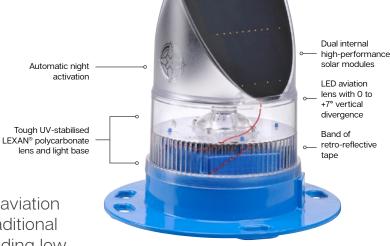
# **Solar Aviation Light**

AV-70 and AV-70-HI





User-replaceable battery in sealed battery compartment

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® 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.





## (\$) Cost Effective

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

## Easy Install

- No trenching of cables
- No mains power

## High Performance

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

## (E) Optional 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)

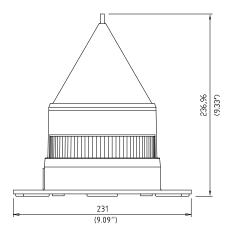


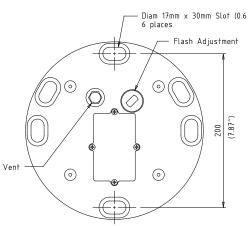
### **Technical Specifications \*\***

	AV-70	AV-70-HI
Light Characteristics		I
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)  Electrical Characteristics	>100,000	>100,000
Operating Voltage (V)	3.6	3.6
Temperature Range	-40 to 55°C	-40 to 55°C
Solar Characteristics	10 10 00 0	10 10 00 0
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	,	
Battery Type	High grade NiMH  - Environmentally friendly	High grade NiMH  - 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		
Frequency	2.4GHz ISM Band	2.4GHz ISM Band
Range	Up to 1.4km relayed	Up to 1.4km relayed
Expandability	AvMesh®	AvMesh®
Compliance  Physical Characteristics	FCC / CE	FCC / CE
Physical Characteristics	LEVAN® Dobroarbonato	LEYAN® Dolycarbonato
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	Single LED optic	Single LED optic
Mounting	6 x 17mm holes on 200mm PCD 240 / 91/2	6 x 17mm holes on 200mm PCD 240 / 91/2
Height (mm/inches)		
Width (mm/inches)	231 / 7% 1.4 / 3%	231 / 7 <sup>1</sup> / <sub>8</sub> 1.6 / 3 <sup>1</sup> / <sub>2</sub>
Mass (kg/lbs) Product Life Expectancy	Up to 12 years	Up to 12 years
Environmental Factors	op to 12 years	Op to 12 years
	0 to 100% MIL CTD 910F	0 to 100% MIL STD 910F
Humidity Icing	0 to 100%, MIL-STD-810F 22kg per square inch	0 to 100%, MIL-STD-810F 22kg per square inch
Wind Speed	Up to 160kph	Up to 160kph
	MIL-STD-202G, Test Condition G,	MIL-STD-202G, Test Condition G,
Shock	Method 213B	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	ISO9001:2008	ISO9001:2008
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® is a registered trademark of Avlite Systems	AVLITE® is a registered trademark of Avlite Systems
Warranty *	3 year warranty	3 year warranty
Options Available	Manual Operation     Radio Controlled – FCC compliant     Option     Avlite Pilot Activated Lighting     Control - Option     IR LEDs - Option     External ON/OFF Switch - Option     External Battery Charging Port	Manual Operation     Radio Controlled – FCC compliant     Option     Avlite Pilot Activated Lighting     Control - Option     IR LEDs - Option     External ON/OFF Switch - Option     External Battery Charging Port
Specifications subject	- Option - Solar Booster™ - Option  to change or variation without not	- Option • Solar Booster™ - Option ice

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

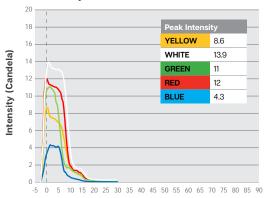
#### **Technical Illustration**





## **Photometric Output**

#### AV-70 Steady ON



**Vertical Divergence (Degrees)** 

#### AV-70-HI Steady ON

