

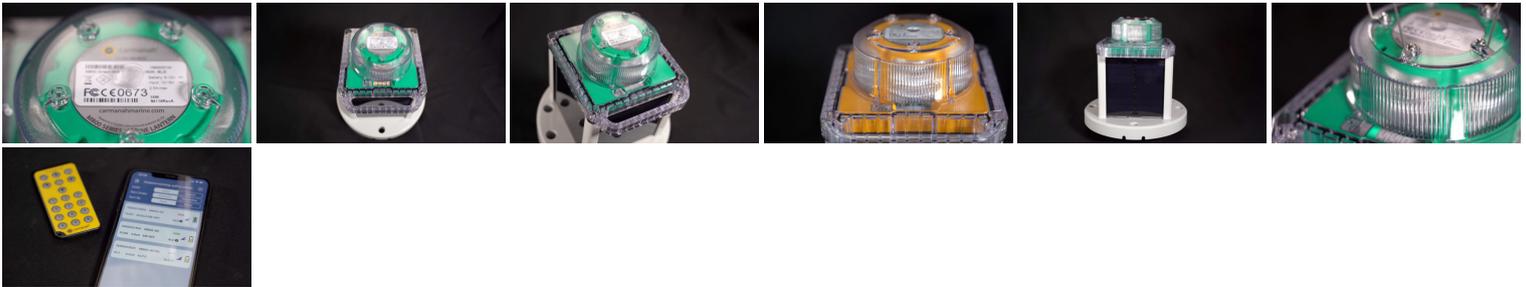
M850



SKU: N/A

Categories: [Self-Contained Marine Lanterns](#), [All Products](#)

GALLERY IMAGES



PRODUCT DESCRIPTION

Self-Contained Marine Lanterns

The M850 combines a compact, high-efficiency solar engine with premium components and a rugged design for best-in-class performance at an optimal price.

- **Intuitive Setup & Programming**

Top-mounted 4-character LED display and simple “tap to activate” functionality allows users to easily check light settings without the need for an external controller. Built-in calendar function allows for automatic de-activation during off-season months. Programmable with optional IR remote.

- **Scalable, Cost Effective Design**

Customizable for best value-for-performance at each installation location. Choose from standard or wide divergences (for fixed or floating applications), and multiple battery pack options.

- **Intelligent Energy Management**

Combines best-in-class, high-efficiency solar panels and MPPT (Maximum Power Point Tracking) with Carmanah’s patented Energy Management System (EMS) for maximum battery life and light performance in even the harshest of environments.

- **Durable, Low Maintenance**



Integrated solar panels, battery, electronics, and LED light source are combined in a compact, stand-alone, maintenance-free unit. Easily replaceable battery extends service life well beyond five years.

Technical Data

SPECIFICATIONS

Optical	<ul style="list-style-type: none">- 445 cd peak intensity (as per IALA rating); see table- High Flux Surface Mount LEDs with colour-specific temperature-corrected LED driver provides consistent intensity under all operating conditions- IALA compliant chromaticities; Red, Green, White, and Yellow- Custom optical design- 250+ flash patterns (including steady-on)- Vertical Divergence 8o or 10o (FWHM)
Energy Collection	<ul style="list-style-type: none">- Best-in-class high-efficiency solar cells- Optional external charge port and charger
Battery	<ul style="list-style-type: none">- Multiple battery pack options available (refer to weight table) including best-in-class pack with extreme temperature range- Battery status and voltage clearly indicated on integrated LED display- Designed for 5 year battery life; Replaceable and recyclable
Energy Management System (EMS)	<ul style="list-style-type: none">- Intelligent, microprocessor EMS- On-board diagnostics
Automatic Light Control (ALC)	When enabled, ALC adjusts output intensity in response to unusually low amounts of sunlight to ensure continued operation
Programming	<ul style="list-style-type: none">- Programmable with optional infrared programmer- Integrated 4-character LED display
GPS Synchronization	Optional GPS enables two or more lanterns to flash in unison
Construction	<ul style="list-style-type: none">- Premium grade UV resistant, polycarbonate lens/head and polycarbonate/polysiloxane co-polymer base- Environmentally-friendly, super durable powdercoated aluminum chassis (applied by trivalent chromate process)- Thermoplastic gaskets- Waterproof, vented battery compartment- Top colour indicator matches LED colour- Integrated handle
Temperature	<ul style="list-style-type: none">-22 to 122 oF (-30°C to 50°C) operating- 40 to 176 oF (-40°C to 80°C) storage
Weight	Refer to weight table
Mounting	3 or 4 bolt 7.87" (200 mm) mounting pattern
Wind Loading	140 knots (72 m/s)
Ice Loading	0.03 psi (22 kg/m ²)
Shock & Vibration	MIL-STD-202G (for Shock and Vibration)



Ingress

- IP 68 immersion
- MIL-STD-202G immersion & damp heat cycling
- MIL-STD-810G rain & salt fog

Compliance

- USCG PATON 33CFR66. 33CFR67
- Class B & C
- RoHS; WEEE