

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 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 ¹	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V DC	+24 V DC	Pin 01 ²
	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.

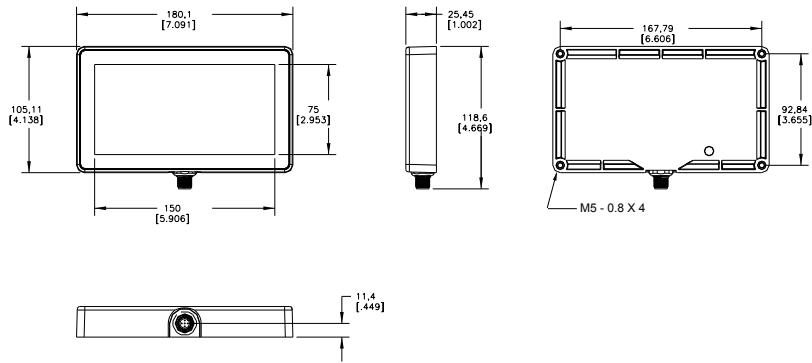
¹ For Banner-supplied wire.

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

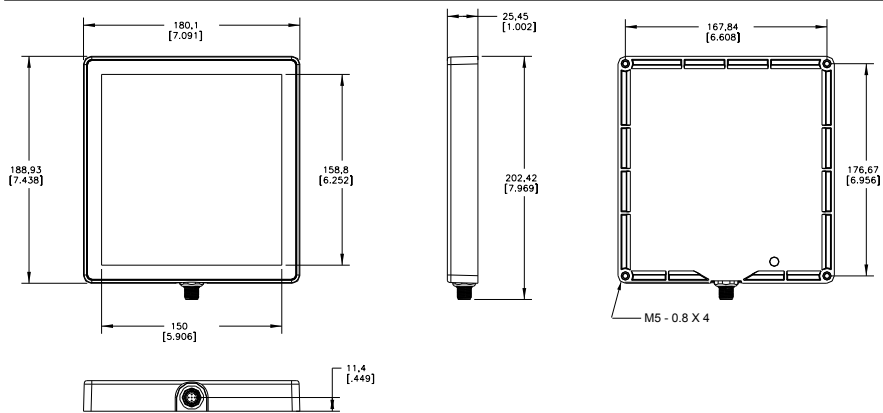
Dimensions

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

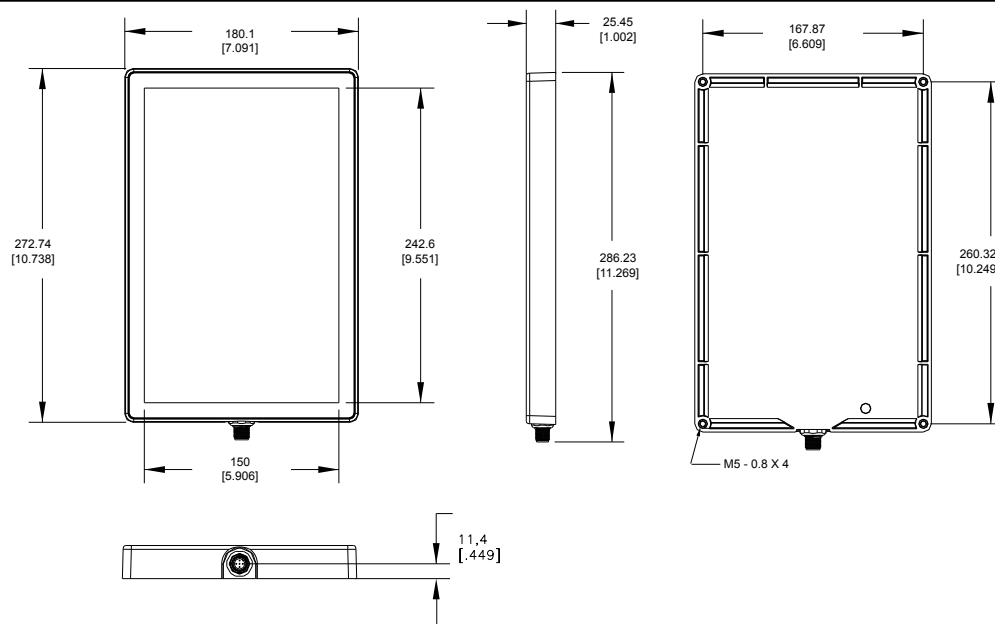
75 mm × 150 mm models



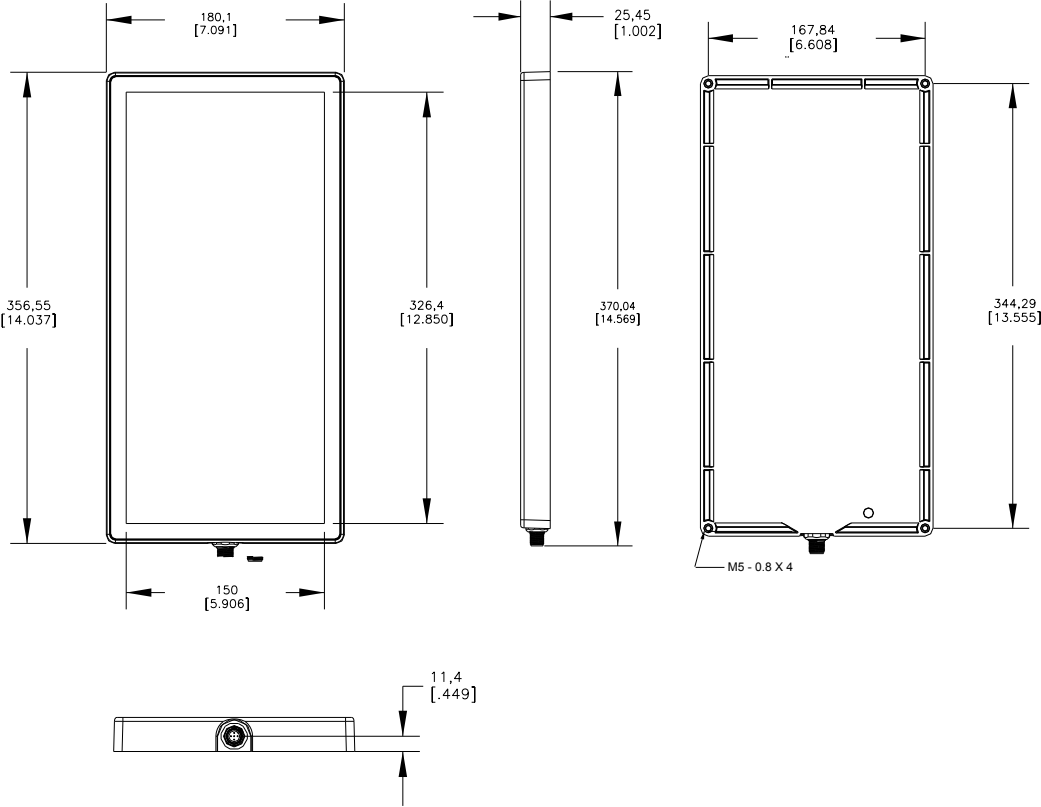
150 mm × 150 mm models



225 mm × 150 mm models



300 mm x 150 mm models



Accessories

Cordsets

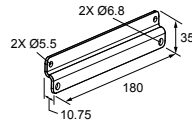
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

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



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.

Mexican Importer

Banner Engineering de México, S. de R.L. de C.V.
David Alfaro Siqueiros 103 Piso 2 Valle oriente
San Pedro Garza Garcia Nuevo León, C. P. 66269
81 8363.2714