

# Model A601

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

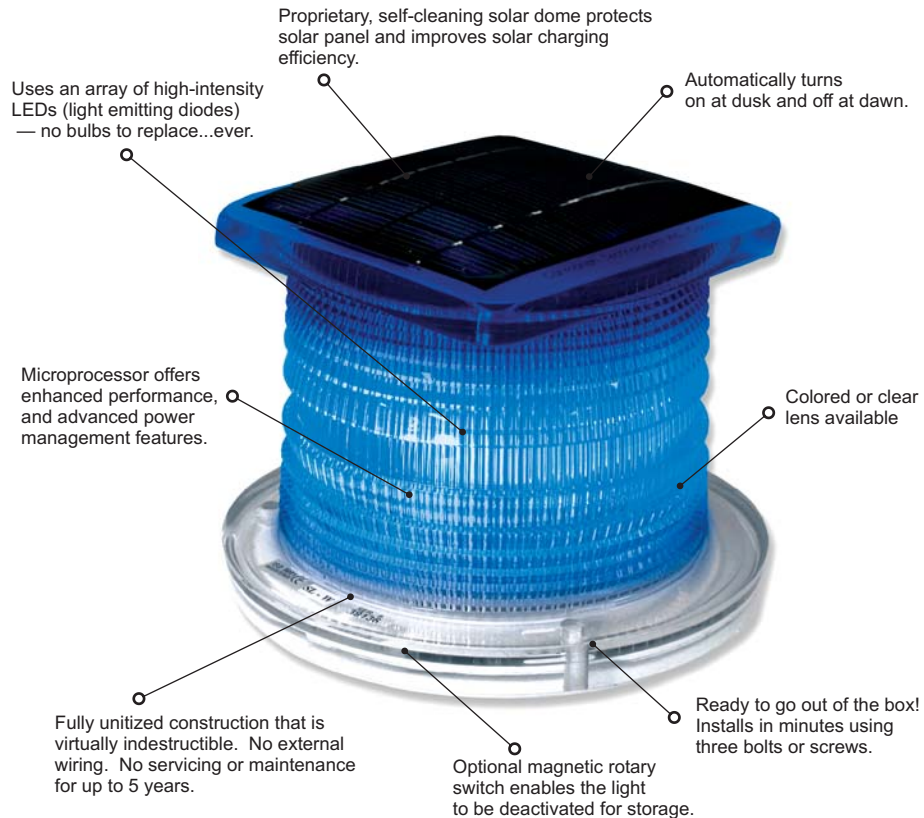
# S O L A R A V I A T I O N L I G H T

### Typical Applications

- Taxiway edge lighting
- Obstruction lighting
- Apron edge lighting
- Heli-pad perimeter lighting
- Barricade lighting
- Emergency & portable lighting
- Parking compounds
- Security lighting
- Building, tower & fence lighting
- Wind cone lighting

### Features & Benefits

- Meets the requirements of ICAO Annex 14, Volume I, Sections 5.3.16.6 and Appendix I, 2.1.1 for taxiway edge lighting.
- Also acceptable for use for barricade & construction applications at Commercial Part 139 Airports under FAA Advisory Circular AC150/5370-2E.
- Improves airport safety
- Installation takes minutes and requires minimal technical expertise
- Provides up to five years of operation with no maintenance, servicing or infrastructure costs
- Completely self-contained and watertight. Designed to operate reliably in harshest of environmental conditions
- Will charge under nearly all weather conditions
- Up to 200 hours of operating capacity from a full charge
- Polycarbonate/polymer encapsulated construction is non-corrosive and virtually indestructible
- Distance of visibility up to 2 miles (3.6 kilometers)
- Available in red, green, amber, white and blue
- Any flash pattern available from the factory. Can also be programmed by the user using optional infrared remote control
- Manufactured under ISO:9001 Quality Assurance Practices
- 30 day satisfaction guarantee and three year warranty



**Certified compliant to ICAO Annex 14, Vol 1, Para 5.3.16**

**The Carmanah Model A601 is the world's most advanced solar LED (light emitting diode) aviation marking light. Ideal for all types of taxiway, obstruction, heli-pad perimeter, barricade and general airfield lighting applications. The A601 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, military, private and general aviation airfields. The Model A601 is a completely integrated, self-contained unit that does not require any external electrical source or bulb/battery replacement for its entire 5 year lifespan. It is also designed to be extremely durable, waterproof and virtually indestructible.

The Model A601 offers cost-effective performance. Based on an independent cost analysis, they will pay for themselves within their 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 A601 charges during the day, even under cloudy conditions.

The Model A601 also features sophisticated microprocessor intelligence that enables advanced light output control and battery power management.

### 30-Day Risk-Free Evaluation

Order a Model A601 today and evaluate the product's quality, performance and reliability for yourself. If you are not fully satisfied, you can return the unit within 30 days for a refund of the purchase price.

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



**Carmanah**®

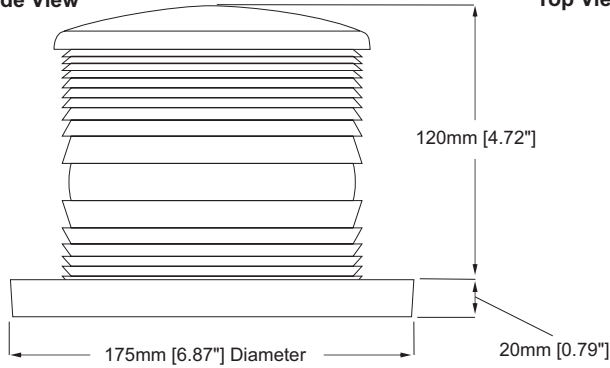
THE LEADER IN SOLAR LED LIGHTING SOLUTIONS



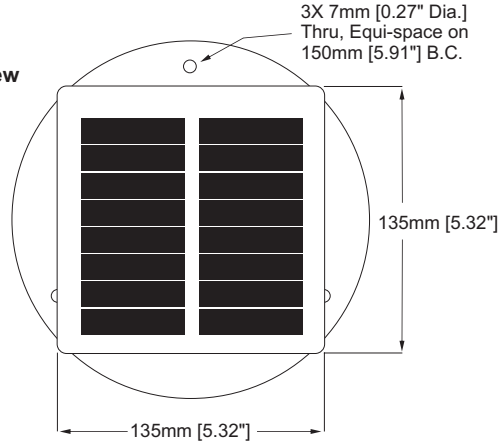
# Model A601

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

Side View



Top View



3X 7mm [0.27" Dia.] Thru, Equi-space on 150mm [5.91" B.C.

Optional mount fits standard 1.5" coupling or 1.5" column to 2" NPT adapter (NPT adapter not included)



### SPECIFICATIONS

#### LIGHT OUTPUT

	FLASHING <sup>2</sup>	STEADY ON
Effective Intensity (Transmissivity constant of 0.74)		
Green	~ 11 Candela	~ 4 Candela
Red, Amber, White, Blue	~ 6 Candela	~ 2 Candela
Nominal Night Range (Employs Method of Schmidt-Clausen)		
Green	~ 2.9 NM	~ 2.0 NM
Red, Amber, White, Blue	~ 2.3 NM	~ 1.5 NM
Vertical Divergence	0 to 6 degrees	
Horizontal Output	360°	

#### OPERATION

Minimum Autonomy <sup>3</sup>	300 Hours	150 Hours
Minimum Equivalent Peak Sun Hours to Maintain Minimum Autonomy	1.5 Hours	3 Hours
Latitude Range <sup>4</sup>	55° S to 55° N	
On / Off Level	70 / 100 Lux	
Illumination Technology	8 or 16 LEDs, depending on color	
Lifespan of LEDs	Up to 100,000 Hours	
Available Standard Flash Patterns (Custom patterns available)	208 including "steady-on"	

#### SOLAR PANELS

Type	Mono-Crystalline Potted with UV-protected polyurethane and domed for higher efficiency
Maximum Power	1.4 Watts
Efficiency	14%

#### BATTERY

Type	Pure-lead thin plate with starved-electrolyte
Nominal Voltage	4 Volts
Capacity	5 Amp-hr at 10-hr discharge rate

#### CONSTRUCTION

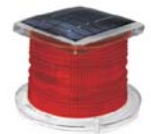
Lens Material	Polycarbonate
Battery Venting	Vent at the bottom of the lantern
Sealing	Self-contained unit, potted with polyurethane
Weight	2.2 kg (4.85 lbs)

#### ENVIRONMENTAL and ELECTRICAL

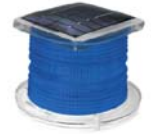
Temperature Range <sup>5</sup>	-40° to +80° C (-40° to 176° F)
Waterproof	As per IP67 (NEMA 6)
CE Approval	As per EN 60945:1997

#### TRADEMARKS and PATENTS

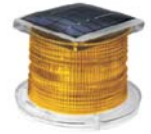
Trademarks and Patents	US Patents: 5,782,552 & 6,013,985 European Patent Application: 96925627.0 Other Patents Pending
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Obstruction Light



Taxiway Edge Light



Apron Edge Light

<sup>1</sup> Actual range is dependant on flash pattern, intensity, and LED color.

<sup>2</sup> All "Flashing" light specifications are based on 100% intensity setting at 12.5% duty cycle (code 064 - 15 flashes per minute).

<sup>3</sup> Actual figures for autonomy depend on the intensity level setting.

<sup>4</sup> Lights will function reliably at higher latitudes than 55° North or South if intensity/autonomy is properly adjusted to suit operating environment by an Authorised Carmanah Representative.

<sup>5</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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