

FA-250LED MR Series Medium Range (+13 nm) Marine Lantern

(L) = 70% @ 60,000 Hours



The FA-250 LED MR lanterns offer the AtoN authority a LED lantern with the highest Lumen Maintenance value available in the market today. Lumen Maintenance (L) is an important factor to consider in using LED lanterns because unlike incandescent lamps, LEDs do not burn out; rather they lose their lumen output over time.

The lumen output degradation is a factor of HEAT. Automatic Power's Procyon LED light modules use a patented*, sealed, ACTIVE heat pipe transfer system that pulls heat away from the LED heat pad and dissipates it to a large surface area heat sink. Coupled with the large area volume of the lantern, the lantern maintains 70% of its initial output for 60,000 hours, the highest achievable (L) value possible with today's LED technology.

The FA-250 uses a long range LED optic with a nominal range of up to 17 nautical miles (T=0.85). The Procyon light module consists of a linear array, very high flux, LED's individually mounted in a parabolic reflector. The highly efficient reflector uses a state of the art dichroic hybrid spectral metal coating.

Form No.: 042611F

Groups of reflectors are assembled in stacked arrays and the array system is driven by specially designed electronics. The exterior is the standard FA-250 precision molded cover. The FA-250LED controller provides flash control, current limiting to the LED, photocell input, synchronization terminal and AC transformer (if required).

FA-250LED MR Models

MR12-AI	LR120-AI
MR12-BI	LR120-BI
MR24-AI	LR240-AI
MR24-BI	LR240-BI

MR= Medium Range

12 = 12V nominal (10.5 -30VDC input)

24 = 24V nominal (10.5 -30VDC input)

120 = 120VAC 50/60 Hz input (external power supply)

240 = 240VAC 50/60 Hz input (external power supply)

A = 1 tier (4 Procyon light modules)

B = 2 tier (8 Procyon light modules)

I = electronic controller located in lantern base.

***Patent No.: US 7,461,952 B2**

MECHANICAL DATA

- **Lighting Source:** Stacked array of high flux, high efficiency 1x6 or 1x9 Procyon LED Light Engines. > 90% efficiency
- **Height:** 750 mm. **Weight:** 20 kg.
- **Materials:** Precision-molded, high-temperature, acrylic cover. Cast aluminum base and frame. Stainless steel fittings and neoprene O-rings.
- **Mounting:** 4 each 20 mm diameter holes on 200 mm bolt circle.
- **Controller Housing:** NEMA 4x fiberglass.
- **Operating Temperature:** -40°C to +55°C

ELECTRIC CONTROL MODULE

- **Input:** 120/240 VAC 50-60 HZ with external power supply, 10.5-30 Volts DC. Reverse polarity protected.
- **Power:** Maximum 100 W on flash to maintain Lumen Maintenance L (70). 1.0 watt quiescent current. 12 selectable power level settings.
- **Synchronization** terminal for UNIFLASH® III wireless synchronization system or hardwired sync circuit.
- **256 Selectable** flash rhythms.
- **ATONIS** ready for AIS Msg 21 and Msg 6 monitoring

See related products catalog sheets:

FA-250LED LR for Long Range (17 nm) Lantern

FA-250LED LR-HA for Class I Div 2 Rated Lantern

FA-250LED L-864 for FAA (ETL) certified L-864 Beacon



FA-250LED MR

PHOTOMETRIC DATA

(Conforms to IALA chromaticity and 90th percentile intensity standards)

Beam: 360 degrees horizontal. Uniformity within +/-20%.
Vertical Divergence: 4 degrees to 50%; 11 degrees to 10%
Lumen Maintenance (L): 70% at 60,000 hours (highest achievable value for existing LED technology)

2-Tier LED PHOTOMETRICS (CD-Fixed)

Input Power, W	WHITE 1x6R	RED 1x9C	GREEN 1x6R	YELLOW 1x6R
135			9000	
100	7000	9800	6200	
90	6800	9000	6000	
72	6500	8000	5500	4200
60	5400	7000	4800	3490
30	3600	3600	3000	2220
15	1950	1850	1680	1225

1-Tier LED PHOTOMETRICS (CD-Fixed)

Input Power, W	WHITE 1x6R	RED 1x9C	GREEN 1x6R	YELLOW 1x6R
84			5170	
68		5880	4660	
50	3500	5410	3400	
36	3250	4380	3100	2250
20	2200	2560	1990	1580
10	1350	1280	1120	960
2.5	350	300	280	250

Some restrictions apply.

Specifications subject to change without notice

