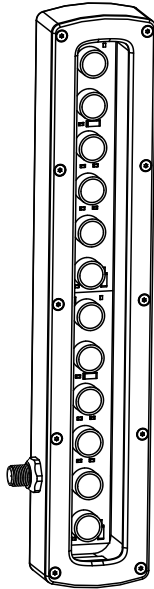# Sealed Linear Array Lights

IP68 Lighting for use with Vision Systems in Washdown Environments

For the latest technical information about this product, including specifications, dimensions, and wiring, see *www.bannerengineering.com/lineararraylights*

- Four high-intensity, visible wavelengths, plus IR and UV
- Rugged, waterproof housing, rated IEC IP68
- The following array lengths are available:

    290 mm (11.4")
    435 mm (17.7")
    580 mm (22.8")

- 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
- Available with 316 stainless steel or nickel-plated aluminum housing
- LEDs directly illuminate target
- Lens angle of ±6.5º on visible and IR models, lens angle of ±5º on UV 395 nm models, reflector cup angle of ±15º 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*	Relative Intensity	Intensity Control	Connector
LED	R	LA	290	A	P	6 —	X	Q
	R = Red		290 mm	A = Aluminum	P = Clear Plastic		X = Not Adjustable	Q = QD
	W = White		435 mm	SS = Stainless	G = Glass			
	B = Blue		580 mm	Steel	D = Diffuse Plastic			
	G = Green							
	I = IR							
	UV365 = UV365 nm†							
	UV395 = UV395 nm‡							

* 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

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‡ **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	FTLR
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 *Presence*PLUS Cameras.

Connections

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

Construction

Housing: nickel-plated aluminum or 100% 316 stainless steel, depending on model

Window: acrylic or glass, depending on model

Supply Voltage and Current

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

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

580 mm Models: 24V dc ± 10% @ 2 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

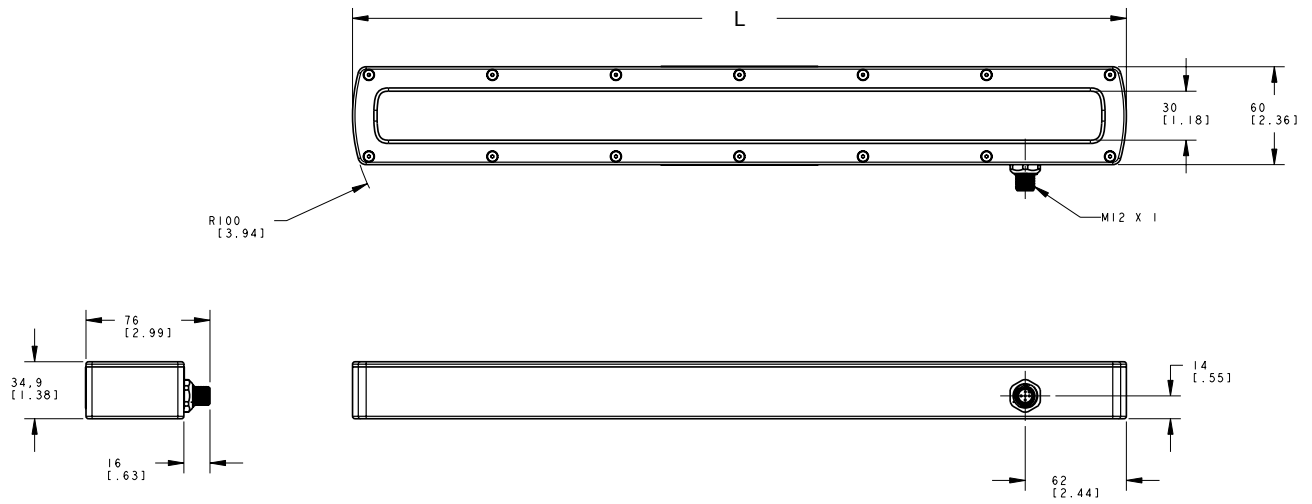**Temperature:** 0° to + 50° C (+32° to 122° F)

Mounting

(4) 1/4"-20 threaded holes in back; brackets available
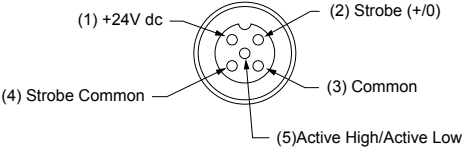
Environmental Rating

IP68

Dimensions

L

30 [1.18]

60 [2.36]

M12 X 1

R100 [3.94]

76 [2.99]

34.9 [1.38]

16 [.63]

14 [.55]

62 [2.44]

Array Length	Length "L"
290 mm	328 mm (12.91")
435 mm	474 mm (18.66")
580 mm	621 mm (24.45")

Wiring Table

Wire Purpose	Cable Wire Color*	Continuous On Mode	Strobed Mode		*Presence*Plus Pro Controller Terminal Block
Power Wires	Brown (1)	+24V dc	+24V dc		Pin 01**
	Blue (3)	common	common		Pin 02
Strobe Polarity Control	Gray (5)	open	**Active Low:** open		Pin 02
			Active High: connect to common (Blue wire)		
Strobe Voltage Wires	White (2)	open	0V dc = ON (Active Low) +5 to 24V dc = OFF (Active Low)		Pin 04
			0V dc = OFF (Active High) +5 to 24V dc = ON (Active High)		
	Black (4)	open	Strobe common		Pin 02

(1) +24V dc
(2) Strobe (+/0)
(4) Strobe Common
(3) Common
(5)Active High/Active Low

Figure 1. Pinouts for Mating Cable

* For Banner-supplied wire.

** When connecting the light to a *Presence*PLUS Pro controller terminal block, the controller supply must be 24V dc ± 10%.

📝 **NOTE:** Connection to earth ground recommended.

Accessory Cordsets

For use with nickel-plated aluminum housing:	For use with stainless steel housing:
5-Pin Quick-Disconnect (QD) 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.	5-wire cable, straight female Euro-style (M12) connector (stainless steel coupling nut) at one end, with flying leads at opposite end.
MQDC20-506, 2 m (6')	**MQDC20SS-506**, 2 m (6')
MQDC20-515, 5 m (15')	**MQDC20SS-515**, 5 m (15')
MQDC20-530, 9 m (30')	**MQDC20SS-530**, 9 m (30')

Accessory Brackets

SMBLASRA

- Right-angle metal bracket
- May be used individually or two used in combination to provide swivel adjustment
- Brackets and hardware are 316 stainless steel

NOTE: If double-bracket mounting will be used, order 2 sets of brackets per light.

Single Bracket   **Double Bracket**

Includes:

- 2 Brackets
- Four ¼-20 stainless steel screws (socket drive, button head)
- 2 stainless steel lock nuts (used only with double brackets)
- 2 stainless steel washers (used only with double brackets)

Replacement Windows

Array Length	Clear Glass	Clear Acrylic	Diffuse Acrylic	White Diffuse Acrylic
290 mm	**LEDLA290SW-G**	**LEDLA290SW-P**	**LEDLA290SCDW-P**	**LEDLA290SWDW-P**
435 mm	**LEDLA435SW-G**	**LEDLA435SW-P**	**LEDLA435SCDW-P**	**LEDLA435SWDW-P**
580 mm	**LEDLA580SW-G**	**LEDLA580SW-P**	**LEDLA580SCDW-P**	**LEDLA580SWDW-P**

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