

# LED Series Sealed Backlights



## Datasheet

For use with any Vision System



- Rugged, waterproof housing, rated IEC IP67
- Mounts directly from the back or surface mount using available brackets
- Smooth exterior for easy cleaning
- Diffused backlights for any Vision System (see Banner's web site [www.bannerengineering.com](http://www.bannerengineering.com) for a complete lighting tutorial)
- Continuous or strobed operation is selectable via sensor software
- Solid-state LED matrix, in four sizes
- Available in four visible colors plus infrared
- Extremely bright light
- Completely non-corrosive
- Extremely even intensity edge-to-edge
- M12 connector

## Models

Models	LED Color	Wavelength	Lighted Area
LEDIB75X150PW2-XQ	Infrared	850 nm	75 mm x 150 mm (2.95 in x 5.91 in)
LEDRB75X150PW2-XQ	Visible Red	633 nm	
LEDBB75X150PW2-XQ	Blue	469 nm	
LEDGB75X150PW2-XQ	Green	525 nm	
LEDWB75X150PW2-XQ	White	6500 K	
LEDIB150X150PW2-XQ	Infrared	850 nm	150 mm x 150 mm (5.91 in x 5.91 in)
LEDRB150X150PW2-XQ	Visible Red	633 nm	
LEDBB150X150PW2-XQ	Blue	469 nm	
LEDGB150X150PW2-XQ	Green	525 nm	
LEDWB150X150PW2-XQ	White	6500 K	
LEDIB225X150PW2-XQ	Infrared	850 nm	225 mm x 150 mm (8.86 in x 5.91 in)
LEDRB225X150PW2-XQ	Visible Red	633 nm	
LEDBB225X150PW2-XQ	Blue	469 nm	
LEDGB225X150PW2-XQ	Green	525 nm	
LEDWB225X150PW2-XQ	White	6500 K	
LEDIB300X150PW2-XQ	Infrared	850 nm	300 mm x 150 mm (11.81 in x 5.91 in)
LEDRB300X150PW2-XQ	Visible Red	633 nm	
LEDBB300X150PW2-XQ	Blue	469 nm	
LEDGB300X150PW2-XQ	Green	525 nm	
LEDWB300X150PW2-XQ	White	6500 K	



## Specifications

### Light Source

LED; wavelengths:

LED Color	Wavelength
Infrared	850 nm
Visible Red	633 nm
Blue	469 nm
Green	525 nm
White	6500 K

### Supply Voltage and Current

75 mm x 150 mm models: 24 V dc  $\pm$  10% @ 550 mA maximum  
 150 mm x 150 mm models: 24 V dc  $\pm$  10% @ 1.1 A maximum  
 225 mm x 150 mm models: 24 V dc  $\pm$  10% @ 1.65 A maximum  
 300 mm x 150 mm models: 24 V dc  $\pm$  10% @ 2.2 A maximum

### Connections

Integral 5-pin threaded M12/Euro-style male quick disconnect, accessory cordset required

### Operating Conditions

Temperature: 0 °C to +50 °C (+32 °F to +122 °F)  
 Humidity: 95% maximum relative humidity (non-condensing)

### Illumination

Diffused for use in applications needing a backlit light

### Useful Life

B50/L50 Lifetime > 100,000 hours (Infrared, Red)  
 B50/L50 Lifetime > 90,000 hours (Blue, Green, White)

### Construction

Black Valox™ housing; acrylic window

### Environmental Rating

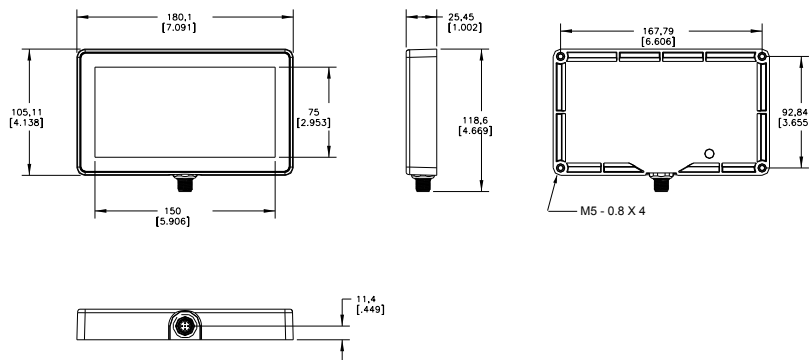
IEC IP67

### Certification

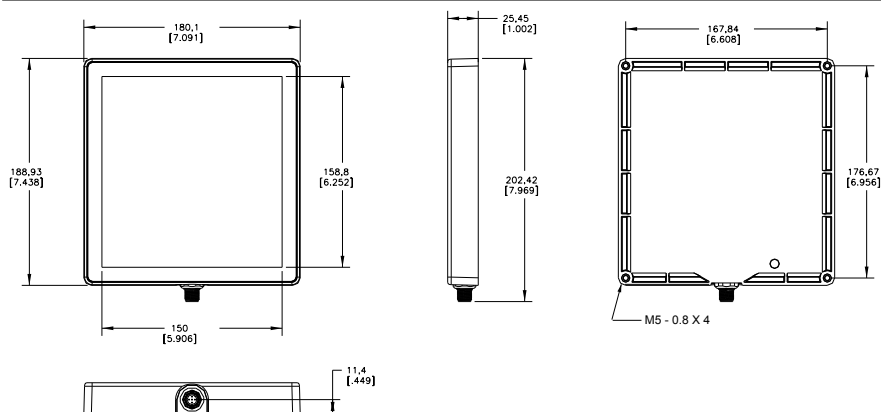


## Dimensions

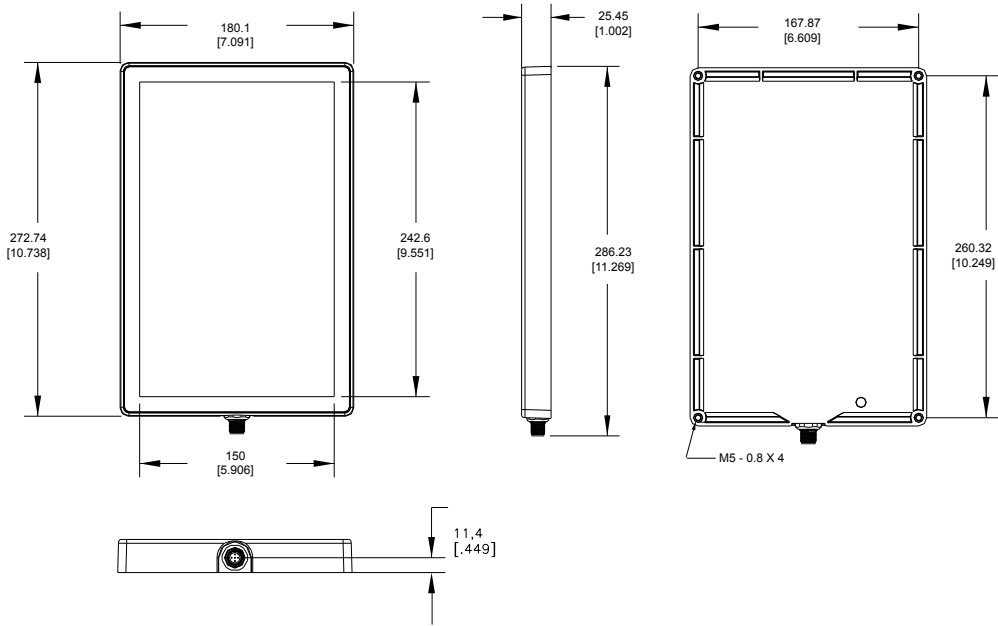
### LED Series Sealed Backlights



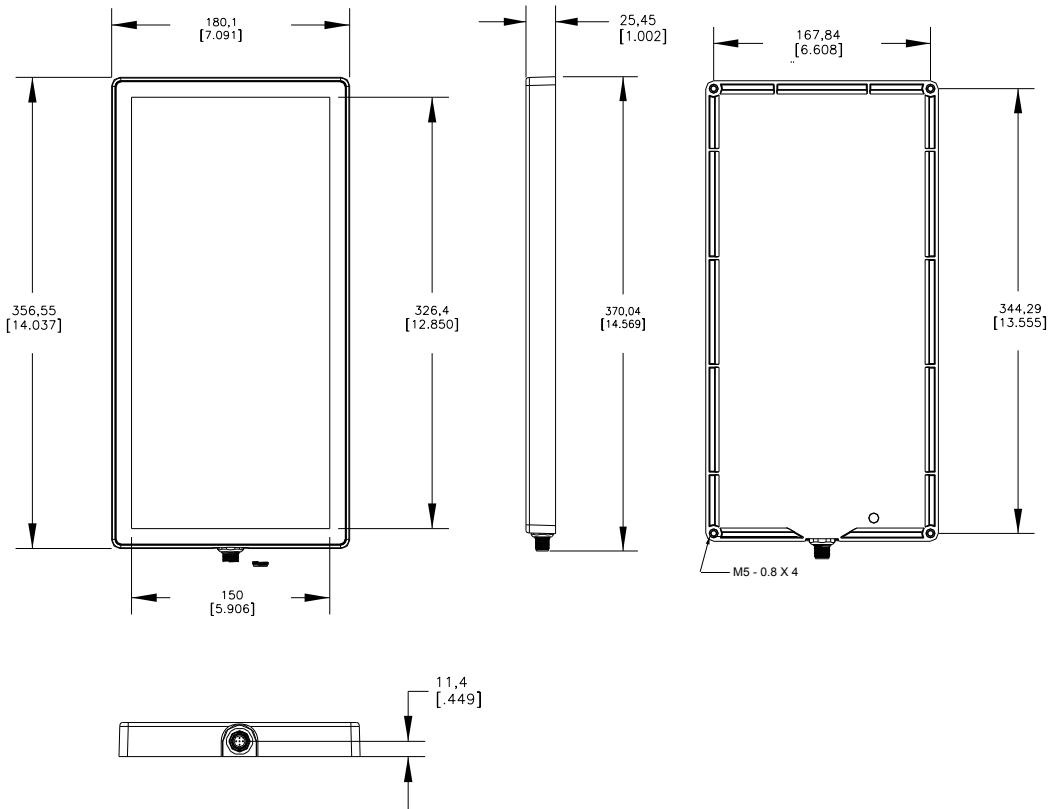
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All measurements are listed in millimeters (inches), unless noted otherwise.

## Wiring

Wire Purpose	Cable Wire Color <sup>1</sup>	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V dc	+24 V dc	Pin 01 <sup>2</sup>
	Blue (3)	common	common	Pin 02
Strobe Polarity Control	Gray (5)	open	Active Low: open	Open — Active Low
			Active High: connect to common (Blue wire)	Pin 02 — Active High
Strobe Voltage Wires	White (2)	open	0 V dc = ON (Active Low) +5 V dc to 24 V dc = OFF (Active Low)	Pin 04
			0 V dc = OFF (Active High) +5 V dc to 24 V dc = ON (Active High)	
	Black (4)	open	Strobe common	Pin 02

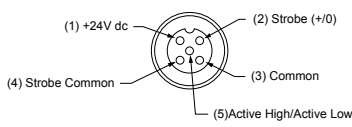
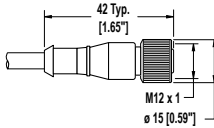
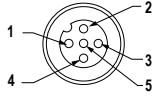


Figure 1. Pinouts for Mating Cable

## Accessories

### Cordsets

For use with nickel-plated models, a 5-wire cable with an M12/Euro-style connector at one end and flying leads at the other end:

5-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

For use with stainless steel models, a 5-wire cable with a stainless steel M12/Euro-style connector at one end and flying leads at the other end:

<sup>1</sup> For Banner-supplied wire.

<sup>2</sup> When connecting the light to a PresencePLUS Pro controller terminal block, the controller supply must be 24 V dc  $\pm$  10%.

5-Pin Threaded M12/Euro-Style Cordsets—Stainless Steel Nut				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20SS-506	1.83 m (6 ft)	Straight		
MQDC20SS-515	4.57 m (15 ft)			
MQDC20SS-530	9.14 m (30 ft)			

## Accessory Brackets

### SMBBSSM

- 316 stainless steel bracket and hardware
- Includes 2 brackets; four M5 socket drive, button head screws to attach to light



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