

## Features

For use with any Vision System



- Rugged, waterproof housing, rated 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:** Read the following instructions before operating the light. Please download the complete LED Series Sealed Backlight technical documentation, available in multiple languages, from [www.bannerengineering.com](http://www.bannerengineering.com) for details on the proper use, applications, Warnings, and installation instructions of this device.

**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.

**IMPORTANT:** Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des LED Series Sealed Backlight sur notre site [www.bannerengineering.com](http://www.bannerengineering.com) pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

## 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		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

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% at 550 mA maximum  
 150 mm x 150 mm models: 24 V DC  $\pm$  10% at 1.1 A maximum  
 225 mm x 150 mm models: 24 V DC  $\pm$  10% at 1.65 A maximum  
 300 mm x 150 mm models: 24 V DC  $\pm$  10% at 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 male quick-disconnect connector, 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

IP67

### Certification



Banner Engineering BV  
 Park Lane, Culliganlaan 2F bus 3  
 1831 Diegem, BELGIUM



<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%.

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

**FCC Part 15 Class A for Unintentional Radiators**

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. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

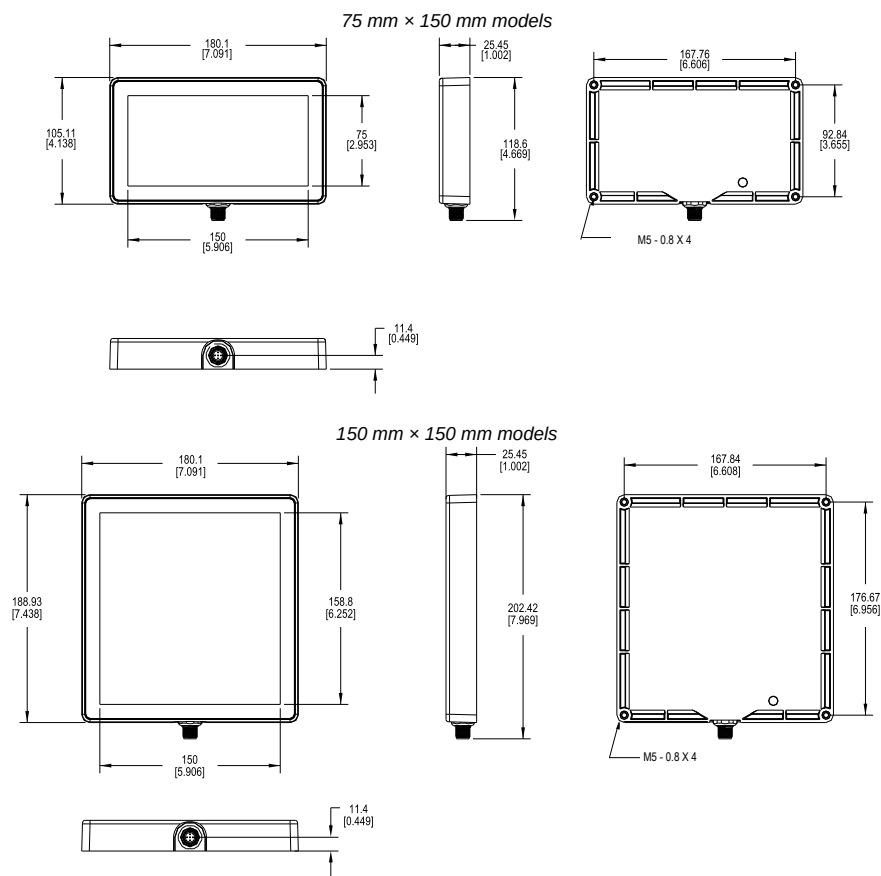
**Industry Canada ICES-003(A)**

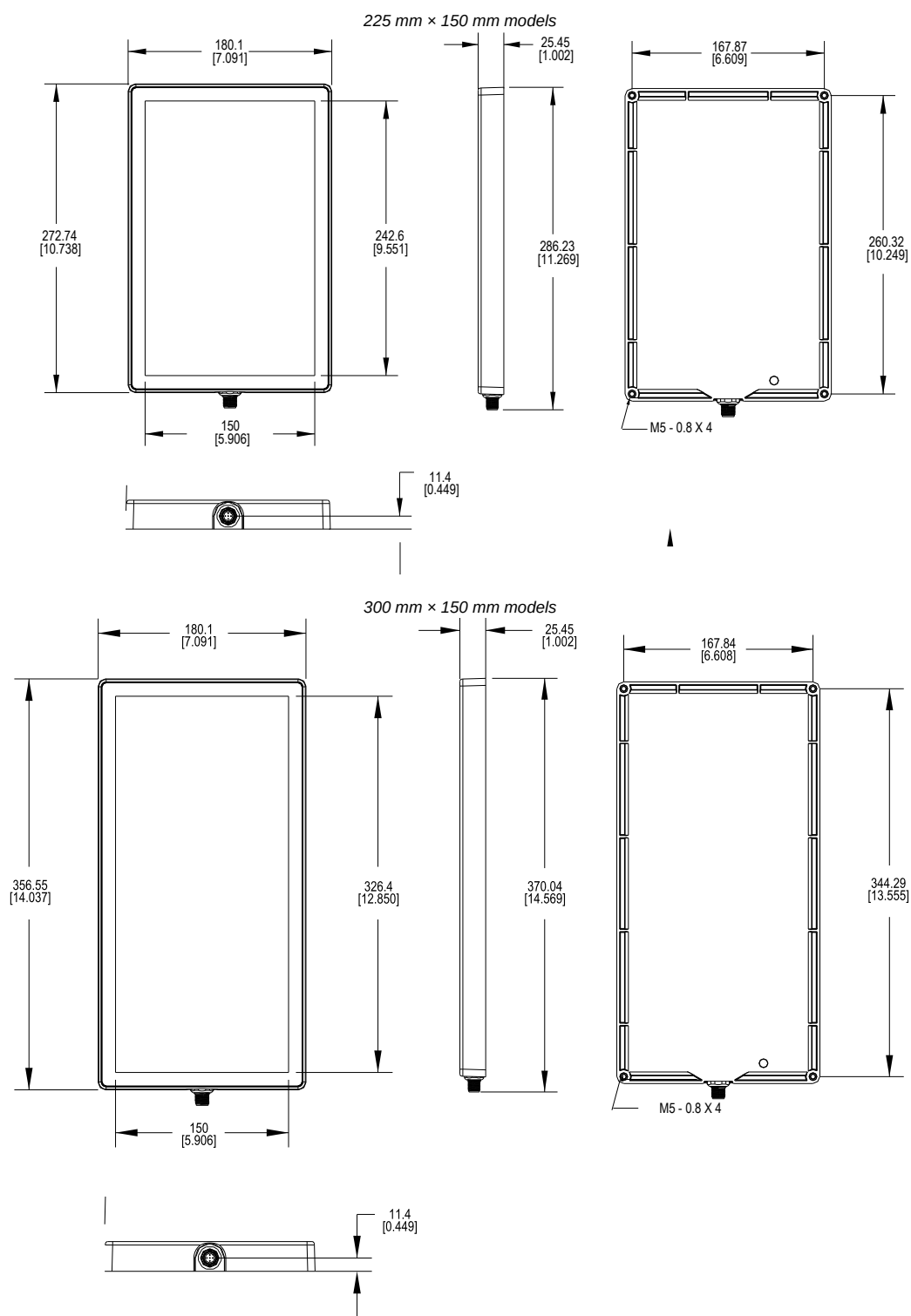
This device complies with CAN ICES-3 (A)/NMB-3(A). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(A). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

**Dimensions**

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.





## Accessories

### Cordsets

5-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	2 m (6.56 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20-515	5 m (16.4 ft)			
MQDC20-530	9 m (29.5 ft)			

5-Pin Single-Ended M12 Female Stainless Steel Nut Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20SS-506	2 m (6.52 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20SS-515	5 m (16.4 ft)			
MQDC20SS-530	9 m (29.5 ft)			

### Brackets

<b>SMBBSSM</b> <ul style="list-style-type: none"> <li>316 stainless steel bracket and hardware</li> <li>Includes 2 brackets; four M5 socket drive, button head screws to attach to light</li> <li>CAD Files: <a href="#">DXF</a>, <a href="#">PDF</a>, <a href="#">IGS</a>, <a href="#">STP</a></li> </ul>	
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## 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.

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For patent information, see [www.bannerengineering.com/patents](http://www.bannerengineering.com/patents).

### Mexican Importer

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