

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

(L) = 70% @ 60,000 Hours



The FA-250HA LED MR **Class 1 Division 2 approved** 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-250HA uses a long range LED optic with a nominal range of up to 19.5 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.: 072611

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-250HA LED controller provides flash control, current limiting to the LED, photocell input, synchronization terminal and AC transformer (with external electronics only).

CONTROLLER OPTIONS

- Electronics can be mounted within FA-250HA enclosure or within external enclosure.
- When mounted within external enclosure determination of hazardous location must be considered and appropriate enclosure must be adhered to.
- Lanterns can be mounted up to 800 meters away from external electronics. Some restrictions apply, consult factory.

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 Tamb max°C see chart

ELECTRIC CONTROL MODULE

- **Input:** 120/240 VAC 50-60 HZ (external controller only), 10-20 VDC (restrictions apply), 20-35 VDC. Reverse polarity protected.
- **Power:** Maximum average power see chart. To maintain Lumen Maintenance L (70). 1.0 watt quiescent current. 15+1 selectable power level settings(one selectable).
- **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-250HA LED LR for Long Range (18 nm) Lantern

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

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



CLASS I DIVISION 2



FA-250HA LED MR

PHOTOMETRIC DATA

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

Beam: 360 degrees horizontal. Uniformity within +/-20%.
Vertical Divergence: 3.2 degrees to 50%; 8 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.

FACTORY MUTUAL CLASS I DIVISION 2 APPROVED:

NI/2/ABCD/ (see table for T-code and Temperature Range)

NI/2/IC/ (see table for T-code and Temperature Range)

LED Assembly	Average Power (watts)	T-code	Tamb max (°C)
1X6X4/1X9X4	18	T4A	48.5
		T4	63.5
1X6X4/1X9X4	49.6	T4A	48.5
		T4	63.5
1X6X4/1X9X4	81.6	T4A	48.5
		T4	63.5

Specifications subject to change without notice

