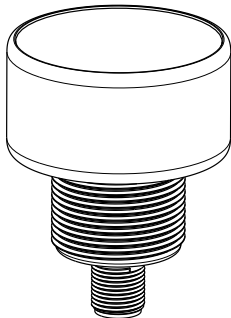


LED..S50L.. High-Intensity Spot Light

For use with PresencePLUS and other vision systems

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



Features

- Low-cost, washdown spot light for vision systems
- Continuous or strobed operation, depending on wiring
- Selectable Active High or Active Low strobe option, depending on wiring
- Optically isolated strobe signal
- Three lens options, depending on model, to vary spot size
- Illuminates a large area with an even pattern of light and no shadows
- 12 to 30V dc operation
- Cabled and quick-disconnect models available
- 50 mm diameter with flat profile and 30 mm mounting base
- Rugged sealed housing rated to IP69K

Models

Model*	LED Color	Lumens / mWatts	Lux / mW/cm ²		Lens Angle	Connection
			0.5 m	1 m		
LEDWS50L5-XQ †	White, 5000-8300 K	295 lm	13780 lx	3445 lx	±5° (smaller, more focused spot; see graph)	5 pin Euro integral QD connector (use with 5-wire mating cordset)
LEDRS50L5-XQ	Red, 620-630 nm	110 lm	8000 lx	2000 lx		
LEDBS50L5-XQ †	Blue, 465-485 nm	85 lm	4880 lx	1220 lx		
LEDGS50L5-XQ	Green, 520-535 nm	210 lm	13000 lx	3250 lx		
LEDIS50L5-XQ	Infrared, 850 nm	760 mW	4.40 mW/cm ²	1.10 mW/cm ²		
LEDUV395S50L5-XQ ‡	Ultraviolet, 395 nm	480 mW	2.10 mW/cm ²	.525 mW/cm ²		
LEDWS50L11-XQ	White, 5000-8300 K	285 lm	5460 lx	1365 lx	±11° (larger spot; see graph)	
LEDRS50L11-XQ	Red, 620-630 nm	105 lm	2500 lx	625 lx		
LEDBS50L11-XQ †	Blue, 465-485 nm	80 lm	1540 lx	385 lx		
LEDGS50L11-XQ	Green, 520-535 nm	200 lm	3900 lx	975 lx		
LEDUV395S50L11-XQ ‡	Ultraviolet, 395 nm	420 mW	.780 mW/cm ²	.195 mW/cm ²		
LEDIS50L14-XQ	Infrared, 850 nm	665 mW	1.16 mW/cm ²	.290 mW/cm ²	±14° (larger spot; see graph)	
LEDWS50L20-XQ	White, 5000-8300 K	270 lm	2000 lx	500 lx	±20° (largest spot; see graph)	
LEDRS50L20-XQ	Red, 620-630 nm	100 lm	1040 lx	260 lx		
LEDBS50L20-XQ †	Blue, 465-485 nm	75 lm	700 lx	175 lx		
LEDGS50L20-XQ	Green, 520-535 nm	190 lm	1700 lx	425 lx		
LEDUV395S50L20-XQ ‡	Ultraviolet, 395 nm	390 mW	.420 mW/cm ²	.105 mW/cm ²		

* Integral QD models only are listed. For integral 2 m (6.5') PVC cable, omit suffix **XQ** from model number (example, **LEDRS50L5**). A model with a QD requires a mating cordset (see [5-Pin Euro-Style Cordsets](#)).



**CAUTION:****† Risk Group 2: Possibly hazardous optical radiation emitted from this product.**

Do not stare at the operating lamp. May be harmful to the eyes. 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

**‡ 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



NOTE: UV emitted from this product. Exempt Risk Group (RG 0) product. No optical hazard is considered reasonably foreseeable, even for continuous, unrestricted use. (-IEC 62471)

Specifications

Supply Voltage and Current

Operating voltage: 12 to 30V dc

Strobe voltage: 5 to 30V dc @ 15 mA max.

Current draw: 400 mA at 12V, 160 mA at 30V

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Light Source

Three high-intensity LEDs; see models table for color temperature or wavelengths

Strobe

Optically isolated, 40kHz max strobe frequency

5 μ s minimum on time

Useful Life

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

Construction

Black anodized aluminum housing; acrylic window; nickel-plated QD connector or PVC-jacketed cable; black zinc-plated steel mounting nut

Mounting:

30x1.5 mm thread base mount

Environmental Rating

IEC IP67, IP69K per DIN 40050-9



NOTE: Do not spray the cable with a high-pressure sprayer or cable damage will result.

Connections

Integral 5-pin M12/Euro style QD or 2 m (6.5 ft) integral cable, depending on model; 5-pin connecting cordset required for QD models

Operating Conditions

-20° to +50°C (-4° to +122°F)

95% max. relative humidity (non-condensing)

Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06", maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

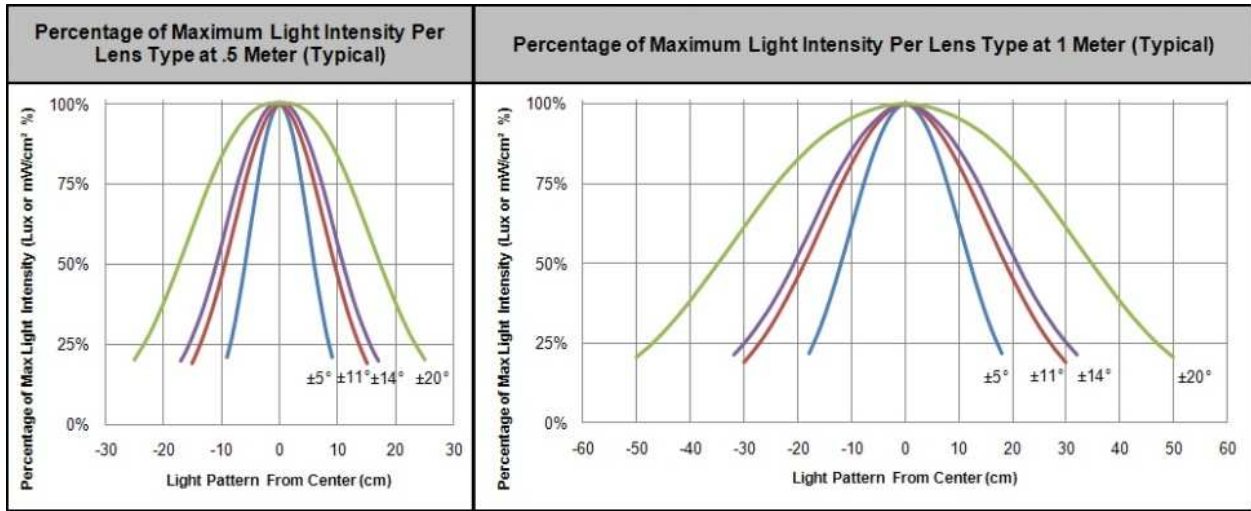
Storage Temperature

-40° to +70°C (-40° to +158°F)

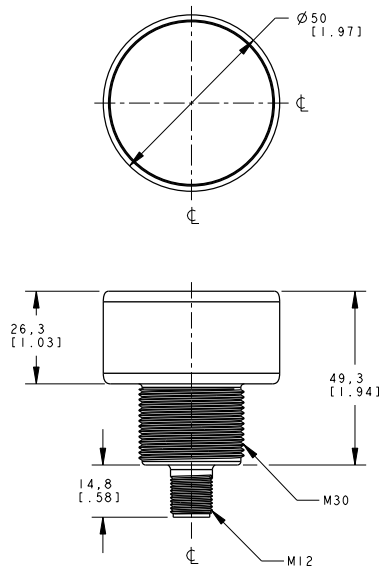
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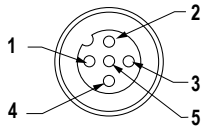
Beam Patterns



Dimensions



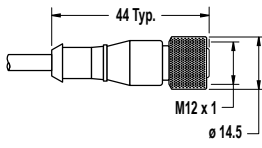
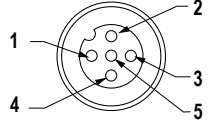
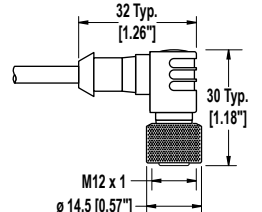
Wiring Table

Wire Purpose	Cable Wire Color*	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+12-30V dc	+12-30V dc	Pin 01 **
	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	0V dc = ON (Active Low) +5 to 30V dc = OFF (Active Low)	Pin 04
			0V dc = OFF (Active High) +5 to 30V dc = ON (Active High)	
	Black (4)	open	Strobe common	Pin 02
 <p>Figure 1. Pinout for Mating Cordset</p>			Wiring Key 1 = +12-30V dc 2 = Strobe (+) 3 = Common 4 = Strobe common 5 = Active high / Active Low	

* For Banner-supplied wire.

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

5-Pin Euro-Style Cordsets

5-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 <p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

Mounting Brackets

All measurements in mm

<p>SMB30A</p> <ul style="list-style-type: none"> • Right-angle bracket with curved slot for versatile orientation • Clearance for M6 (1/4") hardware • Mounting hole for 30 mm sensor • 12-ga. stainless steel 	<p>SMB30SC</p> <ul style="list-style-type: none"> • Swivel bracket with 30 mm mounting hole • Black reinforced thermoplastic polyester • Stainless steel mounting and swivel locking hardware included
<p>SMB30FA</p> <ul style="list-style-type: none"> • Swivel bracket with tilt and pan movement for precise adjustment • Mounting hole for 30 mm sensor • 12-ga. 304 stainless steel • Easy sensor mounting to extrude rail T-slot 	<p>SMBAMS30RA</p> <ul style="list-style-type: none"> • Right-angle SMBAMS series bracket • 30 mm mounting hole • Articulation slots for 90+° rotation • 12-ga. cold rolled stainless steel
<p>SMB30MM</p> <ul style="list-style-type: none"> • 12-ga. stainless steel bracket with curved mounting slots for versatile orientation • Clearance for M6 (1/4") hardware • Mounting hole for 30 mm sensor 	<p>SMBAMS30P</p> <ul style="list-style-type: none"> • Flat SMBAMS series bracket • 30 mm mounting hole • Articulation slots for 90+° rotation • 12-ga. 300 series stainless steel

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