

AL247 Series

UltraSeal Bar Lights

Product Highlights

- Built for extreme environments, our IP69K certified lights are specifically engineered to withstand everything from prolonged liquid immersion to high-pressure steam cleaning and corrosive washdown solutions.
- UltraSeal Bar Lights are ideal for hygienic inspection environments, aseptic manufacturing, and food and beverage applications.



General Specifications

| Florida Occasification | Color | 24V Current | All Other Controls | | | |
|------------------------------|--|--------------------|------------------------|--|--|--|
| | 455, 470, 505, 530, WHI 0.37A per 6 inches | | 0.35A Max per 6 inches | | | |
| Electrical Specifications | 590, 625, 660, 730 0.38A per 6 inches 0.30 | | 0.30A Max per 6 inches | | | |
| | 850, 940 | 0.38A per 6 inches | 0.20A Max per 6 inches | | | |
| Normal Operating Temperature | 0-60 deg C | | | | | |
| Weight | 11.2oz (317.5g) per 6 inches | | | | | |
| Standard Cable Information | 2 M long -0/+150 mm (80" -0/+6") - 105°C rated PVC jacket, foil shield with drain | | | | | |
| | Exempt Applicable Wavelengths: 850, 940 | | | | | |
| Photobiological Risk Factor | Group 1 (Low-Risk) Applicable Wavelengths: 455, 470, 505, 530, 590, 625, 666, 730, | | | | | |
| | WHI | | | | | |
| Compliance | CE, RoHS, IEC 62471 | | | | | |
| IP Rating | IP69K | | | | | |
| Lumen Maintenance | L70 = 50,000 Hours | | | | | |

Part Number Key

| Model | Lens Type | - | Emitting Length (in) | Peak Wavelength | Connector/ Control | Housing Material | - | Alternative Connector |
|-------------|---------------|---|----------------------|------------------|-----------------------|-------------------------|---|--------------------------|
| AL247 | x | - | XX | XXX | XX | XX | - | XXX |
| AL247 | N (Narrow) | | 06 | 455 (royal blue) | C1 | NP (Nickel Plating) | | M8 ¹ |
| | M (Medium) | | 12 | 470 (blue) | C5 | SS (Stainless Steel) | | M12 ¹ |
| | W (Wide) | | 18 | 505 (cyan) | IC | | | |
| | | | 24 | 530 (green) | 13 | | | |
| | | | | 590 (amber) | I3S | | | |
| | | | | 625 (red orange) | 14 | | | |
| | | | | 660 (red) | 24 | | | |
| | | | | 730 (IR) | | | | |
| | | | | 850 (IR) | | | | |
| | | | | 940 (IR) | | | | |
| | | | | WHI (white) | | | | |
| Example Par | t Numbers: | | Beam Angle (F | | | | | |

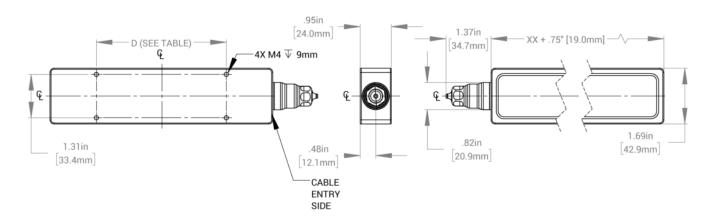
Example Part Numbers: AL247N-06455I3-M12 AL247M-18WHIC1

Beam Angle (FWHM): Narrow = 8° Medium = 21° Wide = 29°

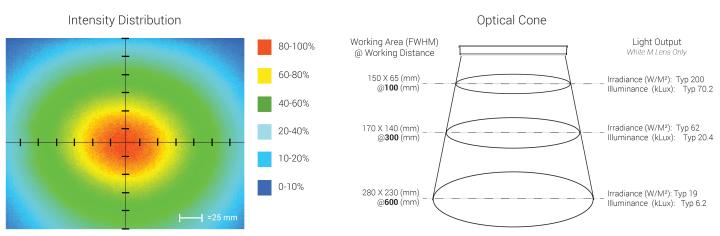
 $^{\mbox{\tiny 1}}\mbox{Available}$ with IC, I3, I3S, I4 and 24 V options only

Mechanical Specs

| LENGTH MATRIX | | | | | | |
|---|---------------|--|--|--|--|--|
| CONFIG. (AL247-XX) MOUNTING HOLE DISTANCE CEN TO CENTER IN INCHES [mm] (D) | | | | | | |
| AL247-06 | 3.94 [100mm] | | | | | |
| AL247-12 | 6.89 [175mm] | | | | | |
| AL247-18 | 9.84 [250mm] | | | | | |
| AL247-24* | 17.72 [450mm] | | | | | |
| | | | | | | |
| AL247-24 HAS ADDITIONAL HOLES AT D/2, DISTANCE BETWEEN HOLES IS 9.84 [225mm] | | | | | | |



Optical Specs



Standard Flying Lead Functions for 24V, IC, I3, I3S, and I4 Control Options

| | COLOR | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS |
|--|-------|---------------|-----------------------|-------------------------|-------------------------|
| | BROWN | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| | WHITE | N/A | 0-10 V ANALOG DIMMING | RESERVED | NPN/ACTIVE LOW TRIGGER |
| | BLUE | DC GND | DC GND | DC GND | DC GND |
| | BLACK | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER |
| | GRAY | N/A | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING |

The functions listed above are applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, without the optional A-coded 5-position Male M12 or A-coded 4-position Male M8 connector.

M12 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options

| | PIN | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS |
|-----------|-----|---------------|-----------------------|-------------------------|-------------------------|
| 5 0 0 0 4 | 1 | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| | 2 | N/A | 0-10 V ANALOG DIMMING | RESERVED | NPN/ACTIVE LOW TRIGGER |
| | 3 | DC GND | DC GND | DC GND | DC GND |
| | 4 | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER |
| | 5 | N/A | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING |

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 5-position Male M12 connector.

M8 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options

| | PIN | 24V FUNCTIONS | IC FUNCTIONS | 13/13S FUNCTIONS | 14 FUNCTIONS |
|---|-----|---------------|-----------------------|-------------------------|-------------------------|
| 4 | 1 | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| | 2 | N/A | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING | 0-10 V ANALOG DIMMING |
| | 3 | DC GND | DC GND | DC GND | DC GND |
| | 4 | N/A | PNP/ACTIVE LOW GATE | PNP/ACTIVE HIGH TRIGGER | PNP/ACTIVE HIGH TRIGGER |

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 4-position Male M8 connector.

For details on operating configurations without built-in control (C1, C5, Q1, and Q4 control, when available), please refer to Advanced illumination's controller manuals.

Control Specs

C1 CONNECTOR

For use with: DCS Series Controllers

Strobe/Continuous Controllers

C5 CONNECTOR

For use with: **Pulsar 320**

High Power Strobe only Controller

ICS 2 (IC)

In-line Continuous Controller

Powered with: **24V Power Supply**

ICS 3

In-line Strobe/ Continuous Controller

Default On

Powered with: **24V Power Supply**

ICS 3S (I3S)

In-line Strobe/ Continuous Controller

Default Off

Powered with: **24V Power Supply**

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In-line Strobe/ Continuous Controller

Powered with: **24V Power Supply**

24 VOLT

Flying/Tinned Leads

Powered with: **24V Power Supply**

Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of FIVE YEARS from the original date of purchase. Should a defect develop during this period, customers may return the complete product, freight prepaid, to one of Ai's distributors or to the Ai factory. All product warranty returns require a Return Merchandise Authorization (RMA) number which is obtained from Customer Service. The RMA number must be clearly marked on the outside of the package. Ai will inspect the unit, and if a defect is found will, at our option, repair or replace the product without charge. Ai disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose." For products under warranty that have since been discontinued, Ai will make an effort to replace with equivalent parts; for circumstances that do not allow for equivalent replacement, Ai reserves the right to repair or replace these products with an updated version. Ai cannot be held responsible for the unauthorized or inappropriate use of its products. Any unauthorized repair or modifications will result in a voided warranty.

No Liability for Consequential Damages: In no event shall Ai be liable for any consequential, special, incidental, or indirect damages of any kind arising from the sale or use of the products.

Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm ET or send an email to orders@advancedillumination.com.

Company Information

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