Percent)

## Wiring – 1-Color Models

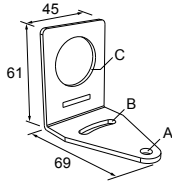
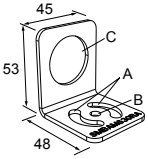
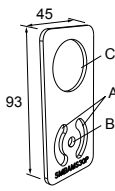
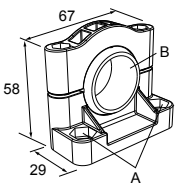
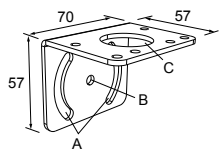
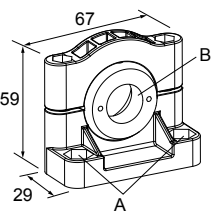


## Wiring – 3-Color Models




## Accessories

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

Mounting Brackets	
<p><b>SMB30A</b></p> <ul style="list-style-type: none"> <li>• Right-angle bracket with curved slot for versatile orientation</li> <li>• Clearance for M6 (¼ in) hardware</li> <li>• Mounting hole for 30 mm sensor</li> <li>• 12-ga. stainless steel</li> </ul>  <p>Hole center spacing: A to B=40 Hole size: A=∅ 6.3, B= 27.1 x 6.3, C=∅ 30.5</p>	<p><b>SMBAMS30RA</b></p> <ul style="list-style-type: none"> <li>• Right-angle SMBAMS series bracket</li> <li>• 30 mm hole for mounting sensors</li> <li>• Articulation slots for 90° + rotation</li> <li>• 12-ga. (2.6 mm) cold-rolled steel</li> </ul>  <p>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</p>
<p><b>SMBAMS30P</b></p> <ul style="list-style-type: none"> <li>• Flat SMBAMS series bracket</li> <li>• 30 mm hole for mounting sensors</li> <li>• Articulation slots for 90° + rotation</li> <li>• 12-ga. 300 series stainless steel</li> </ul>  <p>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</p>	<p><b>SMB30SC</b></p> <ul style="list-style-type: none"> <li>• Swivel bracket with 30 mm mounting hole for sensor</li> <li>• Black reinforced thermoplastic polyester</li> <li>• Stainless steel mounting and swivel locking hardware included</li> </ul>  <p>Hole center spacing: A=∅ 50.8 Hole size: A=∅ 7.0, B=∅ 30.0</p>
<p><b>SMB30MM</b></p> <ul style="list-style-type: none"> <li>• 12-ga. stainless steel bracket with curved mounting slots for versatile orientation</li> <li>• Clearance for M6 (¼ in) hardware</li> <li>• Mounting hole for 30 mm sensor</li> </ul>  <p>Hole center spacing: A = 51, A to B = 25.4 Hole size: A = 42.6 x 7, B = ∅ 6.4, C = ∅ 30.1</p>	<p><b>SMB3018SC</b></p> <ul style="list-style-type: none"> <li>• 18 mm swivel side or barrel-mount bracket</li> <li>• Black reinforced thermoplastic polyester</li> <li>• Stainless steel swivel locking hardware included</li> </ul>  <p>Hole center spacing: A = 50.8 Hole size: A = ∅ 7.0, B = ∅ 18.0</p>

## Sun Shield

<p><b>K50DS</b></p> <ul style="list-style-type: none"> <li>• Use for enhanced visibility in desert sun brightness levels</li> <li>• Thermoplastic polyester</li> </ul>	
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## Banner Engineering Corp. Limited Warranty

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