

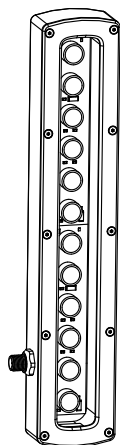
Sealed Linear Array Lights



Datasheet

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 in)
 - 435 mm (17.7 in)
 - 580 mm (22.8 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
- Active High or Active Low strobe models available
- Available with 316 stainless steel or nickel-plated aluminum housing
- 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 (3 in)

Model Key

Light Source	LED Color	Linear Array	Array Length	Housing	Window ¹	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							

The following caution applies to UV365 nm models:



CAUTION:

Risk Group 1: 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

The following caution applies to UV395 nm models:

¹ UV365 Only available with glass window.



**CAUTION:**

Risk Group 2: 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

Supply Voltage and Current

290 mm Models: 24 V dc \pm 10% at 1 A maximum
 435 mm Models: 24 V dc \pm 10% at 1.5 A maximum
 580 mm Models: 24 V dc \pm 10% at 2 A maximum
 Strobe Voltage: 5 V dc to 24 V dc
 Built-in constant current regulator for LEDs

Light Source

LED Color	Wavelength	Optional Filter ²
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
UV	365 nm	FLTB
	395 nm	

Operating Conditions

0 °C to +50 °C (+32 °F to +122 °F)

Connections

Integral 5-pin threaded M12/Euro-style male quick disconnect, accessory cordset required

Construction

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

Mounting

(4) 1/40K"-20 threaded holes in back; brackets available

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

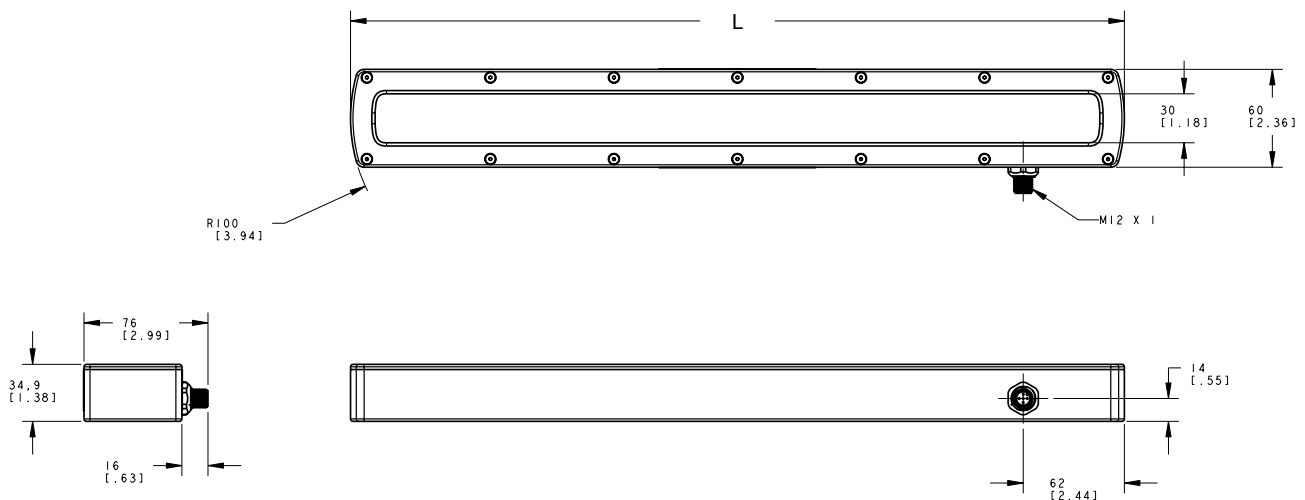
Environmental Rating

IEC IP68

Certification



Dimensions



² Recommended Ambient Light filter kit for use with PresencePLUS Cameras.

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

All measurements are listed in millimeters (inches), unless noted otherwise.

Wiring

Wire Purpose	Cable Wire Color ³	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V dc	+24 V dc	Pin 01 ⁴
	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	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



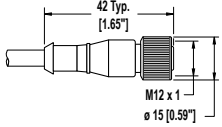
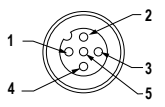
NOTE: Connection to earth ground recommended.

Accessory Cordsets

5-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

³ For Banner-supplied wire.

⁴ When connecting the light to a PresencePLUS Pro controller terminal block, the controller supply must be 24 V dc \pm 10%.

5-Pin Threaded M12/Euro-Style Cordsets—Stainless Steel Nut				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20SS-506	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20SS-515	4.57 m (15 ft)			
MQDC20SS-530	9.14 m (30 ft)			

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
- Includes: 2 brackets; 4 ¼-20 stainless steel screws (socket drive, button head); 2 stainless steel lock nuts (used only with double brackets); and 2 stainless steel washers (used only with double brackets)

When double-bracket mounting is used, order 2 sets of brackets per light.

Single Bracket:



Double Bracket:



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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