

# 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
- 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



**Important:** Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde [www.bannerengineering.com](http://www.bannerengineering.com) toda la documentación técnica de los LED Series Sealed Backlight, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

## 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	



## Wiring

Wire Purpose	Cable Wire Color <sup>1</sup>	Continuous On Mode	Strobed Mode	<i>PresencePlus Pro</i> 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

## 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  
 Use only with a suitable Class 2 power supply (UL) or SELV power supply (CE)  
 See the electrical characteristics on the product label.

### Connections

Integral 5-pin 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



This device complies with part 15 of the FCC Rules and CAN ICES-3 (A)/NMB-3(A). 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 A digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (A)/NMB-3(A). 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.

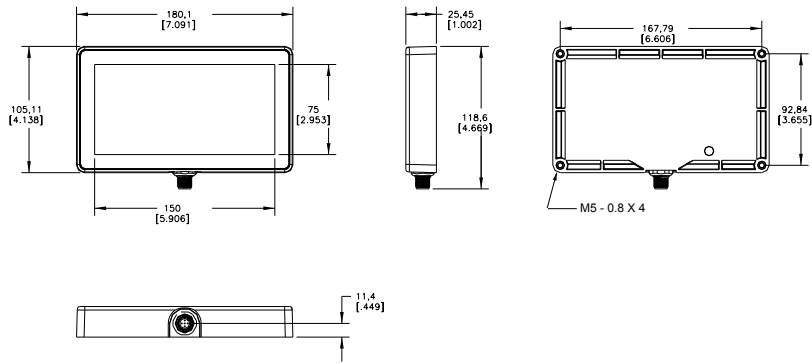
<sup>1</sup> For Banner-supplied wire.

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

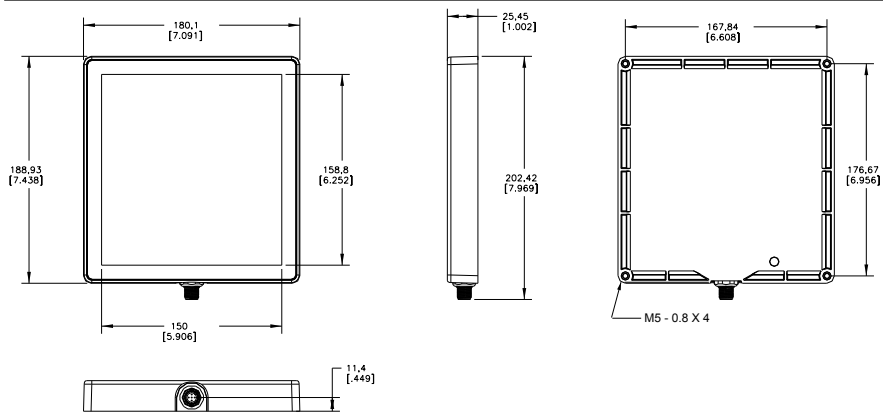
## Dimensions

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

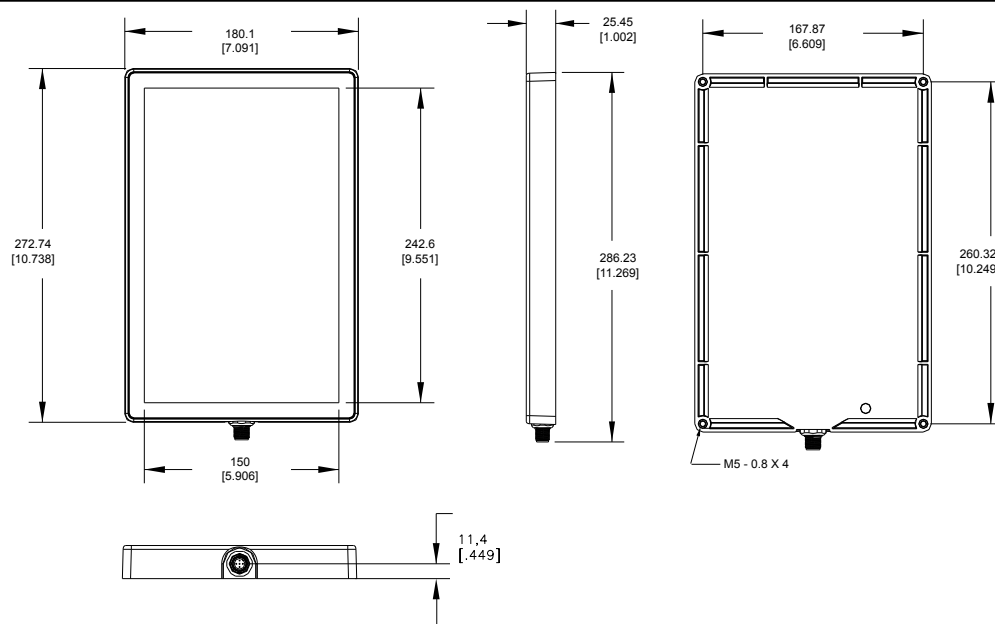
### 75 mm x 150 mm models



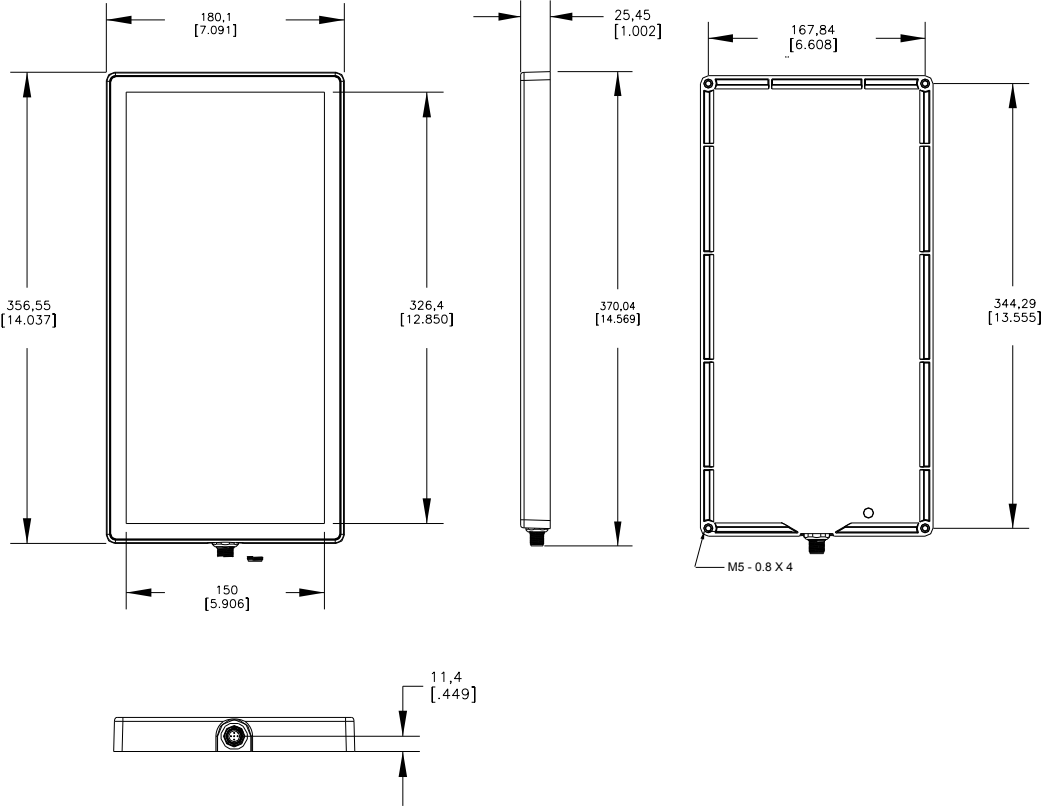
### 150 mm x 150 mm models



### 225 mm x 150 mm models



300 mm x 150 mm models



Accessories

Cordsets

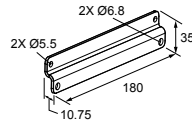
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

5-Pin Threaded M12/Euro-Style Cordsets with Stainless Steel Nut—Single Ended				
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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For patent information, see [www.bannerengineering.com/patents](http://www.bannerengineering.com/patents).

## Mexican Importer

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