

# Solar Aviation Light

## AV-70 & AV-70-16AH Avlite

### Compliance

- FAA L861T, Barricade AC 150/5370-2F
- ICAO Annex 14, Volume 1, 'Aerodrome Design and Operations'

### Applications

- ICAO and FAA Compliant.
- Runway threshold/end.
- Runway edge light.
- Taxiway edge light.

### Features

- 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
  - Integrate into an Avlite runway lighting system.
  - Dusk-to-dawn or on demand operation.
- Optional Add Ons
  - Infrared output.
  - Radio control.
  - Mounting solutions.

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, that 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°, and the user-replaceable battery ensures a service life of up to 12 years.

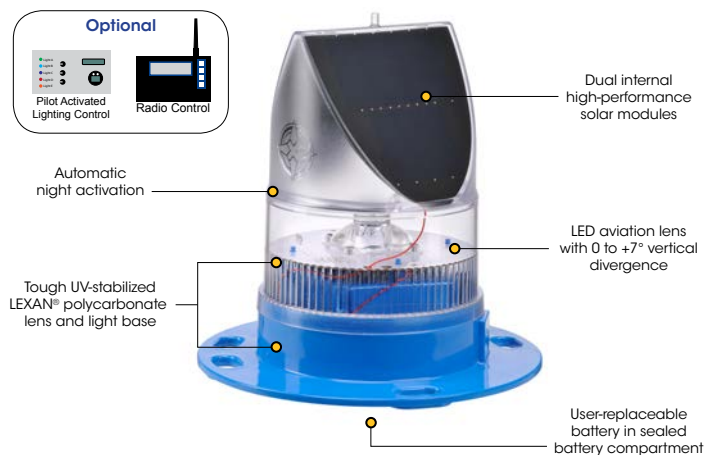
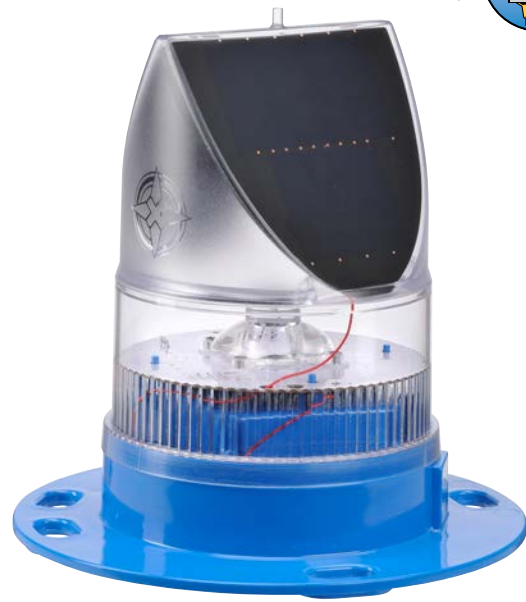
### AV-70

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 remote airfields.

### AV-70-16AH

The AV-70-16AH is a high intensity version of the 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 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.

### Ordering Codes


Part #	Color	Options
AV-70-	B: Blue G: Green GR: Green/Red R: Red W: White Y: Yellow IR: Infrared <sup>1</sup>	CP: External Charge Port RF: Radio Controlled S: External Switch 16AH: 16AH Battery 15: 15 FPM 30: 30 FPM 40: 40 FPM 60: 60 FPM

<sup>1</sup> Requires "Radio Controlled" option. Infrared LEDs cannot be operated simultaneously with visible LEDs.

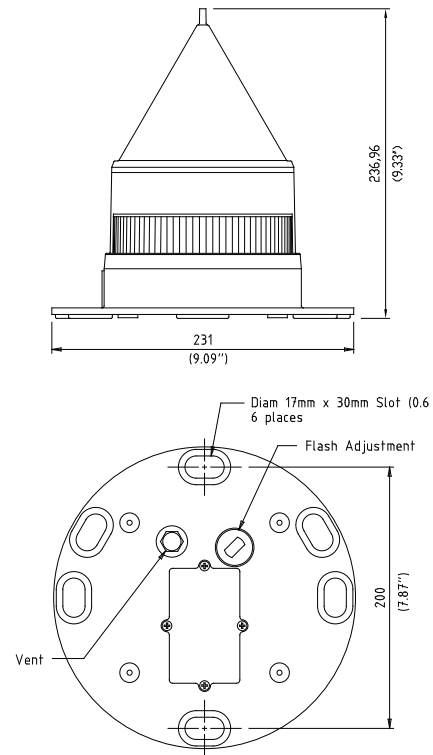


Technical Specifications \*\*

	AV-70	AV-70-16AH
<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 - 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
<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 EN61000-6-1:2007	EN61000-6-3:2007 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 Color Standard (Engineering Brief No. 67D)	LED Color 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>

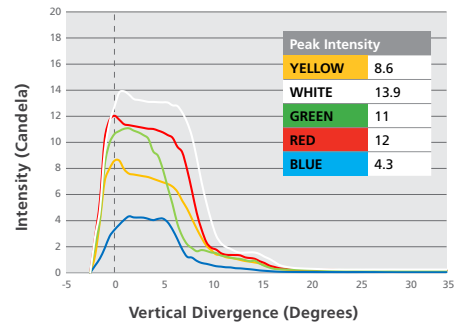
\* Specifications subject to change or variation without notice  
 \*\* Subject to standard terms and conditions  
 † Intensity setting subject to solar availability  


Technical Illustration



Photometric Output

AV-70 Steady ON



AV-70-16AH Steady ON

