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



Important: Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los LED..A70XD5-..High-Intensity Area Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

Models

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

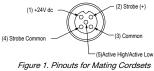
- IEC 62471



Original Document 153956 Rev. G

Wiring

| +24 V dc common | | +24 V dc | Pin 01 ² |
|--------------------|--------------------------------|--|--|
| common | | | |
| | | common | Pin 02 |
| open | Active Low: open | Open — Active Low | |
| | Active High: connect to common | (Blue wire) | Pin 02 — Active High |
| open | 0 V dc = ON (Active Low) | +5 V dc to 24 V dc = OFF (Active Low) | Dia 04 |
| | 0 V dc = OFF (Active High) | +5 V dc to 24 V dc = ON (Active High) | Pin 04 |
| open | Strobe common | | Pin 02 |
| | open | open Active High: connect to common 0 V dc = ON (Active Low) 0 V dc = OFF (Active High) | Active High: connect to common (Blue wire) open 0 V dc = ON (Active Low) +5 V dc to 24 V dc = OFF (Active Low) 0 V dc = OFF (Active High) +5 V dc to 24 V dc = ON (Active High) open Strobe common |



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 ±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)

See the electrical characteristics on the product label.

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

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

Construction

Enclosure rating: IP50 (when mounted using the two 1/4 - 20 holes in back)

Housing: aluminum, black anodized Window: acrylic, clear with frosted diffusing surface on inside

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.

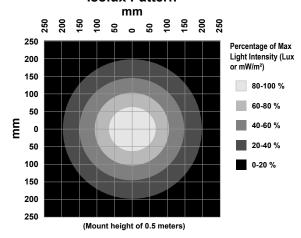
| | | Lume | mWatts | | | |
|---------|------------|-------|--------|------|------|-------|
| | Cool White | Green | Red | Blue | IR | UV395 |
| LEDxA70 | 555 | 435 | 215 | 160 | 1130 | 610 |

For Banner-supplied wire

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

Optical Data

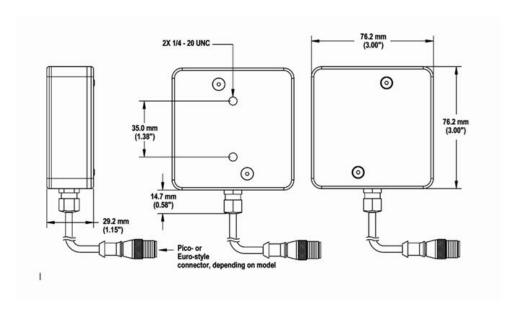
Area Light Diffuse Window Isolux Pattern



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

Cordsets

| 5-Pin Threaded M12/Euro-Style Cordsets—Single Ended | | | | | | | |
|---|----------------|----------|------------------------|---|--|--|--|
| Model | Length | Style | Dimensions | Pinout (Female) | | | |
| MQDC20-506 | 1.83 m (6 ft) | | | € -2 | | | |
| MQDC20-515 | 4.57 m (15 ft) | Straight | 42 Тур | 1 (200) | | | |
| MQDC20-530 | 9.14 m (30 ft) | | M12 x 1 — e 15 [0.59"] | 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray | | | |

Bracket

SMBAMS70A

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



Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications upposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.

Mexican Importer

Banner Engineering de Mèxico, S. de R.L. de C.V. David Alfaro Siqueiros 103 Piso 2 Valle oriente San Pedro Garza Garcia Nuevo Leòn, C. P. 66269 81 8363.2714

