

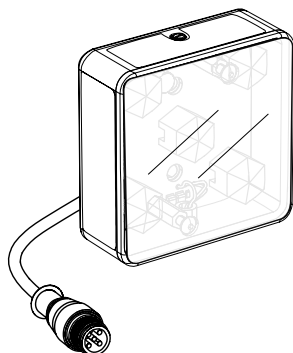
LED..A70XD5-..High-Intensity Area Light



Datasheet

For use with Banner Vision Systems

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see www.bannerengineering.com.



- Compact area light for Banner Vision Systems
- Five extremely bright LEDs for illumination of targets from 0.15 meters to beyond 2 meters
- Continuous or strobed operation
- Fixed or adjustable intensity, depending on model
- Maintenance-free, rugged construction
- Optically isolated strobe signal

Models

Model		LED Color	Cable
Fixed Intensity	Adjustable Intensity		
LEDRA70XD5-XQ	LEDRA70XD5-PQ	Red, 620 nm to 630 nm	150 mm (6 in) pigtail with threaded 5-pin Euro-style connector Requires Euro-style mating cordset
LEDWA70XD5-XQ	LEDWA70XD5-PQ	White, 5000 K to 8300 K	
LEDBA70XD5-XQ	LEDBA70XD5-PQ	Blue, 465 nm to 485 nm	
LEDGA70XD5-XQ	LEDGA70XD5-PQ	Green, 520 nm to 535 nm	
LEDIA70XD5-XQ	LEDIA70XD5-PQ	Infrared, 850 nm	
LEDUV395A70XD5-XQ	LEDUV395A70XD5-PQ	UV, 395 nm	
LEDRA70XD5-XM	LEDRA70XD5-PM	Red, 620 nm to 630 nm	2 m (6.5 ft) pigtail with threaded 3-pin Pico-style connector Connects directly to the P4 or VE sensor
LEDWA70XD5-XM	LEDWA70XD5-PM	White, 5000 K to 8300 K	
LEDBA70XD5-XM	LEDBA70XD5-PM	Blue, 465 nm to 485 nm	
LEDGA70XD5-XM	LEDGA70XD5-PM	Green, 520 nm to 535 nm	
LEDIA70XD5-XM	LEDIA70XD5-PM	Infrared, 850 nm	
LEDUV395A70XD5-XM	LEDUV395A70XD5-PM	UV, 395 nm	

The following caution applies to UV 395 nm models:



CAUTION:

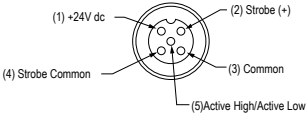
Risk Group 2: UV Emitted from this product.

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



Wiring

Wire Purpose	Cable Wire Color ¹	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V dc	+24 V dc	Pin 01 ²
	Blue (3)	common	common	Pin 02
Strobe Polarity Control	Gray (5)	open	Active Low: open Active High: connect to common (Blue wire)	Open — Active Low Pin 02 — Active High
Strobe Voltage Wires	White (2)	open	0 V dc = ON (Active Low) +5 V dc to 24 V dc = OFF (Active Low)	Pin 04
	Black (4)	open	0 V dc = OFF (Active High) +5 V dc to 24 V dc = ON (Active High)	
 <p>Figure 1. Pinouts for Mating Cordsets</p>				

Light Intensity Adjustment

Adjust the light's intensity by turning the 270° Intensity potentiometer with a small flat-blade screwdriver. Apply power to the light and turn the potentiometer all the way clockwise for max. intensity. If the object to be sensed is too bright at max. intensity, turn the potentiometer down a little at a time, testing with the object, until the correct brightness is achieved.

Specifications

Supply Voltage and Current

Operating Voltage: 24 V dc $\pm 10\%$

Strobe Voltage: 5 V dc to 24 V dc at 15 mA maximum

Current Draw at Full Intensity: 500 mA max

Built-in constant current regulator for LEDs

Adjustable intensity control varies intensity for "P" models

Use only with a suitable Class 2 power supply (UL) or SELV power supply (CE)

Light Source

Five high-intensity LEDs; see models table for wavelengths

Illumination

610 mm (24 in) diameter usable light pattern at 1 m (3.28 ft)

Strobe

Optically isolated

Connections

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

Construction

Enclosure rating: IP50 (when mounted using the two ¼ - 20 holes in back)

Housing: aluminum, black anodized

Window: acrylic, clear with frosted diffusing surface on inside

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 °C to +50 °C (+32 °F to +122 °F)

Humidity: 90% maximum relative humidity (non-condensing)

Certifications



Light Characteristics

Values shown are typical at 25 °C.

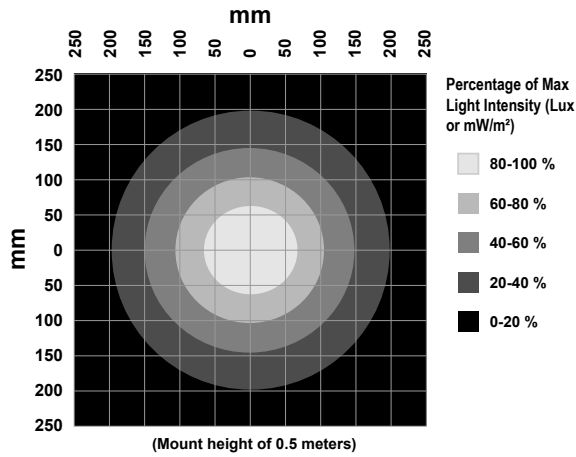
	Lumens				mWatts	
	Cool White	Green	Red	Blue	IR	UV395
LEDxA70	555	435	215	160	1130	610

¹ For Banner-supplied wire.

² When connecting the light to a PresencePLUS Pro controller terminal block, the controller supply must be 24 V dc $\pm 10\%$.

Optical Data

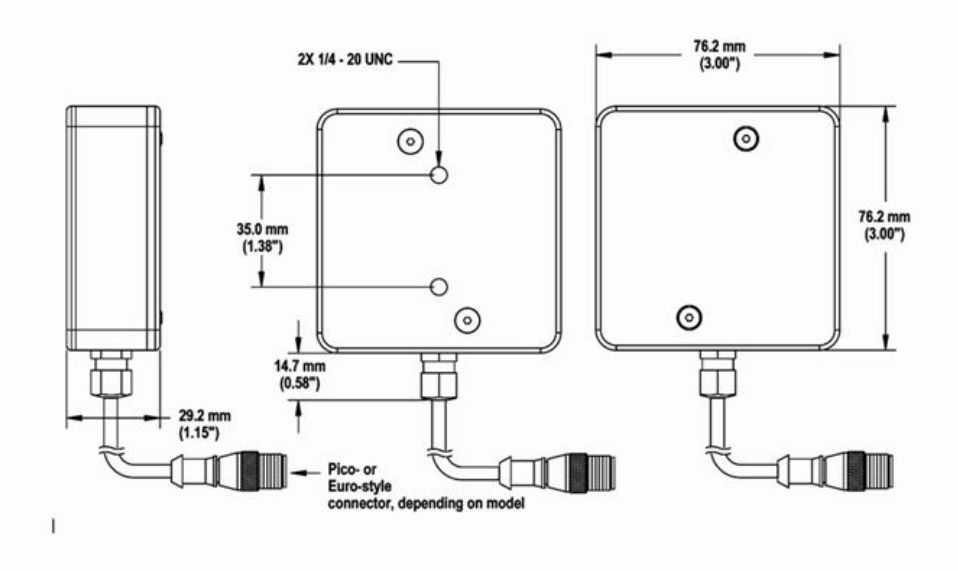
Area Light Diffuse Window
Isolux Pattern



Values shown are typical at 25 °C.

Distance (m)	Max Center Beam Lux (lux)				Max Center Beam Irradiance (mW/m²)		Beam Width (m)	
	Cool White	Green	Red	Blue	IR	UV395	Vertical (Spread 29.1°)	Horizontal (Spread 30.7°)
0.25	22,990	18,019	8,906	6,628	46,808	25,268	0.13	0.14
0.50	7,030	5,510	2,723	2,027	14,313	7,727	0.26	0.27
1.00	1,850	1,450	717	533	3,767	2,033	0.52	0.55

Dimensions



Front View

Back View

All measurements are listed in millimeters [inches], unless noted otherwise.

Accessories

The following describes available cordset and bracket options for these lights.

Cordsets



Note: These 5-pin cordsets can also be used on 4-pin connector lights.

5-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

Bracket

SMBAMS70A

- Zinc-plated cold rolled steel right-angle bracket
- Articulated slots for 90+ degrees rotation
- two 1/4-20 screws included



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