

Solar Aviation Light



- > 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

Typical Application



Taxiway Lighting FAA Construction & Baricade Lighting

The solar powered DWT-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 DWT-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 DWT-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.

Optional Radio Control

The DWT-AV-70-RF is a radio-controlled version of the popular DWT-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.

Compliant to:
 ✓ ICAO Annex 14

- Fittings / Options:**
- ✓ Radio-Controlled – FCC compliant
 - ✓ Pilot Activated Lighting Control
 - ✓ IR LEDs
 - ✓ External ON/OFF Switch
 - ✓ External Battery Charging Port
 - ✓ Manual Operation

MECHANICAL CHARACTERISTICS

Material	
Body	LEXAN® Polycarbonate – UV stabilized
Lens	LEXAN® Polycarbonate – UV stabilized
Body Colour	According to light color
Dimensions	
Width	231 mm
Height	240 mm
Lens Diameter	140 mm (External optics with interior flute design)
Weight	1.1 kg
Mounting	6 x 17mm holes on 200mm PCD
Protection Class	IP68
Temperature Range	-40 to 80°C
Wind Speed	Up to 160 kph

OPTICAL CHARACTERISTICS

Light Source	12 ultra-high intensity LEDs
Light Colour	Red Green White Yellow Amber Blue Sectored Combinations
Light Intensities (steady-on flashing)	
Blue	2.8 cd 5.5 cd DWT-AV 70-HI (steady-on): 4.5 cd
Red	6.8 cd 18.2 cd DWT-AV 70-HI (steady-on): 12.1 cd
Green	9.0 cd 21.9cd DWT-AV 70-HI (steady-on): 16.9 cd
White	7.0 cd 19.1 cd DWT-AV 70-HI (steady-on): 14.2 cd
Yellow	6.5 cd 15.1 cd DWT-AV 70-HI (steady-on): 11.6 cd
Intensity Adjustments	0%, 25%, 50%, 75%, 100%
Available Flash Characteristics	> 250 including steady-on (user-adjustable)

Life Expectancy	
of LED	>100,000 hours
of Unit	up to 12 years
Horizontal Divergence	360° (Omnidirectional 360° LED Reflector)
Vertical Divergence	0 to +7°

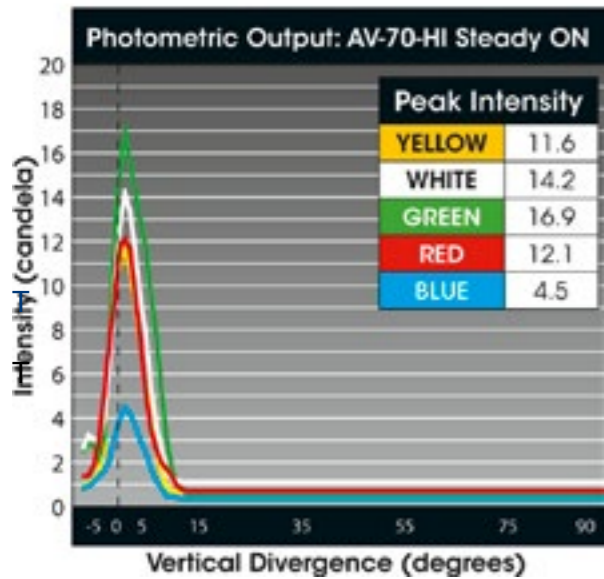
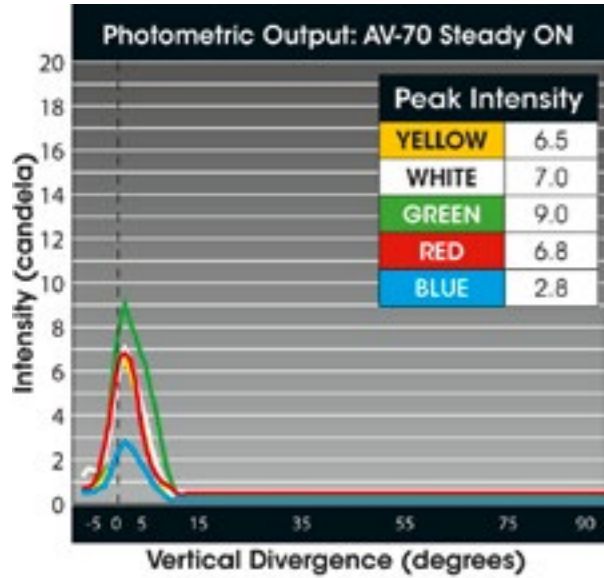
ELECTRICAL CHARACTERISTICS

Operating Voltage	3.6 V
Battery Capacity	8 Ah, High grade NiMH
Solar Module	
Type	Multicrystalline
Output	2.5 W (2 x 1.25 W)
Efficiency	14 %
Charging Regulation	Microprocessor controlled
Radio Control	
Frequency	2.4 GHz ISM Band
Range	Up to 1.4 km relayed
Autonomy	
Steady-on	(14 hour darkness, 12.5% duty cycle) > 14 nights
Flashing	> 38 nights

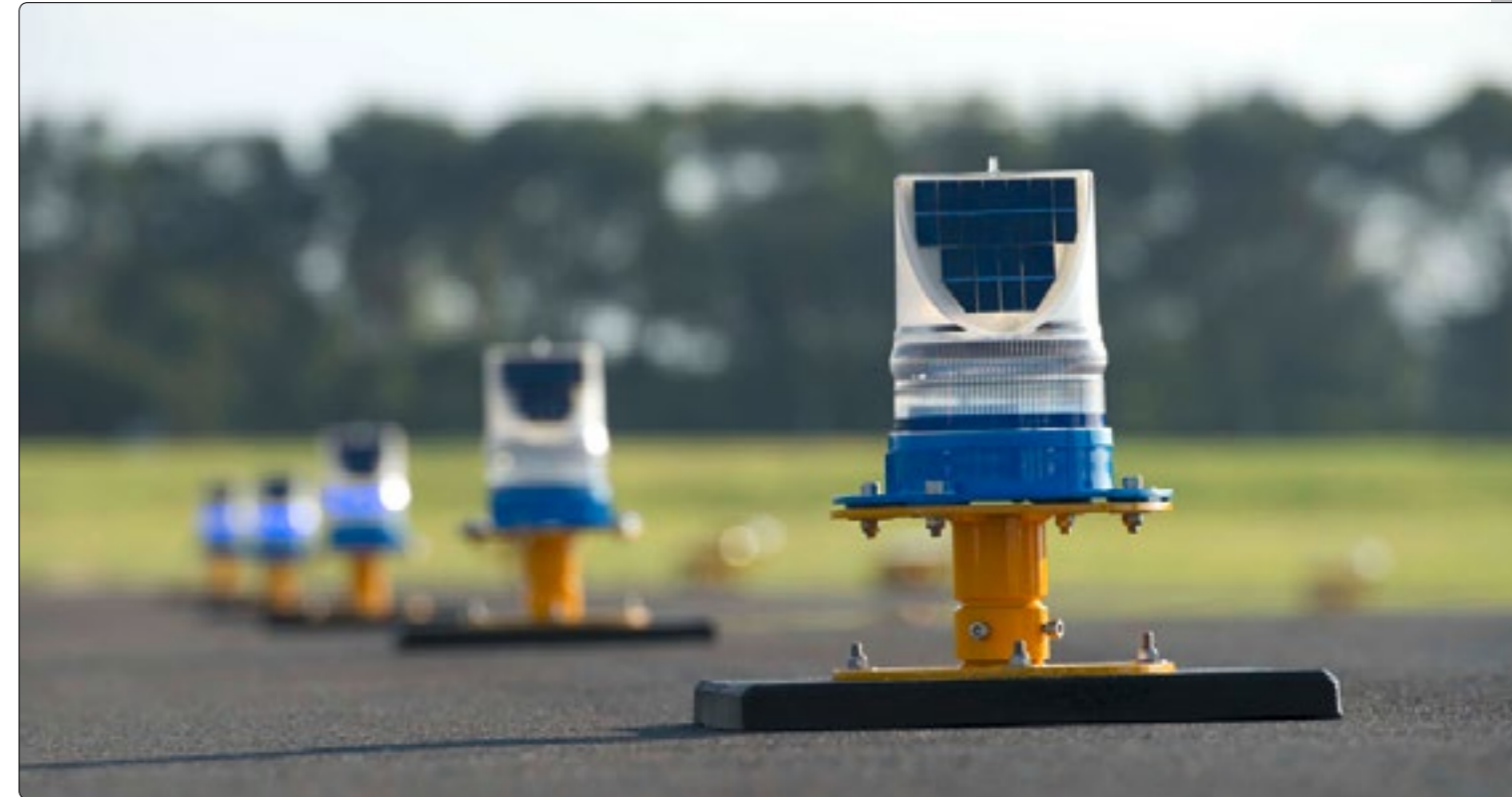
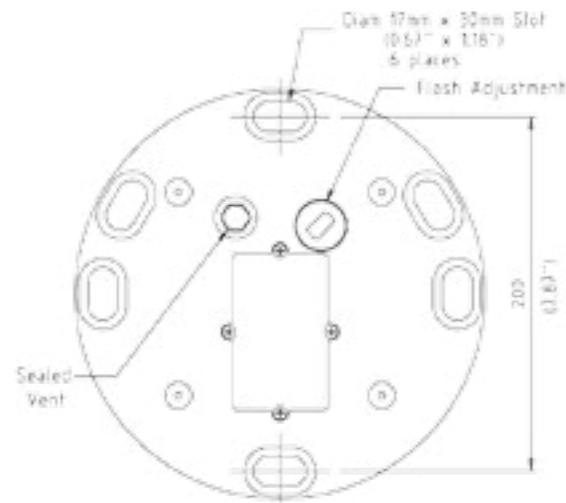
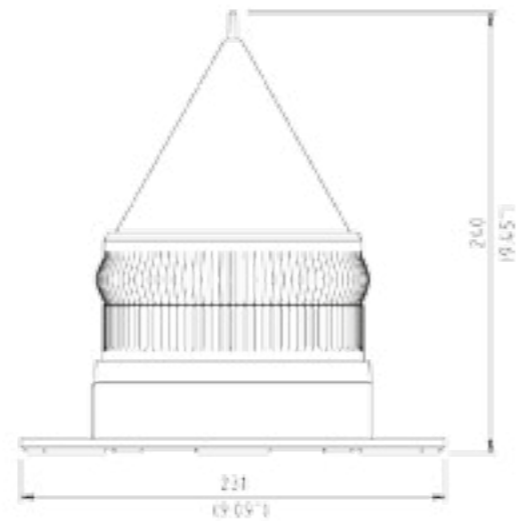
Intensity setting subject to solar availability

Solar Aviation Light

PHOTOMETRY



DIMENSIONS



DWT-AV 70 RF: The integrated AvMesh® technology is self-realizing, meaning once deployed the airfield lights will undertake a period of network mapping, whereby the system automatically determines an efficient path to relay command messages through the airfield.

AvMesh® has redundancy. Once the system has mapped an efficient relay of command messages, a secondary sub-network is mapped for added redundancy.

The DWT-AV-70-RF has three selectable modes; always on, dusk-till-dawn and standby. When set to dusk-till-dawn mode, integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently and the light will begin operation automatically.



**DWT-AV-70-RF:
 Integrated
 Radio-Control**