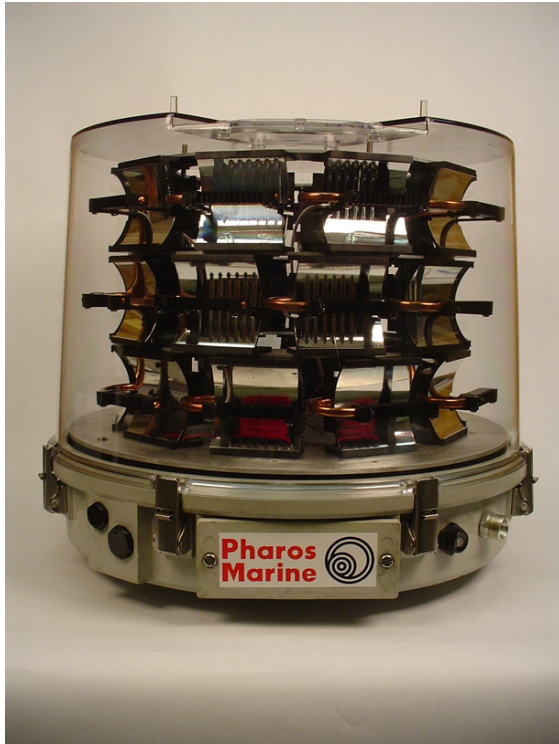


FA-410 LED LR Long Range LED Marine Lantern



The FA-410 LED LR signaling lantern is designed for lighthouse applications where a long range LED lantern is the preferred choice. The light is a unique combination of high intensity and optical efficiency giving the possibility of a nominal range in excess of 20 nautical miles ($t=0.74$) and 29 nautical miles ($t=0.85$).

The FA-410 LED LR consists of a linear array of very high flux LEDs individually mounted in a parabolic reflector. The highly efficient reflector uses a state of the art dichroic hybrid spectral coating. Groups of reflectors are assembled in stacked arrays and the array system is driven by specially designed electronics.

The individual LEDs are operated and coupled to a unique patented cooling system which ensures that the LEDs are able to maintain intensity well beyond the life of competing products. The temperature of the LEDs is kept below 130°C at maximum power level to assure the long life of 50,000 hours. The exterior cover is a precision molded, high strength, high optical transmissivity acrylic.

The FA-410 LED controller provides flash control, current limiting to the LED, photocell input (auto, forced on, forced off), synchronization terminal and AC transformer (if required).

TECHNICAL DATA

- **Cover:** 410 mm precision molded, high-temperature, acrylic cover.
- **Lighting Source:** Stacked array of high flux, high efficiency LED Light Engines.
- **Colors:** White, Red, Green, Blue and Yellow

PHOTOMETRIC DATA

- **Beam:** 360 degrees horizontal. Uniformity within +/-15%.

LED PHOTOMETRICS (CANDELA)

System Power (W)	GREEN	YELLOW	BLUE	RED
1040	60 000	36 000	26 250	
625	36 150	21 690	15 800	
375	21 680	13 010	9 500	14 900
250	14 450	8 640	6 300	9 940

Maximum 250W average per duty cycle.

System Power (W)	WHITE-C	MAXIMUM DUTY CYCLE
1650	141 800	13.3%
825	72 500	26.7%
400	35 450	52.2%
200	17 725	100%
100	8 875	100%

Vertical divergence is 3 degrees to 50% and 10 degrees to 10%.

MECHANICAL DATA

- **Height:** 500 mm. **Diameter:** 500 mm.
- **Weight:** 27 kg.
- **Materials:** Precision heat tolerant acrylic cover. Cast aluminum base and frame. Stainless steel fittings and neoprene o-rings.
- **Mounting:** 3 each M12 threaded inserts on 200 mm bolt circle.

ELECTRIC CONTROL MODULE

- **Input:** 120/240 VAC 50-60 HZ or 22-30 Volts DC reverse polarity protected.
- **Power:** Maximum 250W average per duty cycle. 3.6 watts quiescent current. Selectable power level settings.
- **Synchronization:** Terminals for UNIFLASH®III wireless synchronization system or hardwired synch circuit.
- **Flash Rhythm:** 256 Selectable Characters.
- **Photocell:** External or Internal Mount

Patent No.: US 7,461,952 B2

Form N° 042310C