# **Solar Aviation Light**

AV-70 and AV-70-HI



Automatic night – activation

Tough UV-stabilised LEXAN<sup>®</sup> polycarbonate lens and light base

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.

The AV-70 is made from tough, durable UV stabilized LEXAN<sup>®</sup> 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 throughout Australia - where the units mark indigenous and regional council's airstrips, and mining strips around the country.

#### 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.







# S Cost Effective

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

# 🐼 Easy Install

- No trenching of cables
- No mains power

## (A) High Performance

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

# Doptional Add Ons

- Infrared Output
- Radio Control
- Mounting Solutions

# Reliable

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

# Applications

- Runway threshold/end
- Runway Edge Light
- Taxiway Edge Light
- FAA and L861T compliant (option -see datasheet AV-70-861T)



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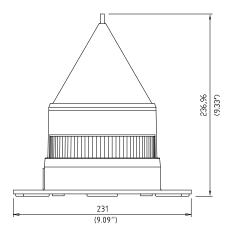
**USA C** +1 (603) 737 1310 ⊠ info@avlite.com www.avlite.com Dual internal — high-performance solar modules

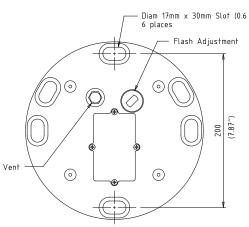
LED aviation lens with 0 to +7° vertical divergence

#### **Technical Specifications \*\***

	AV-70	AV-70-HI
Light Characteristics	LED	LED
Light Source		
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
Electrical Characteristics	3.6	3.6
Operating Voltage (V)	-40 to 55°C	-40 to 55°C
Temperature Range Solar Characteristics	-40 10 33 C	-40 10 33 C
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
Power Supply		
	High grade NiMH	High grade NiMH
Battery Type	- Environmentally friendly	- Environmentally friendly
Battery Capacity (Ah)	8.6	17.2
Nominal Voltage (V)	3.6	3.6
Autonomy (nights)	Steady-on: >14	Steady-on: >19
Power Supply - Radio Controlled	l (optional)	
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
Physical Characteristics		
Body Material	LEXAN® Polycarbonate – UV stabilized	LEXAN® Polycarbonate – UV stabilized
Lens Material	LEXAN <sup>®</sup> Polycarbonate – UV stabilized	LEXAN <sup>®</sup> Polycarbonate – UV stabilized
Lens Diameter (mm/inches)	140 / 5½	140 / 5½
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 / 9½	240 / 9½
Width (mm/inches)	231 / 71/8	231 / 71/8
Mass (kg/lbs)	1.4 / 31/8	1.6 / 3½
Product Life Expectancy	Up to 12 years	Up to 12 years
Environmental Factors		
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
Certifications		
CE	EN61000-6-3:1997. EN61000-6-1:1997	EN61000-6-3:1997. EN61000-6-1:1997
Quality Assurance	ISO9001:2015	ISO9001:2015
Waterproof	IP68	IP68
Intellectual Property		
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 <sup>®</sup> is a registered trademark of Avlite Systems	AVLITE <sup>®</sup> is a registered trademark of Avlite Systems
Warranty *	3 year warranty	3 year warranty
	Manual Operation     Radio Controlled – FCC compliant     Option	Manual Operation     Radio Controlled – FCC complian     Option
Options Available	<ul> <li>Avlite Pilot Activated Lighting Control - Option</li> <li>IR LEDs - Option</li> <li>External ON/OFF Switch - Option</li> <li>External Battery Charging Port - Option</li> <li>Solar Booster<sup>™</sup> - Option</li> </ul>	<ul> <li>Avlite Pilot Activated Lighting Control - Option</li> <li>IR LEDs - Option</li> <li>External ON/OFF Switch - Option</li> <li>External Battery Charging Port - Option</li> <li>Solar Booster<sup>™</sup> - Option</li> </ul>
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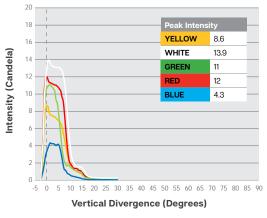
**Technical Illustration** 



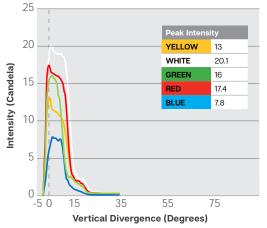


### **Photometric Output**

AV-70 Steady ON



#### AV-70-HI Steady ON





Intensity setting subject to solar availability

USA **L** +1 (603) 737 1310 ⊠ info@avlite.com www.avlite.com