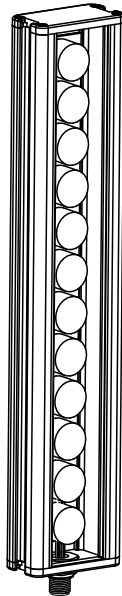


High-Power Unsealed Linear Array Lights



Lighting for use with Vision Systems

For the latest technical information about this product, including specifications, dimensions, and wiring, see www.BannerEngineering.com



- Four high-intensity, visible wavelengths, plus IR and UV
- The following array lengths are available:
 - 145 mm (5.7")
 - 290 mm (11.4")
 - 435 mm (17.7")
 - 580 mm (22.8")
 - 870 mm (34.2")
 - 1160 mm (45.6")
- 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
- LEDs directly illuminate target
- Lens angle of $\pm 6.5^\circ$ on visible and IR models, lens angle of $\pm 5^\circ$ on UV 395 nm models, reflector cup angle of $\pm 15^\circ$ on UV 365 nm models
- Three window materials from which to choose: clear acrylic, clear glass, and clear diffusing acrylic
- Maintenance-free, rugged construction
- Built-in constant current regulation
- Very even light pattern (as close as 76.2 mm or 3 inches)

Model Key

Light Source	LED Color	Linear Array	Array Length	Housing	Window Material	Relative Intensity	Intensity Control	Connector
LED	R	LA	145	X	P	6 —	X	Q
	R = Red W = White B = Blue G = Green I = IR UV365 = UV365 nm† UV395 = UV395 nm‡		145 mm 290 mm 435 mm 580 mm 870 mm 1160 mm	X = IP50	P = Clear Plastic G = Glass D = Diffuse Plastic		X = Not Adjustable	Q = QD

* UV365 Only available with glass window

† Risk Group 1 :
NOTICE: UV Emitted from this product.
 Minimize exposure to eyes or skin. Use appropriate shielding and eye protection. Risk Group 1 (RG 1) products are safe for most use applications, except for very prolonged exposures where direct ocular exposures may be expected.
 - IEC 62471



‡ Risk Group 2:
CAUTION: UV Emitted from this product.
 Eye or skin irritation may result from exposure. Use appropriate shielding and eye protection. Risk Group 2 (RG 2) products generally do not pose a realistic optical hazard if aversion responses limit the exposure duration or where lengthy exposures are unrealistic.
 - IEC 62471

Specifications

Light Source

LED Color	Wavelength	Optional Filter *
Infrared	850 nm	FLTI
Red	620-630 nm	FRLR
Blue	465-485 nm	FLTB
Green	520-535 nm	FLTG
White	5000-8300 K	FLTB or FLTG
UV	365 nm	FLTB
	395 nm	

*Recommended Ambient Light filter kit for use with *PresencePLUS* Cameras.

Connections

5-pin Euro-style (M12) male connector; accessory cordset required for operation

Construction

Housing: black anodized aluminum

Window: acrylic or glass, depending on model

Supply Voltage and Current

145 mm Models: 24V dc \pm 10% @ 500 mA max.

290 mm Models: 24V dc \pm 10% @ 1 A max.

435 mm Models: 24V dc \pm 10% @ 1.5 A max.

580 mm Models: 24V dc \pm 10% @ 2 A max.

870 mm Models: 24V dc \pm 10% @ 3 A max.

1160 mm Models: 24V dc \pm 10% @ 4 A max.

Strobe Voltage: 5-24V dc

Built-in constant current regulator for LEDs

Useful Life

When operated within specifications, output will decrease less than 30% after 50,000 hours for visible and IR models; 20,000 hours for UV models

Operating Conditions

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

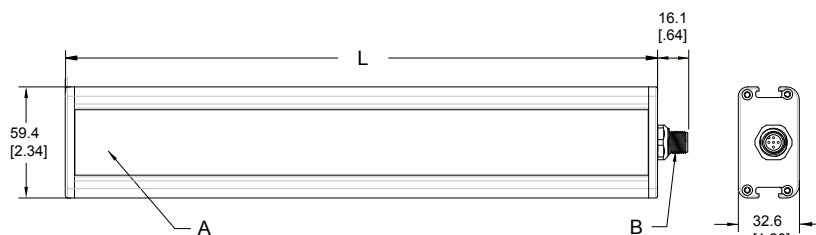
Mounting

4 M5 T-nuts included, brackets available

Environmental Rating

IP50

Dimensions



A = Window (glass or acrylic, depending on model)

B = 5-pin Euro-style male connector

Array Length	Length "L"
145 mm	171 mm (6.73")
290 mm	316.5 mm (12.46")
435 mm	462 mm (18.19")
580 mm	607.5 mm (23.92")
870 mm	898.5 mm (35.37")
1160 mm	1189.5 mm (46.83")

Wiring Table

Wire Purpose	Cable Wire Color*	Wire Connections	PresencePLUS Pro Controller Terminal Block
Power Wires	Brown (1)	+24V dc	Pin 01**
	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: 0V dc = ON +5 to 24V dc = OFF	Pin 04
		Active High: 0V dc = OFF +5 to 24V dc = ON	
	Black (4)	Strobe common	Pin 02

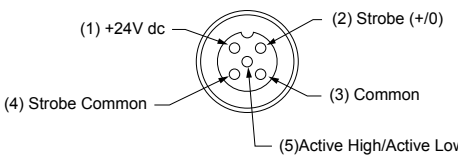


Figure 1. Pinouts for Mating Cable

* For Banner-supplied wire.

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



NOTE: Connection to earth ground recommended.

Accessory Cordsets

5-Pin Quick-Disconnect (QD) Cordsets

5-wire cable, straight female Euro-style (M12) connector (nickel-plated brass coupling nut) at one end, with flying leads at opposite end.

MQDC20-506, 2 m (6')

MQDC20-515, 5 m (15')

MQDC20-530, 9 m (30')

Accessory Brackets

SMBLAXRA

- Right-angle stainless steel bracket
- May be used individually or in combination with **SMBLAXU** to provide swivel adjustment



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

Includes:

- 2 Brackets
- 4 M5 screws (socket-drive, button head)
- 4 M5 T-nuts
- Four each stainless steel 1/4-20 screws (socket drive, button head), lock nuts, washers



Combination View

Replacement Windows

Array Length	Clear Glass	Clear Acrylic	Diffuse Acrylic	White Diffuse Acrylic
145 mm	LEDLA145XW-G	LEDLA145XW-P	LEDLA145XCDW-P	LEDLA145XWDW-P
290 mm	LEDLA290XW-G	LEDLA290XW-P	LEDLA290XCDW-P	LEDLA290XWDW-P
435 mm	LEDLA435XW-G	LEDLA435XW-P	LEDLA435XCDW-P	LEDLA435XWDW-P
580 mm	LEDLA580XW-G	LEDLA580XW-P	LEDLA580XCDW-P	LEDLA580XWDW-P
870 mm	LEDLA870XW-G	LEDLA870XW-P	LEDLA870XCDW-P	LEDLA870XWDW-P
1160 mm	LEDLA1160XW-G	LEDLA1160XW-P	LEDLA1160XCDW-P	LEDLA1160XWDW-P

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