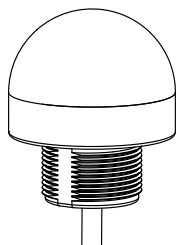


# EZ-LIGHT K50L2 Multicolor RGB Indicator



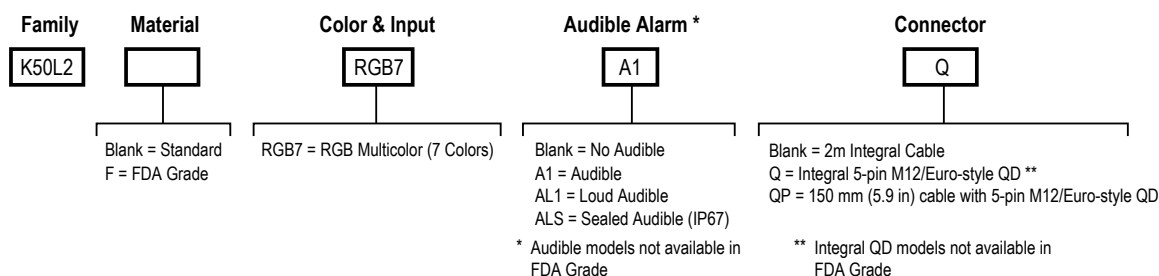
## Datasheet

Medium Sized, Seven Color Indicator with Audible Models and an Optional Flashing Input Control



- Bright, uniform indicator light
- Seven colors in one device (Red, Yellow, Green, Cyan, Blue, Magenta, White)
- 30 mm threaded polycarbonate base
- Translucent polycarbonate dome
- Rugged IP66, IP67 and IP69K design
- Bimodal inputs (PNP/NPN, depending on source wiring)
- Models with integrated audible alarm available
- Variety of connector options
- Models constructed from FDA-grade materials available

## Models



## Wiring Diagrams

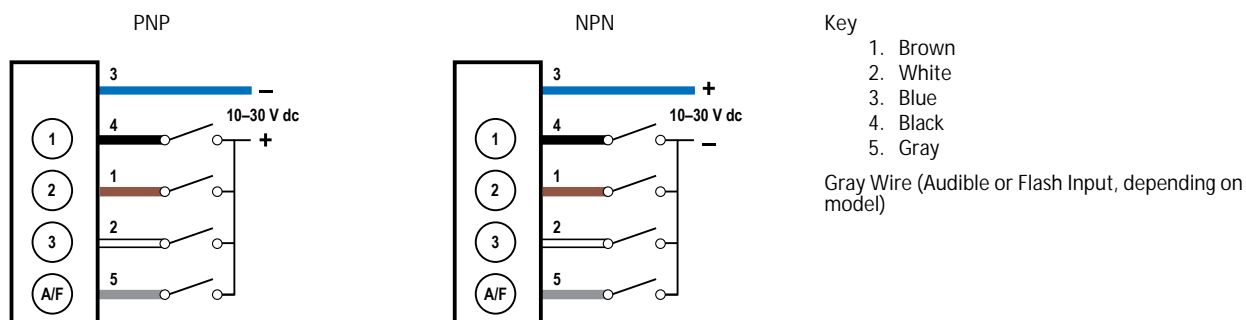


Table 1: Color Definition

	Red	Yellow	Green	Cyan	Blue	Magenta	White
Input 1	X	X				X	X
Input 2		X	X	X			X
Input 3				X	X	X	X

An "X" denotes an active input, for example when Input 1 and Input 3 are active, the indicator will show Magenta.



# Specifications

## Supply Voltage and Current

- 10 V dc to 30 V dc
- 220 mA Max. at 10 V dc
  - 190 mA Max. at 12 V dc
  - 115 mA Max. at 24 V dc
  - 100 mA Max. at 30 V dc

## Supply Protection Circuitry

Protected against reverse polarity and transient voltages

## Input Response Time

250 ms maximum

## Flash

1.5 Hz flash rate using flash input wire (not available on audible models)

## Audible Alarm

All models have a Steady tone  
A1 Model: 75 dB at 1 m (typical), 3 kHz  $\pm$  500 Hz  
AL1 Model: 95 dB at 1 m (typical), 2.7 kHz  $\pm$  500 Hz  
ALS Model: 94 dB at 1 m (typical), 2.9 kHz  $\pm$  250 Hz

## Construction

Standard model base, dome, and nut: polycarbonate  
FDA model base, dome, and nut: FDA grade polycarbonate

## Connections

Integral 5-pin M12/Euro-style quick disconnect, or 150 mm (6 in) PVC cable with quick disconnect, or 2 m (6.5 ft) cable, depending on model

## Mounting

M30 by 1.5 threaded base Max. Torque 4.5 Mn (40 in-lbf)(mounting nut included)

## Indicators

7 colors  
Only one color can be on at a time.

## Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates <sup>†</sup>		Lumen Output (Typical at 25 °C)
		x	y	
Green	530 nm	0.170	0.711	21.4
Red	625 nm	0.688	0.310	6.3
Blue	470 nm	0.133	0.072	4.7
White	5700 K	0.311	0.328	21.3
Yellow	–	0.457	0.485	17.2
Cyan	–	0.154	0.321	25.1
Magenta	–	0.365	0.176	8.5

## Environmental Rating

Non-Audible Models: IEC IP66, IEC IP67, IEC IP69K per DIN 40050-9  
A1 and AL1 Models: IEC IP50  
ALS Models: IEC IP66, IEC IP67, IEC IP69K

## Vibration and Mechanical Shock

All models meet Mil Std. 202F requirements. Method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 inch, maximum acceleration 10G). Also meets IEC 60947-5-1 requirements: 15G 11 ms duration, half sine wave.

## Operating Conditions

–40 °C to +50 °C (–40 °F to +122 °F)  
90% at +50 °C maximum relative humidity (non-condensing)  
Storage Temperature: –40 °C to +70 °C (–40 °F to +158 °F)

## 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](http://www.bannerengineering.com).

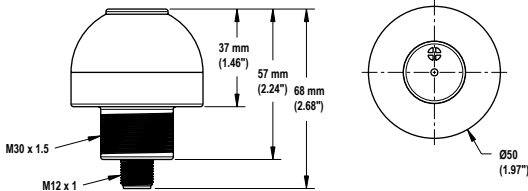
Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

## Certifications

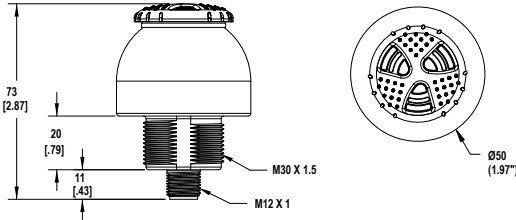


# Dimensions

A1 and AL1 Audible Models

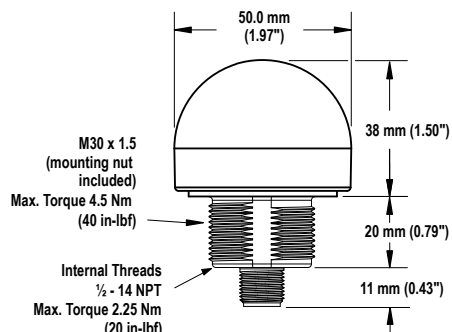


ALS Audible Model



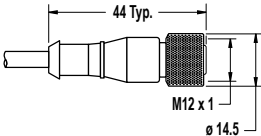
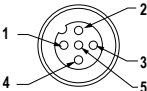
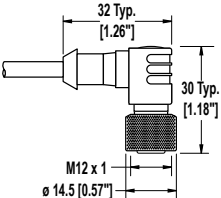
<sup>†</sup> Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

## Non-Audible Model



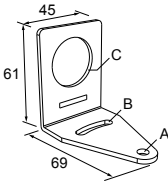
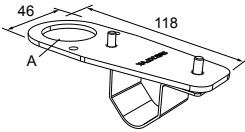
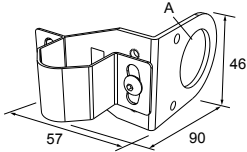
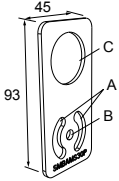
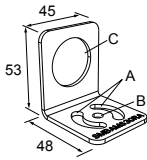
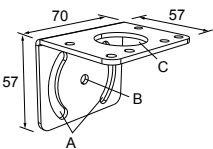
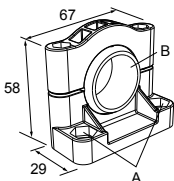
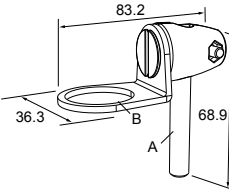
## Accessories

## Cordsets

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		 <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>	
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)				

5-Pin Threaded M12/Euro-Style Cordsets—Washdown Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0506	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC-WDSS-0515	4.57 m (15 ft)			
MQDC-WDSS-0530	9.14 m (30 ft)			

# 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=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p>	<p><b>SMB30FVK</b></p> <ul style="list-style-type: none"> <li>V-clamp, flat bracket and fasteners for mounting to pipe or extensions</li> <li>Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions</li> <li>30 mm hole for mounting sensors</li> </ul>  <p>Hole size: A= ø 31</p>
<p><b>SMB30RAVK</b></p> <ul style="list-style-type: none"> <li>V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion</li> <li>Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions</li> <li>30 mm hole for mounting sensors</li> </ul>  <p>Hole size: A = ø 30.5</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=ø 6.5, C=ø 31.0</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=ø 6.5, C=ø 31.0</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 = ø 6.4, C = ø 30.1</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=ø 50.8 Hole size: A=ø 7.0, B=ø 30.0</p>	<p><b>SMB30FA</b></p> <ul style="list-style-type: none"> <li>Swivel bracket with tilt and pan movement for precise adjustment</li> <li>Mounting hole for 30 mm sensor</li> <li>12-ga. 304 stainless steel</li> <li>Easy sensor mounting to extrude rail T-slot</li> <li>Metric and inch size bolt available</li> </ul>  <p>Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50 Hole size: B= ø 30.1</p>

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