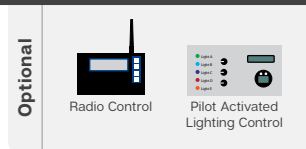


# Solar Aviation Light

AV-70 and AV-70-HI



The solar powered AV-70 is a field proven aviation light that offers enormous benefits over traditional battery and hard-wired aviation lights including low maintenance and no underground wiring.

These completely self-contained LED lights are designed to suit a range of aviation and general applications including emergency airstrip, caution, taxiway, and threshold lighting.

The unit has two high-performance solar modules mounted within the lens, which maximize solar collection and provide reliable operation in a range of environmental conditions.

The focal plane of the light is designed to provide a vertical divergence of between 0 to +7 degrees, and the user-replaceable battery ensures a service life of up to 12 years.

## AV-70

The AV-70 is made from tough, durable UV stabilized LEXAN® polycarbonate, and incorporates an internal photodiode for automatic night activation once the ambient light threshold drops sufficiently.

Completely self-contained and able to be installed in minutes, the AV-70 is the preferred choice for marking of indigenous, regional and mining airstrips around Australia, and remote airfields globally.

## AV-70-HI

The AV-70-HI is a high intensity version of the popular AV-70 and is ideal for use in high sunlight areas.

## Optional Radio Control

The AV-70-RF is a radio-controlled version of the popular AV-70, which can be used in conjunction with a PALC or simple handheld controller. Users can wirelessly control ON/OFF functions, adjust light intensities or switch between visual and IR (tactical) operational modes if fitted.

### Cost Effective

- Solar Powered
- No running costs
- Low ongoing maintenance costs

### Easy Install

- No trenching of cables
- No mains power

### Reliable

- No bulbs blown – ever
- Latest LED technology
- No Moving parts

### High Performance

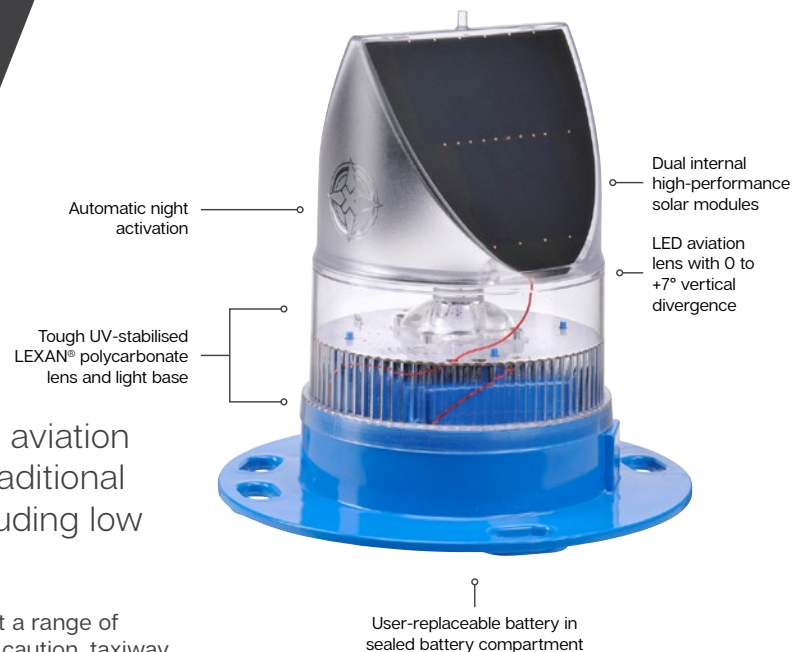
- Fully integratable into an Avlite runway lighting system
- Dusk-to-dawn or on demand operation

### Optional Add Ons

- Infrared Output
- Radio Control
- Mounting Solutions

### Applications

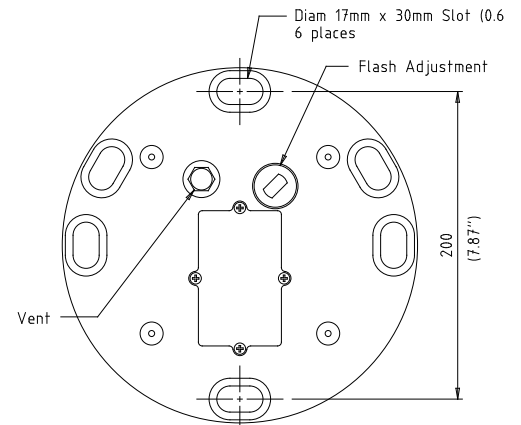
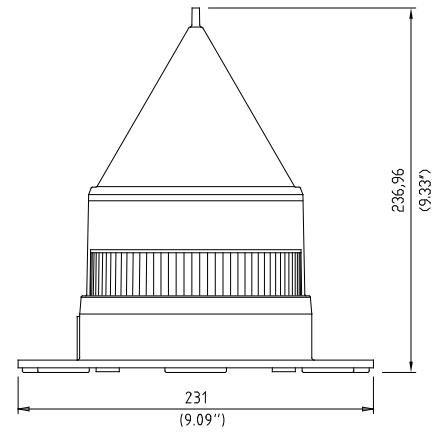
- ICAO and FAA Compliant
- Runway threshold/end
- Runway Edge Light
- Taxiway Edge Light



## Technical Specifications \*

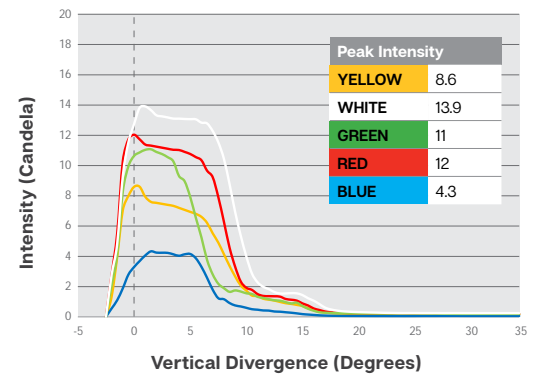
|                                   | AV-70  | AV-70-HI   |
|-----------------------------------|--|--|
| <b>Light Characteristics</b>      |  |  |
| Light Source                      | LED  | LED  |
| Available colors                  | Red, Green, White, Amber, Blue   | Red, Green, White, Amber, Blue   |
| Horizontal Output (degrees)       | 360  | 360  |
| Vertical Divergence (degrees)     | 0 to +7  | 0 to +7  |
| Intensity Adjustments             | 3 Steps - Low, Med, High †   | 3 Steps - Low, Med, High †   |
| LED Life Expectancy (hours)       | >100,000   | >100,000   |
| <b>Electrical Characteristics</b> |  |  |
| Operating Voltage (V)             | 3.6  | 3.6  |
| Temperature Range                 | -40 to 55°C  | -40 to 55°C  |
| <b>Solar Characteristics</b>      |  |  |
| Solar Module Type                 | Monocrystalline  | Monocrystalline  |
| Output (watts)                    | 2.8 (2 x 1.4 watt)   | 2.8 (2 x 1.4 watt)   |
| Solar Module Efficiency (%)       | 21   | 21   |
| Charging Regulation               | Microprocessor controlled  | Microprocessor controlled  |
| <b>Power Supply</b>               |  |  |
| Battery Type                      | High grade NiMH<br>– Environmentally friendly  | High grade NiMH<br>– Environmentally friendly  |
| Battery Capacity (Ah)             | 8.6  | 17.2   |
| Nominal Voltage (V)               | 3.6  | 3.6  |
| Autonomy (nights)                 | Steady-on: >14   | Steady-on: >19   |
| <b>Radio Control</b>              |  |  |
| Frequency                         | 2.4GHz ISM Band  | 2.4GHz ISM Band  |
| Range                             | Up to 1.4km relayed  | Up to 1.4km relayed  |
| Expandability                     | AvMesh®  | AvMesh®  |
| Compliance                        | FCC / CE   | FCC / CE   |
| <b>Physical Characteristics</b>   |  |  |
| Body Material                     | LEXAN® Polycarbonate – UV stabilized   | LEXAN® Polycarbonate – UV stabilized   |
| Lens Material                     | LEXAN® Polycarbonate – UV stabilized   | LEXAN® Polycarbonate – UV stabilized   |
| Lens Diameter (mm/inches)         | 140 / 5 1/2  | 140 / 5 1/2  |
| Lens Design                       | Single LED optic   | Single LED optic   |
| Mounting                          | 6 x 17mm holes on 200mm PCD  | 6 x 17mm holes on 200mm PCD  |
| Height (mm/inches)                | 240 / 9 1/2  | 240 / 9 1/2  |
| Width (mm/inches)                 | 231 / 7 1/4  | 231 / 7 1/4  |
| Mass (kg/lbs)                     | 1.4 / 3 1/4  | 1.6 / 3 1/2  |
| Product Life Expectancy           | Up to 12 years   | Up to 12 years   |
| <b>Environmental Factors</b>      |  |  |
| Humidity                          | 0 to 100%, MIL-STD-810F  | 0 to 100%, MIL-STD-810F  |
| Icing                             | 22kg per square inch   | 22kg per square inch   |
| Wind Speed                        | Up to 160kph   | Up to 160kph   |
| Shock                             | MIL-STD-202G, Test Condition G, Method 213B  | MIL-STD-202G, Test Condition G, Method 213B  |
| Vibration                         | MIL-STD202G, Test Condition B, Method 204  | MIL-STD202G, Test Condition B, Method 204  |
| <b>Certifications</b>             |  |  |
| CE                                | EN61000-6-3:2007<br>EN61000-6-1:2007   | EN61000-6-3:2007<br>EN61000-6-1:2007   |
| Quality Assurance                 | ISO9001:2015   | ISO9001:2015   |
| Waterproof                        | IP68   | IP68   |
| Regulation                        | DGAC (Mexico)  | DGAC (Mexico)  |
| <b>Compliance</b>                 |  |  |
| ICAO                              | Annex. 14 Volume 1 'Aerodrome Design and Operations'   | Annex. 14 Volume 1 'Aerodrome Design and Operations'   |
| FAA                               | L861T  | L861T  |
| FAA                               | Barricade AC 150/5370-2F   | Barricade AC 150/5370-2F   |
| FAA                               | LED Colour Standard (Engineering Brief No. 67D)  | LED Colour Standard (Engineering Brief No. 67D)  |
| Regulation                        |  | CASA MOS Part 139, Volume 2, 2016, Section 9.13.15   |
| <b>Intellectual Property</b>      |  |  |
| Trademarks                        | AVLITE® is a registered trademark of Avlite Systems  | AVLITE® is a registered trademark of Avlite Systems  |
| Warranty *                        | 3 year warranty  | 3 year warranty  |
| Options Available                 | <ul style="list-style-type: none"> <li>Manual Operation</li> <li>Radio Controlled</li> <li>Avlite Pilot Activated Lighting Control</li> <li>IR LEDs</li> <li>External ON/OFF Switch</li> <li>External Battery Charging Port</li> <li>Solar Booster™</li> </ul> | <ul style="list-style-type: none"> <li>Manual Operation</li> <li>Radio Controlled</li> <li>Avlite Pilot Activated Lighting Control</li> <li>IR LEDs</li> <li>External ON/OFF Switch</li> <li>External Battery Charging Port</li> <li>Solar Booster™</li> </ul> |

## Technical Illustration

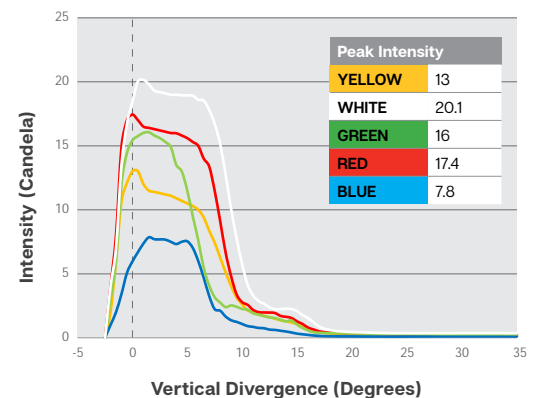


## Photometric Output

### AV-70 Steady ON



### AV-70-HI Steady ON



• Specifications subject to change or variation without notice  
 \* Subject to standard terms and conditions  
 † Intensity setting subject to solar availability

