

# AV70

Solar Aviation Light

## Features

- Integrated solar/battery system
- Dual internal high-performance solar modules angled to maximize solar collection
- Fast & easy to deploy - no programming
- IP68 waterproof rating
- User-replaceable battery
- Ultra-high intensity LEDs (no changing globes ever)

## Typical Applications

- Solar Airstrip Light
- Solar Barricade Light
- Solar Caution Light
- Solar Taxiway Light (ICAO)
- Solar Threshold Light
- Solar Obstruction Light

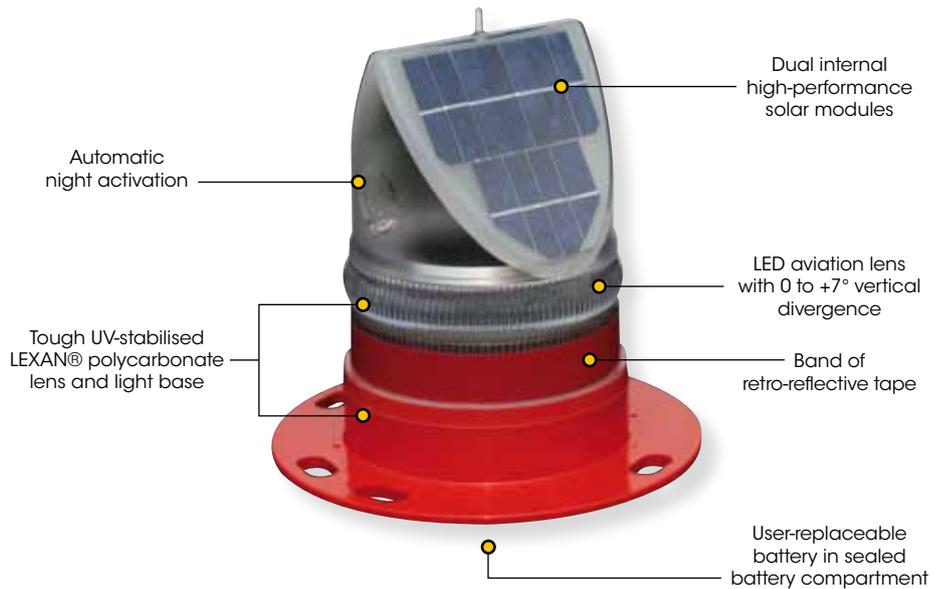
## Compliance

- FAA AC150/5370-2E for construction and barricade installations
- ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Forth edition July 2004, paragraph 5.3.17.7.



Royal Flying  
Doctor Service

Avlite donates AU\$20 to the Royal Flying Doctor Service from the sale of each AV60 & AV70 light within Australia



**The solar powered AV70 aviation light 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 and +7 degrees, and the user-replaceable battery ensures a service life of up to 12 years.

The AV70 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 AV70 is the preferred choice of remote airfields throughout Australia - where the units mark indigenous and regional council's airstrips, and mining strips around the country.

### AV70-HI

The AV70-HI is a high intensity version of the popular AV70 and is ideal for use in high sunlight areas that receive a minimum of 3.5 hours of sun per day.

### Optional Radio Control (AV70-RF)

The AV70-RF is a radio-controlled version of the popular AV70, which can be used in conjunction with a PALC or simple handheld controller. Users can wirelessly control ON/OFF functions, adjust light intensities, change colours or switch between visual and IR (tactical) operational modes.



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### AVLITE SYSTEMS

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### SPECIFICATIONS • AV70

### AV70-HI

#### Light Characteristics

Light Source  
Available colours  
Peak Intensity (cd)†  
Horizontal Output (degrees)  
Vertical Divergence (degrees)  
Reflector Type

12 ultra-high intensity LEDs  
Red, Green, White, Yellow, Amber, Blue, Sectored Combinations  
Steady-on:  
Blue - 2.8 Red - 6.8 Green - 9.0  
White - 7.0 Yellow - 6.5  
Flashing:  
Blue - 5.5 Red - 18.2 Green - 21.9  
White - 19.1 Yellow - 15.1  
360  
0 to +7

12 ultra-high intensity LEDs  
Red, Green, White, Yellow, Amber, Blue, Sectored Combinations  
Steady-on:  
Blue - 4.5 Red - 12.1 Green - 16.9  
White - 14.2 Yellow - 11.6  
Flashing: Not available  
360  
0 to +7

#### Available Flash Characteristics

Intensity Adjustments  
LED Life Expectancy (hours)

Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582. AU Pat. No. 778,918)  
>250 including steady-on (user-adjustable)  
Adjustable in 25% increments  
>100,000

Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582. AU Pat. No. 778,918)  
Not available  
Adjustable in 25% increments  
>100,000

#### Electrical Characteristics

Operating Voltage (v)  
Temperature Range

3.6  
-40 to 80°C

3.6  
-40 to 80°C

#### Solar Characteristics

Solar Module Type  
Output (watts)  
Solar Module Efficiency (%)  
Charging Regulation

Multicrystalline  
2.5 (2 x 1.25watt)  
14  
Microprocessor controlled

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2.5 (2 x 1.25watt)  
14  
Microprocessor controlled

#### Power Supply

Battery Type  
Battery Capacity (Ah)  
Nominal Voltage (v)  
Autonomy (nights)

High grade NiMH  
- Environmentally friendly  
8  
3.6  
Steady-on: >14  
Flashing: >38 (14 hour darkness, 12.5% duty cycle)

High grade NiMH  
- Environmentally friendly  
16  
3.6  
Steady-on: >19  
Flashing: Not available

#### Radio Controlled (optional)

Frequency  
Range  
Expandability  
Approvals

2.4Ghz ISM Band  
1.4km between 2 lights, relayed  
Peer to Peer Networking  
FCC / CE

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#### Physical Characteristics

Body Material  
Lens Material  
Lens Diameter (mm/inches)  
Lens Design  
Mounting  
Height (mm/inches)  
Width (mm/inches)  
Mass (kg/lbs)  
Product Life Expectancy

LEXAN® Polycarbonate  
- UV stabilized  
LEXAN® Polycarbonate  
- UV stabilized  
140 / 5½  
External optics with interior flute design  
6 x 17mm holes on 200mm PCD  
240 / 9½  
231 / 9⅓  
1.1 / 2⅔  
Up to 12 years

LEXAN® Polycarbonate  
- UV stabilized  
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- UV stabilized  
140 / 5½  
External optics with interior flute design  
6 x 17mm holes on 200mm PCD  
240 / 9½  
231 / 9⅓  
1.41 / 3⅓  
Up to 12 years

#### Environmental Factors

Humidity  
Icing  
Wind Speed  
Shock  
Vibration

0 to 100%, MIL-STD-810F  
22kg per square inch  
Up to 160kph  
MIL-STD-202G, Test Condition G, Method 213B  
MIL-STD202G, Test Condition B, Method 204

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22kg per square inch  
Up to 160kph  
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#### Certifications

CE  
Quality Assurance  
Waterproof

EN61000-6-3:1997. EN61000-6-1:1997  
ISO9001:2000  
IP68

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ISO9001:2000  
IP68

#### Intellectual Property

Patents

US Pat. No. 6,667,582.  
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Trademarks

AVLITE® is a registered trademark of Avlite Systems

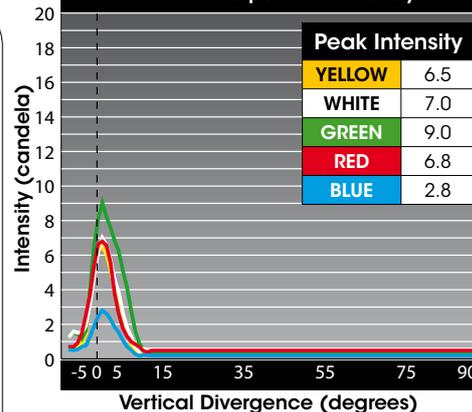
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#### Warranty \*

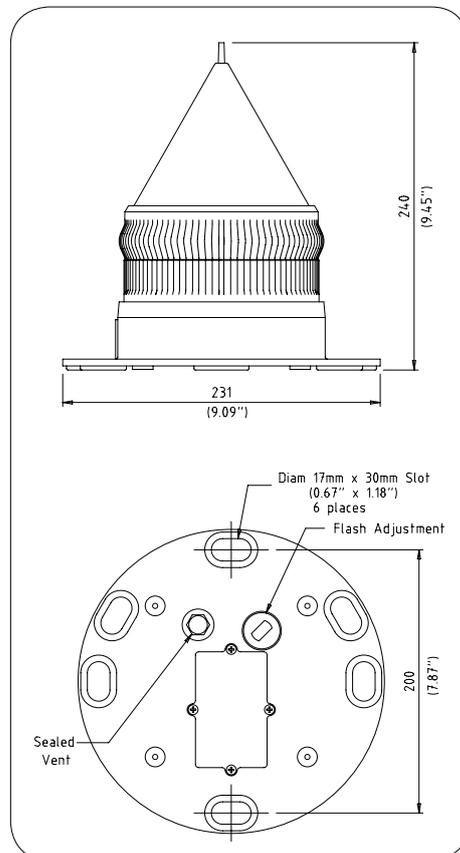
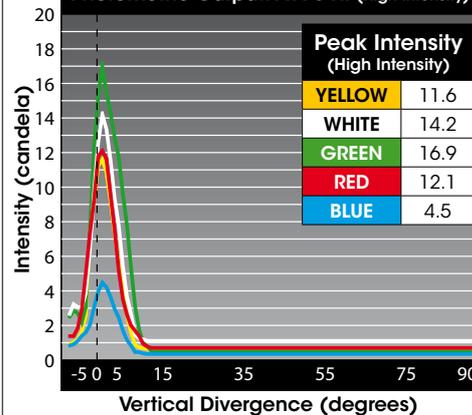
#### Options Available

- Hard-wire Synchronisation (AV70-HW)
- Voltage-free Contact (AV70-VFC)
- RF Flash Synchronisation (AV70-CS)
- Avlite Pilot Activated Lighting Control
- Radio Controlled - FCC approved
- IR (AV70.IR)
- External ON/OFF Switch (AV70-S)
- External Battery Charging Port
- Manual Operation
- Hard-wire Synchronisation (AV70-HI-HW)
- Voltage-free Contact (AV70-HI-VFC)
- RF Flash Synchronisation (AV70-HI-CS)
- Avlite Pilot Activated Lighting Control
- Radio Controlled - FCC approved
- IR (AV70-HI.IR)
- External ON/OFF Switch (AV70-HI-S)
- External Battery Charging Port
- Manual Operation

Photometric Output: AV70 Steady ON



Photometric Output: AV70-HI (High Intensity)



\* Specifications subject to change or variation without notice  
† Intensity setting subject to solar availability

