

# Model A501

## 360° One Mile<sup>1</sup> Aviation Marking Light

# SOLAR AVIATION LIGHT

### Typical Applications

- Barricade lighting
- Parking compounds
- Security lighting
- Building, tower & fence lighting
- Sign enhancement lighting

### Features & Benefits

- Increases airport safety
- Provides up to five years of operation with no maintenance, power or infrastructure costs
- Enables increased hours of operation for pilot navigation and night time use
- Uses high brightness LEDs for reliable illumination and long life with no maintenance
- Available in blue, red, amber, white and green output
- Can be ordered in "steady on" or one of six common flash patterns
- Completely self-contained and watertight. Designed to operate reliably in harshest of environmental conditions
- Polycarbonate/polymer construction is non corrosive and virtually indestructible
- Installation takes minutes requiring minimal technical expertise
- Will charge under nearly all weather conditions
- Up to 300 hours of operating capacity from a full charge
- 30 day satisfaction guarantee and three year warranty

For more information, visit:  
[www.solarairportlights.com](http://www.solarairportlights.com)



**The Carmanah Model A501 is the world's most advanced solar LED (light emitting diode) aviation marking light. Ideal for all types of barricade and general airfield hazard or safety marking applications. It installs in minutes and requires no maintenance or servicing for up to five years.**

### Typical Applications

Designed as a cost-effective, maintenance-free lighting solution for commercial, private and general aviation airports, the Model A501 is a completely integrated, self-contained unit that does not require any external electrical source or battery replacement for its entire 5 year lifespan. It is also designed to be extremely durable, waterproof and vandal resistant.

The Model A501 offers cost-effective performance; based on an independent cost analysis, the light pays for itself within its first year of operation - in the form of reduced installation, maintenance and servicing costs.

### The Technology

Utilizing an innovative combination of solar power and LED (light emitting diode) technology, the Model A501 charges during the day, even under cloudy conditions.

The Model A501 features an optional proprietary magnetic switch to deactivate the unit for storage or transport.

The Model A501 is rugged, reliable and virtually indestructible; it is designed to operate for up to 5 years with no additional maintenance or servicing.

### 30-Day Risk-Free Evaluation

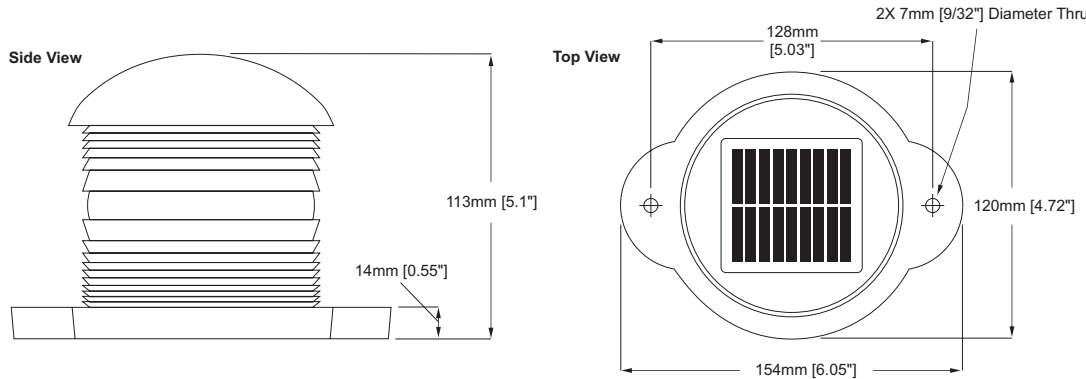
Due to its proprietary, unitized design, the Model A501 will withstand many years of harsh environmental conditions including; impact, submersion, vibration and intense sunlight.

Order a Model A501 today and evaluate the product's quality, performance and reliability for yourself. If you are not fully satisfied, you can return it within 30 days for a refund of the purchase price.

**No external wiring, no battery or bulb replacement, no maintenance, no worries...**

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Optional adapter attaches to base using two bolts and fits any standard 1"-14 threaded mount.



### SPECIFICATIONS

#### LIGHT OUTPUT

	FLASHING <sup>2</sup>	STEADY ON
Effective Intensity (Transmissivity constant of 0.74)		
Green	~ 3.1 Candela	~ 0.5 Candela
Red, Amber, White, Blue	~ 1.2 Candela	~ 0.2 Candela
Nominal Night Range (Employs Schmitt-Clausen's Law)		
Green	~ 1.9 Miles	~ 0.9 Miles
Red, Amber, White, Blue	~ 1.3 Miles	~ 0.6 Miles
Vertical Divergence	± 3.5° at 50% intensity	
Horizontal Output	360°	

#### OPERATION

Minimum Autonomy	300 Hours
Minimum Equivalent Peak Sun Hours to Maintain Minimum Autonomy	1.5 Hours
Latitude Range	55° S to 55° N
On / Off Level	350 / 250 Lux
Illumination Technology	4 LEDs
Lifespan of LEDs	Up to 100,000 Hours
Available Standard Flash Patterns	7 including steady-on

#### SOLAR PANELS

Type	Mono-Crystalline Potted with UV-protected polyurethane and domed for higher efficiency
Maximum Power	0.3 Watts
Efficiency	14%

#### BATTERY

Type	Pure-lead thin plate with starved-electrolyte
Nominal Voltage	2 Volts
Capacity	2.5 Amp-hr at 10-hr discharge rate

#### CONSTRUCTION

Lens Material	Polycarbonate
Battery Venting	Vent at the bottom of the lantern
Sealing	Self-contained unit, potted with polyurethane
Weight	1.1 kg (2.45 lbs)

#### ENVIRONMENTAL and ELECTRICAL

Temperature Range <sup>3</sup>	-40° to +80° C (-40° to 176° F)
Waterproof	As per IP67 (NEMA 6)
CE Approval	As per EN 60945:1997

#### TRADEMARKS and PATENTS

Trademarks and Patents	US Patents: 5,782,552 & 6,013,985 European Patent Application: 96925627.0 Other Patents Pending
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<sup>1</sup> Actual range is dependant on flash pattern, intensity, and LED color.  
<sup>2</sup> All "Flashing" light specifications are based on a 12.5% duty cycle (code 064 - 15 flashes per minute).  
<sup>3</sup> Consistent ambient temperatures above +25°C (+77°F) may affect overall battery life. Temperatures above +60°C (+140°F) may affect output.

All specifications are subject to change without notice.

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