Features

Lighting for use with Vision Systems



- Four high-intensity, visible wavelengths, plus IR
- The following array lengths are available:
  - 145 mm (5.7 in)
  - 290 mm (11.4 in)
  - 435 mm (17.7 in)
  - 580 mm (22.8 in)
  - 870 mm (34.2 in)
  - 1160 mm (45.6 in)
- High-power, solid-state LED array; continuous or strobed operation is selectable via sensor software (P4 models) or via hookup
- Optically isolated strobe signal
- Selectable Active High or Active Low strobe option
- Maintenance-free, rugged construction
- Built-in constant current regulation
- Very even light pattern
- Can also be used as a highly diffused area light
- Diffused backlight for any Vision System

IMPORTANT: Read the following instructions before operating the light. Please download the complete High-Power Unsealed Linear Backlights technical documentation, available in multiple languages, from 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 toda la documentación técnica de los High-Power Unsealed Linear Backlights, 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 High-Power Unsealed Linear Backlights sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

Models

Light Source	LED Color	Linear Array	Array Length	Housing	Window Material	Relative Intensity	Intensity Control	Connector
LED	**R**	**LB**	**145**	**X**	**W**	**6-**	**X**	**Q**
	R = Red W = White B = Blue G = Green I = IR		145 mm (5.7 in) 290 mm (11.4 in) 435 mm (17.7 in) 580 mm (22.8 in) 870 mm (34.2 in) 1160 mm (45.6 in)	X = IP50	W = White Plastic		X = Not Adjustable	Q = Integral 5-pin M12 male quick-disconnect connector

Not all models are available. For a list of discontinued models, see Discontinued Models.

Original Instructions
15-Jun-26

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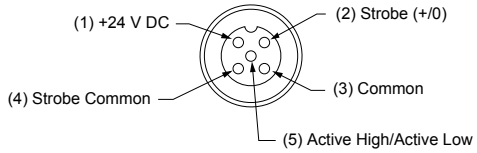
166314
p/n: 166314 Rev. H

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Wiring

Wire Purpose	Cable Wire Color[1]	Wire Connections		*Presence*PLUS® Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V DC		Pin 01[2]
	Blue (3)	common		Pin 02
Strobe Polarity Control	Gray (5)	**Active Low:** open		Pin 02 or open
		Active High: connect to common (Blue wire)		
Strobe Voltage Wires	White (2)	**Active Low:** 0 V DC = ON	+5 V DC to 24 V DC = OFF	Pin 04
		Active High: 0 V DC = OFF	+5 V DC to 24 V DC = ON	
	Black (4)	Strobe common		Pin 02
		Pinouts for Mating Cable 		

NOTE: Connection to earth ground recommended.

Specifications

Light Source

LED Color	Wavelength	Optional Filter[3]
Infrared	850 nm	FLTI
Red	620 nm to 630 nm	FTLR
Blue	465 nm to 485 nm	FLTB
Green	520 nm to 535 nm	FLTG
White	5000 K to 8300 K	FLTB or FLTG

Supply Voltage and Current

145 mm Models: 24 V DC ± 10% at 500 mA max.
290 mm Models: 24 V DC ± 10% at 1 A max.
435 mm Models: 24 V DC ± 10% at 1.5 A max.
580 mm Models: 24 V DC ± 10% at 2 A max.
870 mm Models: 24 V DC ± 10% at 3 A max.
1160 mm Models: 24 V DC ± 10% at 4 A max.
Strobe Voltage: 5 V DC to 24 V DC
Built-in constant current regulator for LEDs
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

[3] Recommended Ambient Light filter kit for use with *Presence*PLUS® Cameras.

Construction

Housing: black anodized aluminum
Window: acrylic

Useful Life

When operated within specifications, output will decrease less than 30% after 50,000 hours

Operating Conditions

Temperature: 0 °C to +50 °C (+32 °F to +122 °F)

Mounting

4 M5 T-nuts included, brackets available

Environmental Rating

IP50

Certification

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

[1] For Banner-supplied wire.
[2] When connecting the light to a *Presence*PLUS® Pro controller terminal block, the controller supply must be 24 V DC ± 10%.

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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.

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

Dimensions

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

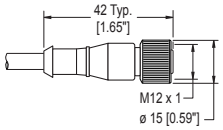
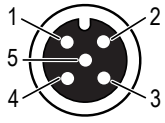


A= Window
B = 5-pin M12 male connector

Array Length	Length "L"	Lighted Area "A"
145 mm	171 mm (6.73 in)	161 x 35 mm (6.33 in x 1.38 in)
290 mm	316.5 mm (12.46 in)	307 x 35 mm (12.09 in x 1.38 in)
435 mm	462 mm (18.19 in)	452 x 35 mm (17.80 in x 1.38 in)
580 mm	607.5 mm (23.92 in)	598 x 35 mm (23.54 in x 1.38 in)
870 mm	898.5 mm (35.37 in)	889 x 35 mm (35.00 in x 1.38 in)
1160 mm	1189.5 mm (46.83 in)	1180 x 35 mm (46.46 in x 1.38 in)

Accessories

Cordsets

5-Pin Single-Ended M12 Female Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC20-506	2 m (6.56 ft)	Straight		
MQDC20-515	5 m (16.4 ft)			
MQDC20-530	9 m (29.5 ft)			

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray

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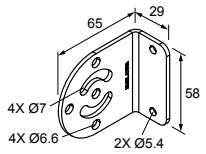
Brackets

SMBLAXRA

- Right-angle stainless steel bracket
- May be used individually or in combination with **SMBLAXU** to provide swivel adjustment
- CAD Files: DXF, PDF, IGS, STP

Includes:

- 2 Brackets
- 4 M5 screws (socket drive, button head)
- 4 M5 T-nuts

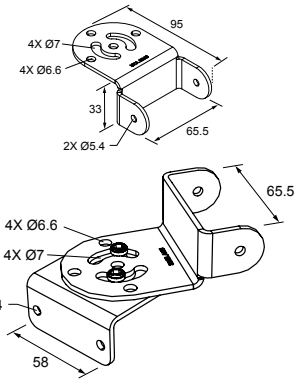


SMBLAXU

- U-shaped stainless steel bracket
- For use with **SMBLAXRA** to provide swivel adjustment
- CAD Files: DXF, PDF, IGS, STP

Includes:

- 2 Brackets
- 4 M5 screws (socket-drive, button head)
- 4 M5 T-nuts
- Four each stainless steel ¼-20 screws (socket drive, button head), lock nuts, washers



Combination View

Product Support and Maintenance

Discontinued Models

The following models are no longer available for order but are still covered by the information in this document.

- LEDBLB580XW6-XQ
- LEDBLB870XW6-XQ
- LEDGLB145XW6-XQ
- LEDGLB290XW6-XQ
- LEDGLB435XW6-XQ
- LEDGLB580XW6-XQ
- LEDGLB870XW6-XQ
- LEDGLB1160XW6-XQ
- LEDILB435XW6-XQ
- LEDILB870XW6-XQ
- LEDILB580XW6-XQ
- LEDILB1160XW6-XQ

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For patent information, see www.bannerengineering.com/patents.

Mexican Importer

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