



MODEL

M550

SOLAR LED MARINE LANTERN

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

The M550 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. To view performance in your installation location visit [www.carmanahmarine.com/selector](http://www.carmanahmarine.com/selector)

- Installs in minutes; automatic “out of box” activation
- Up to 26 cd (IALA peak, white)
- 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
- Life expectancy over 15 years; 3 year warranty
- Complies with the requirements of Title 33 of the US CFR, Part 67 for use on Class “C” PATON structures
- With thousands of installations worldwide, Carmanah/Sabik solar LED lights operate year-round and are trusted by:

- |  |   |
|--|---|
| • Australian Maritime Systems              | • PDVSA, Venezuela                      |
| • Brazilian Naval Commission               | • NOAA – National Data Buoy Centre      |
| • Canadian Coast Guard                     | • Panama Canal                          |
| • CETMEF, France                           | • Suez Canal, Egypt                     |
| • Port of Kandla, India                    | • Trinity House Light House Service, UK |
| • Maritime and Port Authority of Singapore | • United States Coast Guard             |
| • SERBA, Uruguay                           | • Vancouver Port Authority              |
| • Petrobras, Brazil                        |   |

LEVERAGING CUSTOM OPTICS, HIGH-EFFICIENCY SOLAR PANELS AND PREMIUM MATERIALS, THIS COMPACT 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.

➤ RANGE: 1 TO 3 NAUTICAL MILES



Pole-mount option also available

Carmanah/Sabik is backed by a worldwide network of distributors. To find yours visit [carmanahmarine.com](http://carmanahmarine.com) or call +1.250.380.0052 (toll-free US & Canada 1.877.722.8877)

REPRESENTED BY:

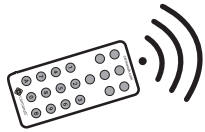
[carmanahmarine.com](http://carmanahmarine.com)

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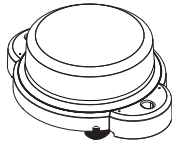
## MODEL

# M550

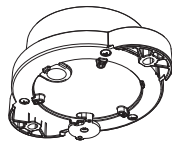
## SOLAR LED MARINE LANTERN



OPTIONAL INFRARED PROGRAMMER



TOP VIEW: SWITCHED, FLANGE MOUNT



BOTTOM VIEW: SWITCHED, FLANGE MOUNT

### SPECIFICATIONS

Optical	29 cd peak intensity (as per IALA rating); see table
	High Flux Surface Mount LED
	IALA compliant chromaticities; Red, Green, White, Yellow, Blue
	Proprietary optical design
	40 flash patterns
Energy Collection	Best-in-class high-efficiency solar cells. 0.6 W panel
Battery	Three high-temperature NIMH AA batteries rated for -40 to 185 °F (-40 to 85 °C)
	Designed for 5 year battery life; Replaceable and recyclable
Energy Management System (EMS)	Intelligent, microprocessor EMS
Automatic Light Control 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 hydrophobic and oleophobic vent
	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	Flange Mount: 0.8 lbs (0.37 kg), Pole Mount: 0.9 lbs (0.40 kg)
Mounting	Flange or pole-mount options. Refer to dimensional diagram 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
Compliance	USCG PATON 33CFR66. 33CFR67 Class C
	RoHS; WEEE
	IEC 60945, FCC

### ORDER KEY

MODEL	OUTPUT ▼	MOUNT ▼
M550	RED GREEN WHITE YELLOW BLUE	FLANGE-MOUNT FLANGE-MOUNT WITH SWITCH POLE-MOUNT

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.

Specifications subject to local environmental conditions.  
Specifications may be subject to change.

Document: MARI\_M550\_Spec\_RevG

US Patent Number 6573659. International patents apply.

### PEAK INTENSITY (IALA)

COLOUR	INTENSITY
Red	18 cd
Green	23 cd
White	29 cd
Yellow	25 cd
Blue	8 cd

Note: Peak IALA intensity dependent on location. To view performance in your installation location visit [www.carmanahmarine.com/selector](http://www.carmanahmarine.com/selector)

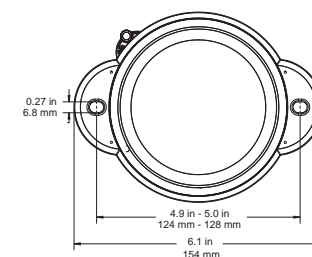
### M550 RED: TYPICAL PERFORMANCE

Flash Code 064: 12.5% duty cycle, 6 days autonomy

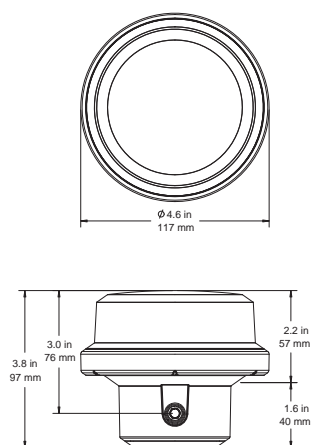


### DIMENSIONS

Flange Mount



Pole Mount



With sleeve: 1.9 in (48 mm) pole ID  
Without sleeve: 2.4 in (61 mm) pole ID  
Overport mount: 2.8 in (71 mm) pole OD



The management system governing the manufacture of this product is ISO 9001:2008 certified.

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