AV70
Solar Aviation Light

Avlite®
www.avlite.com
AUTHORISED DISTRIBUTOR

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
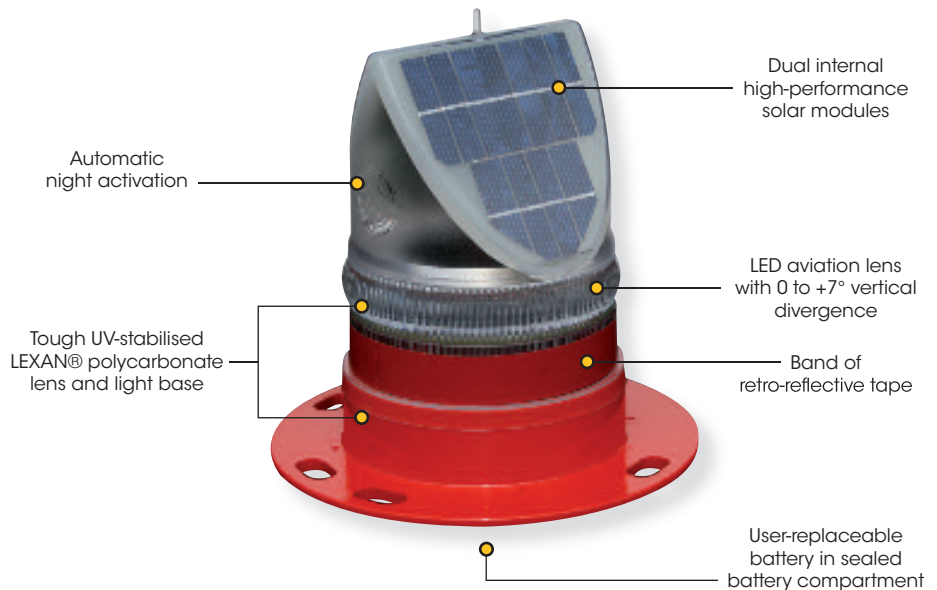- Solar Obstruction Light

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

Automatic night activation

Dual internal high-performance solar modules

LED aviation lens with 0 to +7° vertical divergence

Tough UV-stabilised LEXAN® polycarbonate lens and light base

Band of retro-reflective tape

User-replaceable battery in sealed battery compartment

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 colors or switch between visual and IR (tactical) operational modes.

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SPECIFICATIONS •	AV70	AV70-HI
Light Characteristics		
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
Electrical Characteristics		
Operating Voltage (v)	3.6	3.6
Temperature Range	-40 to 80°C	-40 to 80°C
Solar Characteristics		
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
Power Supply		
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
Radio Controlled (optional)		
Frequency	2.4Ghz ISM Band	2.4Ghz ISM Band
Range	Up to 1.4km relayed	Up to 1.4km relayed
Expandability	Peer to Peer Networking	Peer to Peer Networking
Compliance	FCC / CE	FCC / CE
Physical Characteristics		
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 / 9¹/₈	231 / 9¹/₈
Mass (kg/lbs)	1.1 / 2³/₈	1.41 / 3¹/₈
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	ISO9001:2008	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 *	Full 3 year warranty	Full 3 year warranty
Options Available	• RF Flash Synchronisation (AV70-CS) • Avlite Pilot Activated Lighting Control • Radio Controlled – FCC compliant • IR (AV70.IR) • External ON/OFF Switch (AV70-S) • External Battery Charging Port • Manual Operation	• RF Flash Synchronisation (AV70-CS) • Avlite Pilot Activated Lighting Control • Radio Controlled – FCC compliant • IR (AV70-HI.IR) • External ON/OFF Switch (AV70-HI-S) • External Battery Charging Port • Manual Operation

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

Photometric Output: AV70 Steady ON

Peak Intensity	
YELLOW	6.5
WHITE	7.0
GREEN	9.0
RED	6.8
BLUE	2.8

Vertical Divergence (degrees)

Photometric Output: AV70-HI (High Intensity)

Peak Intensity (High Intensity)	
YELLOW	11.6
WHITE	14.2
GREEN	16.9
RED	12.1
BLUE	4.5

Vertical Divergence (degrees)

240 (9.45'')
231 (9.09'')
Diam 17mm x 30mm Slot (0.67'' x 1.18'') 6 places
Flash Adjustment
Sealed Vent
200 (7.87'')