

# Solar Aviation Light AV-70 & AV-70-HI Avlite

## Compliance

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

## Applications

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

## Features

- Solar powered, self-contained
- Integrated solar/battery system
- Dual internal high-performance solar modules angled to maximize solar collection
- Fast and easy to deploy - no programming
- IP68 waterproof rating
- User-replaceable battery in sealed battery compartment
- Ultra-high intensity LEDs (no changing lamps ever)
- Tough UV-stabilized LEXAN® polycarbonate lens and light base
- Automatic night activation

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.

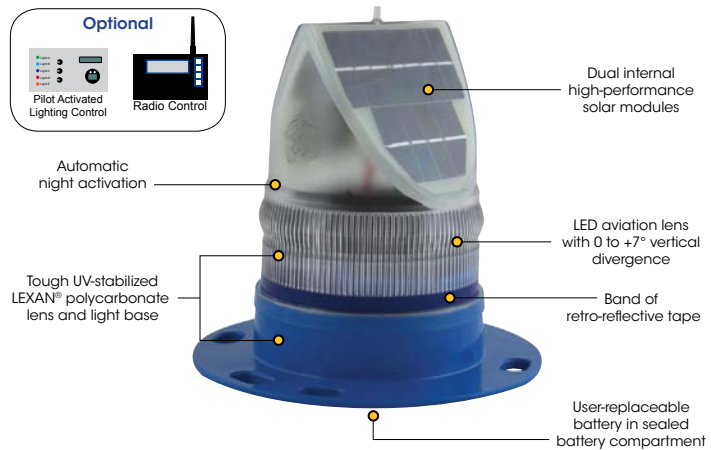
The unit has two high-performance solar modules mounted within the lens, which maximize solar collection and provide reliable operation in a range of environmental conditions. The focal plane of the light is designed to provide a vertical divergence of between 0 and +7 degrees, and the user-replaceable battery ensures a service life of up to 12 years.

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 of remote airfields around the world.

## 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 that receive a minimum of 3.5 hours of sun per day.



## Optional Radio Control

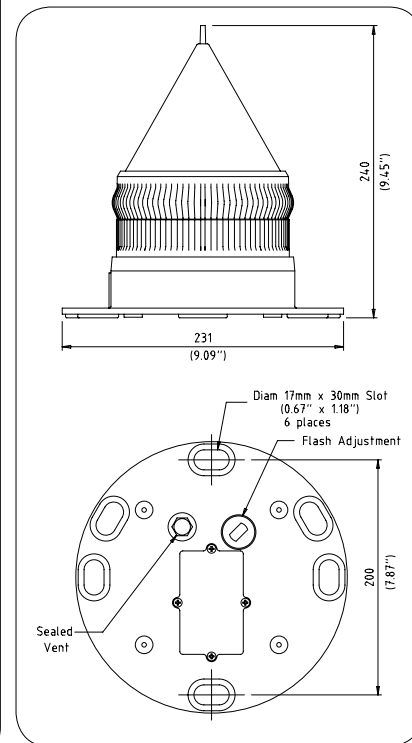
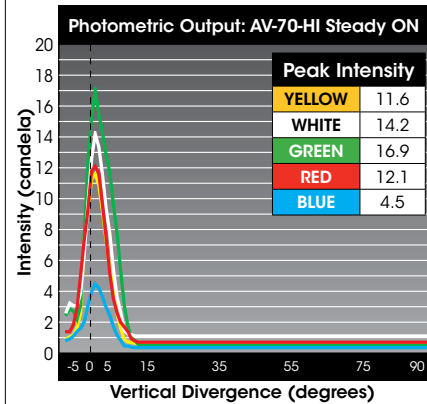
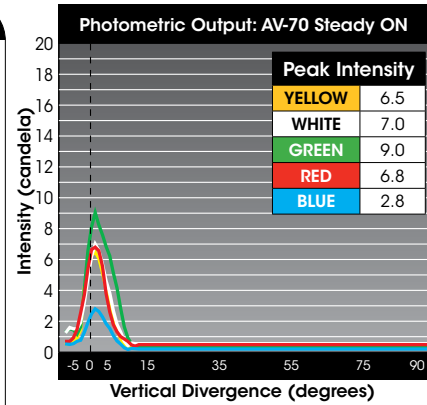
The AV-70-RF is a radio-controlled version of the popular AV-70, which can be used in conjunction with a PALC or simple hand-held controller. Users can wirelessly control ON/OFF functions and adjust light intensities.

## AV-SB-3 Solar Booster™

The AV-SB-3 Solar Booster™ can be connected to the AV-70 light to provide additional solar collection for charging the battery. The Avlite Solar Booster™ can be used in areas of reduced sunlight to help ensure optimum battery charge.



SPECIFICATIONS * *	AV-70	AV-70-HI
<b>Light Characteristics</b>		
Light Source	12 ultra-high intensity LEDs	12 ultra-high intensity LEDs
Available colors	Red, Green, White, Yellow, Amber, Blue, Sectored Combinations	Red, Green, White, Yellow, Amber, Blue, Sectored Combinations
Peak Intensity (cd)†	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	Steady-on: Blue - 4.5 Red - 12.1 Green - 16.9 White - 14.2 Yellow - 11.6 Flashing: Not available
Horizontal Output (degrees)	360	360
Vertical Divergence (degrees)	0 to +7	0 to +7
Reflector Type	Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582, AU Pat. No. 778,918)	Omnidirectional 360° LED Reflector (US Pat. No. 6,667,582, AU Pat. No. 778,918)
Available Flash Characteristics	>250 including steady-on (user-adjustable)	Not available
Intensity Adjustments	Adjustable in 25% increments	Adjustable in 25% increments
LED Life Expectancy (hours)	>100,000	>100,000
<b>Electrical Characteristics</b>		
Operating Voltage (V)	3.6	3.6
Temperature Range	-40 to 80°C	-40 to 80°C
<b>Solar Characteristics</b>		
Solar Module Type	Multicrystalline	Multicrystalline
Output (watts)	2.5 (2 x 1.25watt)	2.5 (2 x 1.25watt)
Solar Module Efficiency (%)	14	14
Charging Regulation	Microprocessor controlled	Microprocessor controlled
<b>Power Supply</b>		
Battery Type	High grade NiMH - Environmentally friendly	High grade NiMH - Environmentally friendly
Battery Capacity (Ah)	8	16
Nominal Voltage (V)	3.6	3.6
Autonomy (nights)	Steady-on: >14 Flashing: >38 (14 hour darkness, 12.5% duty cycle)	Steady-on: >19 Flashing: Not available
<b>Radio Controlled (optional)</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 / 5½	140 / 5½
Lens Design	External optics with interior flute design	External optics with interior flute design
Mounting	6 x 17mm holes on 200mm PCD	6 x 17mm holes on 200mm PCD
Height (mm/inches)	240 / 9½	240 / 9½
Width (mm/inches)	231 / 9 1/8	231 / 9 1/8
Mass (kg/lbs)	1.1 / 2 3/8	1.41 / 3 1/8
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	EN61000-6-3:1997, EN61000-6-1:1997	EN61000-6-3:1997, EN61000-6-1:1997
Quality Assurance	ISO9001:2008	ISO9001:2008
Waterproof	IP68	IP68
<b>Intellectual Property</b>		
Patents	US Pat. No. 6,667,582. AU Pat. No. 778,918	US Pat. No. 6,667,582. AU Pat. No. 778,918
Trademarks	AVLITE® is a registered trademark of Avlite Systems 3 year warranty	AVLITE® is a registered trademark of Avlite Systems 3 year warranty
<b>Warranty * Options Available</b>	<ul style="list-style-type: none"> <li>• Radio Controlled - FCC compliant</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>• Manual Operation</li> <li>• Solar Booster™</li> </ul>	<ul style="list-style-type: none"> <li>• Radio Controlled - FCC compliant</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>• Manual Operation</li> <li>• Solar Booster™</li> </ul>



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

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