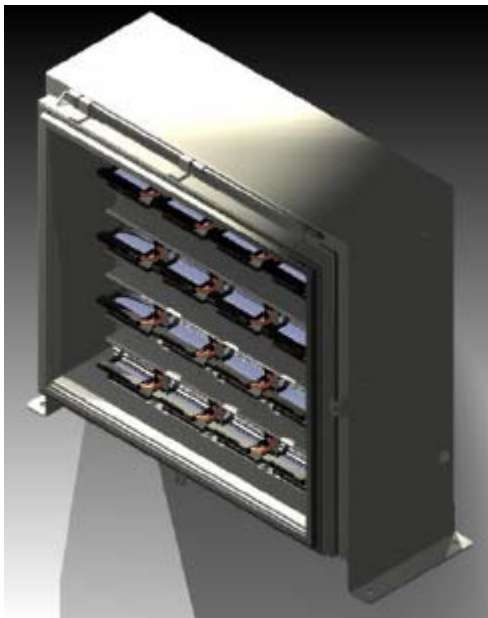


# PR-500 LED LONG RANGE SIGNALING BEACON



The PR-500 LED is a high intensity, directional, long range signaling lantern suitable for lighthouses, leading lights and traffic signaling systems intended to operate as both nighttime and daytime signals. The key advantage of the PR-500 LED is the very low maintenance in utilization of LED as the light source making it possible to obtain several years of unattended operation.

The PR-500 LED features high flux LED's mounted at the focal point of stainless parabolic reflector with a specialized dichroic hybrid spectral metal coating. The LED's are mounted on metal core PCB located at the focal point of the mirror. A **patented** passive heat pipe cooling system transports the heat away from the LED's and into the reflector housing. Housed in a weatherproof anodized aluminum enclosure, groups of reflectors are stacked to optimize optical performance.



The array system is driven by highly efficient proprietary electronics. The PR-500 LED controller provides flash control, current limiting to the LED, photocell input, and synchronization terminal. The controller has a nominal input of 120-240 VAC 50-60 HZ input. DC input voltages are optional.

The PR-500LED Beacon is optimized to project a high intensity, 180 degree, horizontal beam. With a horizontal divergence of  $\pm 45$  degrees to 50% of peak intensity, the PR-500 provides signaling performance unmatched by other products on the market. Vertical divergence is 2.4 degrees.

Using direct emitting colored LED technology, the PR-500 LED is able to generate colored signals with exceptional ranges. A total of 1700 watts of LED may be mounted in the housing. One Traffic Control Beacon could house 500 watts of arrays of red, green, and amber LED's with each color having a daytime range in excess of two miles.

## Photometric Data

LED POWER	BLUE	AMBER	GREEN	RED	WHITE
500 WATT	42,000	65,000	144,000	101,000	162,000
900 WATT	84,000	130,000	205,000	N/A	323,000
1400 WATT	126,000	195,000	285,000	N/A	420,000

If duty cycle is above 600 WATTS average, cooling system required.

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