



MODEL

## M550

SOLAR LED MARINE LANTERN

# 15 TIMES BRIGHTER, THREE TIMES THE RANGE, HALF THE SIZE

Leveraging custom optics, high-efficiency solar panels, and premium materials, this miniature solar LED marine lantern weighs less than one pound while still providing up to three times the range of its popular M502 predecessor. Now also with replaceable, recyclable batteries, this lantern offers excellent value and reliable operation for over five years. Ideal for marine aids-to-navigation (ATON), private aids-to-navigation (PATON), marina lighting, dock lighting, port lighting and more.

- · Installs in minutes; automatic "out of box" activation
- Up to 26 cd (IALA peak, white)
- Up to 3 Nautical Miles visible range at T=0.74
- Vertical divergence 8° (FWHM)
- Up to 40 user-adjustable flash patterns with ability to direct enter effective intensity. Automatic adjustment for Schmidt Clausen
- Operates on three high-temperature-rated NiMH AA batteries
- Next generation, energy-saving Automatic Light Control; five-day data trending regulates intensities for optimal performance throughout the calendar year and longer battery life
- Premium grade, UV resistant polycarbonate body and lens material
- · Waterproof design; IP 68 immersion
- Ventilated battery compartment
- · Product life expectancy 15 years; 3 year warranty

With thousands of installations worldwide, Carmanah/Sabik solar LED lights operate year-round and are trusted by:

- Australian Maritime Systems
- Brazilian Naval Commission
- Canadian Coast Guard
- CETMEF, France
- Port of Kandla, India
- Maritime and Port Authority of Singapore
- SERBA, Uruguay
- Petrobras, Brazil

- PDVSA, Venezuela
- NOAA National Data Buoy Centre
- Panama Canal
- · Suez Canal, Egypt
- Trinity House Light House Service, UK
- United States Coast Guard
- Vancouver Port Authority

















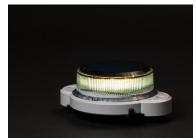












Carmanah/Sabik is backed by a worldwide network of distributors.

**REPRESENTED BY:** 

Sensor Systems (NZ) Ltd

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OPTIONAL INFRARED PROGRAMMER



TOP VIEW: SWITCHED, FLANGE MOUNT



BOTTOM VIEW: SWITCHED, FLANGE MOUNT

### **MODEL**

### M550

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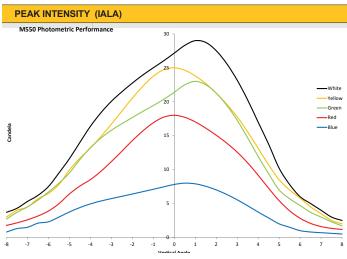
| SPECIFICATIONS                           |   |  |
|--|---|--|
|  | 26 cd peak intensity (as per IALA rating); see table  |  |
| Optical                                  | High Flux Surface Mount LED   |  |
|  | IALA compliant chromaticities; Red, Green, White, Yellow, I   |  |
|  | Proprietary optical design  |  |
|  | 36 flash patterns   |  |
| Energy Collection                        | Best-in-class high-efficiency solar cells embedded in polyurethane. 0.6 W panel   |  |
| Battery                                  | Three high-temperature NiMH AA batteries rated for $$ -40 to $^{\circ}\text{F}$ (-40 to 85 $^{\circ}\text{C})$            |  |
|  | Designed for 5 year battery life; Replaceable and recyclable  |  |
| Energy Management<br>System (EMS)        | Intelligent, microprocessor EMS   |  |
| Automatic Light Control<br>2.0 (ALC 2.0) | When enabled, ALC adjusts output intensity in response to unusually low amounts of sunlight to ensure continued operation |  |
| Programming                              | Programmable with optional infrared programmer  |  |
| Construction                             | Premium grade UV resistant, polycarbonate body and lens   |  |
|  | Waterproof battery compartment with GORE® vent  |  |
|  | External colour indicator matches LED colour  |  |
| Temperature                              | -22 to 122 °F (-30 to 50 °C) operating  |  |
|  | -40 to 176 °F (-40 to 80 °C) storage  |  |
| Weight                                   | 0.37 kg (0.8 lbs)   |  |
| Mounting                                 | Flange or pole-mount options. Refer to dimensional diagra for details   |  |
| Wind Loading                             | 140 knots (72 m/s)  |  |
| Ice Loading                              | 0.03 psi (22 kg/m²)   |  |
| Shock & Vibration                        | MIL-STD-202G (for Shock and Vibration)  |  |
| Ingress                                  | IP 68 immersion, 24 hrs at 1 m (3 ft)   |  |
|  | MIL-STD-202G immersion & damp heat cycling  |  |
|  | MIL-STD-810G rain & salt fog  |  |
|  | USCG PATON 33CFR66. 33CFR67 Class C Pending   |  |
| Compliance                               | RoHS; WEEE  |  |
|  | IEC 60945, FCC  |  |

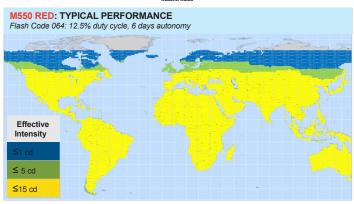
| ORDER KEY |   |                       |                     |
|-----------|---|-----------------------|---------------------|
| MODEL     | OUTPUT ▼                                | MOUNT▼                | OTHER▼              |
| M550      | RED<br>GREEN<br>WHITE<br>YELLOW<br>BLUE | FLANGE<br>POLE-MOUNT* | SWITCH<br>NO SWITCH |

<sup>\*</sup> Allow additional lead time for pole-mount option. Contact your sales representative for details.

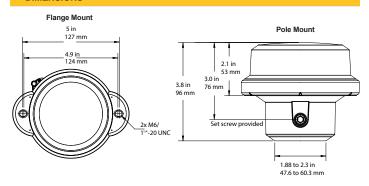
Originally designed and built under contract with the U.S. Coast Guard, Carmanah Marine lanterns were the first solar-powered lanterns using light emitting diodes (LEDs) to enter the U.S. Navigational Aid System.

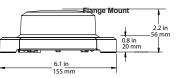
Today, thousands of Carmanah Marine lanterns are in use by Coast Guards, Navies, and Ports Authorities around the world.

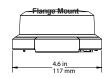




#### **DIMENSIONS**







Document: MARI\_M550\_Spec\_RevA
US Patent Number 6573659. International patents apply.

Specifications may be subject to change.

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