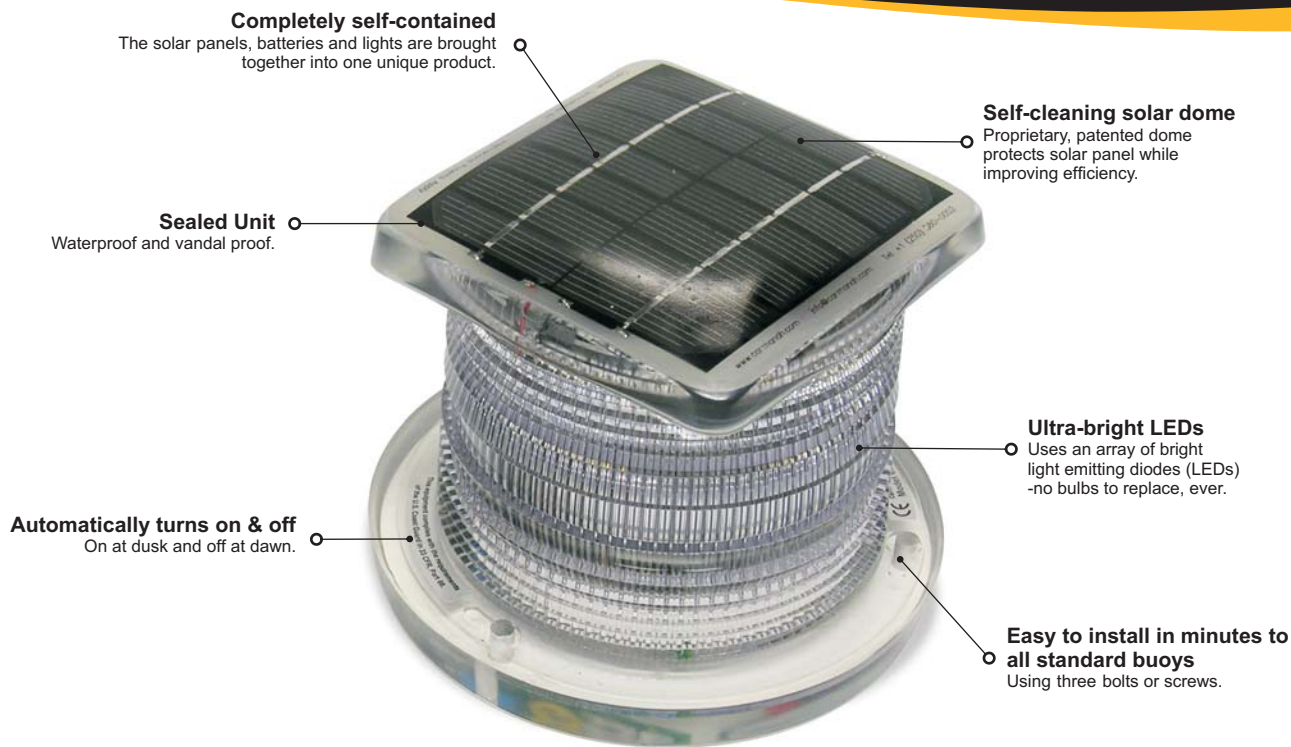


# Solar-Powered LED Marine Lanterns

## Model M601 - 2 Nautical Miles<sup>1</sup>



### Built to Perform in Harsh Environments

The Model M601, 2 Nautical Mile (3.7km) solar-powered LED lanterns are the world's most advanced, solar-powered LED navigational and hazard-marking lanterns. Completely self-contained, installing in minutes and requiring no maintenance or servicing for up to five years, the Model M601 has a history of reliable performance even in extremely harsh weather conditions.

### Reliable Technology

Through the innovative combination of solar power and LED technology, the Model M601 lantern charges during the day, even under cloudy conditions, and turns on automatically at night. Instead of relying on short-lived incandescent bulbs, the Model M601 uses durable, ultra-bright light emitting diodes (LEDs), which have an operating lifespan of up to 100,000 hours.

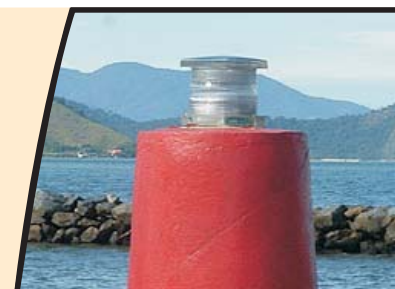
### Quality Manufacturing

Designed and built in partnership with Canadian Coast Guard, the Model M601 uses an array of ultra-bright LEDs and can be programmed to produce any one of over 200 standard flash patterns. Custom patterns can be special ordered. The Model M601's light output meets IALA's four international chromaticity color requirements, and is available in green, red, amber and white. The Model M601 is manufactured in accordance with ISO 9001:2000 Quality Assurance Standards.

### Typical applications:

- Small safety/hazard buoys
- Short range navigation buoys
- Research buoys
- Private aids to navigation
- Port and marina entrances
- Channel and canal markers
- Offshore oil & gas rigs
- Public piers, docks and marine walkways
- Boat and barge terminals
- Breakwaters and all types of marine infrastructure
- Floating hose markers

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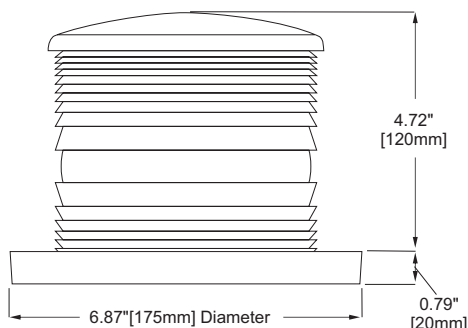


# Solar-Powered LED Marine Lanterns

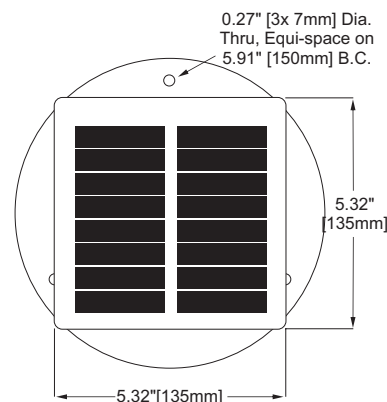
## Model M601 - 2 Nautical Miles<sup>1</sup>



Side View



Top View



### SPECIFICATIONS

#### LIGHT OUTPUT

Effective Intensity (Transmissivity constant of 0.74)

|       |              |
|-------|--------------|
| Green | ~ 11 Candela |
| Red   | ~ 7 Candela  |
| Amber | ~ 6 Candela  |
| White | ~ 9 Candela  |

Nominal Night Range<sup>1</sup> (Employs Method of Schmidt-Clausen)

|       |          |
|-------|----------|
| Green | ~ 2.7 NM |
| Red   | ~ 2.3 NM |
| Amber | ~ 2.1 NM |
| White | ~ 2.5 NM |

Vertical Divergence

7°

Horizontal Output

360°

#### OPERATION

|  |   |
|--|---|
| Minimum Autonomy <sup>3</sup>                                  | 300 Hours                                   |
| Minimum Equivalent Peak Sun Hours to Maintain Minimum Autonomy | 1.5 Hours                                   |
| Illumination Technology  | 16 Ultra-bright Light Emitting Diodes       |
| Lifespan of LEDs   | Up to 100,000 Hours                         |
| Chromaticity of Color Output                                   | Meets IALA specifications                   |
| Available Standard Flash Patterns (Custom patterns available)  | 256 including "steady-on" (user-adjustable) |
| Power Management System  | MICROSOURCE™                                |

#### CONSTRUCTION

|                 |   |
|-----------------|---|
| Solar Panels    | Mono-Crystalline<br>Potted with UV-protected polyurethane and domed for higher efficiency |
| Battery         | Sealed pure lead-tin - recyclable   |
| Lens Material   | Polycarbonate   |
| Battery Venting | Vent at the bottom of the lantern   |
| Sealing         | Self-contained unit, potted with polyurethane   |
| Weight          | 4.85 lbs (2.2 kg)   |

#### ENVIRONMENTAL and ELECTRICAL

|                                |                                    |
|--------------------------------|------------------------------------|
| Temperature Range <sup>5</sup> | -40° to 176° F<br>(-40° to +80° C) |
| 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

### REPRESENTED BY

#### Scottco Marine

Website: [www.scottcomarine.com](http://www.scottcomarine.com)  
Phone: 800-932-9414  
Address:  
Scottco Marine  
2970 W. Hayden Avenue  
Hayden, Idaho 83835

Optional Infrared Programmer



Optional Bird Deterrent



<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).

<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> Amber, Red, Green: ~14 years to 80% of original effective intensity when operated at night with a 12.5% duty cycle..

<sup>6</sup> Consistent ambient temperatures above +77°F (+25°C) may affect overall battery life. Temperatures above +140°F (+60°C) may affect output.

All specifications are subject to change without notice.

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