

SunPOWR

Solar Powered Obstruction Light Systems

Application

The FAA mandates steady red obstruction lights on towers and communication obstructions from 50–2,200 feet in height, where there is a danger to small planes and helicopters at night. Steady red lights are required up to 150 ft. in height, and flashing red lights (L864) are mandated up to 350 feet high. (Also see our PRTO Series and PRL864 data sheets for FAA, ICAO lights.)

In remote areas, where 110V or 220V is not available except at extremely high cost, solar systems are often installed to operate the lights. In the past, solar systems for incandescent FAA lights were large and expensive, requiring many large solar panels (110 watt for L810 and 1,600 watt for L864), plus large batteries to store daylight charging and to operate the lights at night, as well as conversion controls. Today, solar powered LED lights are a simpler and greener solution, saving money and keeping lights off grid.

SunPOWR Systems Slash Costs

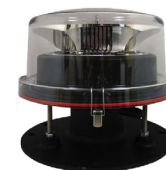
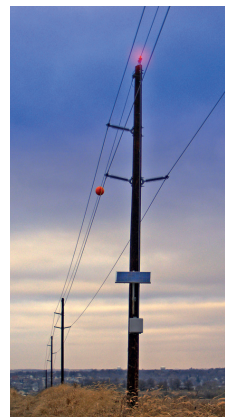
P&R Tech's SunPOWR Solar Powered Obstruction Light Systems cost less than 10% as much as incandescent solar systems, because:

1. The lights are FAA approved LEDs (Light Emitting Diodes). LED lights use 5% of the power of incandescent lights and therefore require much less solar power equipment, fewer batteries, smaller solar panels, and less support structures.
2. The LED lights have a 15 year life expectancy and are warranted for 5 years. Some utilities change as many as 300 incandescent light bulbs every year on obstruction lights, bringing significant costs in time, equipment, and manpower.
3. Much less maintenance is required. The solar system has no working parts. Sealed, maintenance free Gel Cell batteries are used. A wireless remote monitoring system can be added.

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**PRTO Series
Single & Dual Fixture
LED Obstruction Lights**

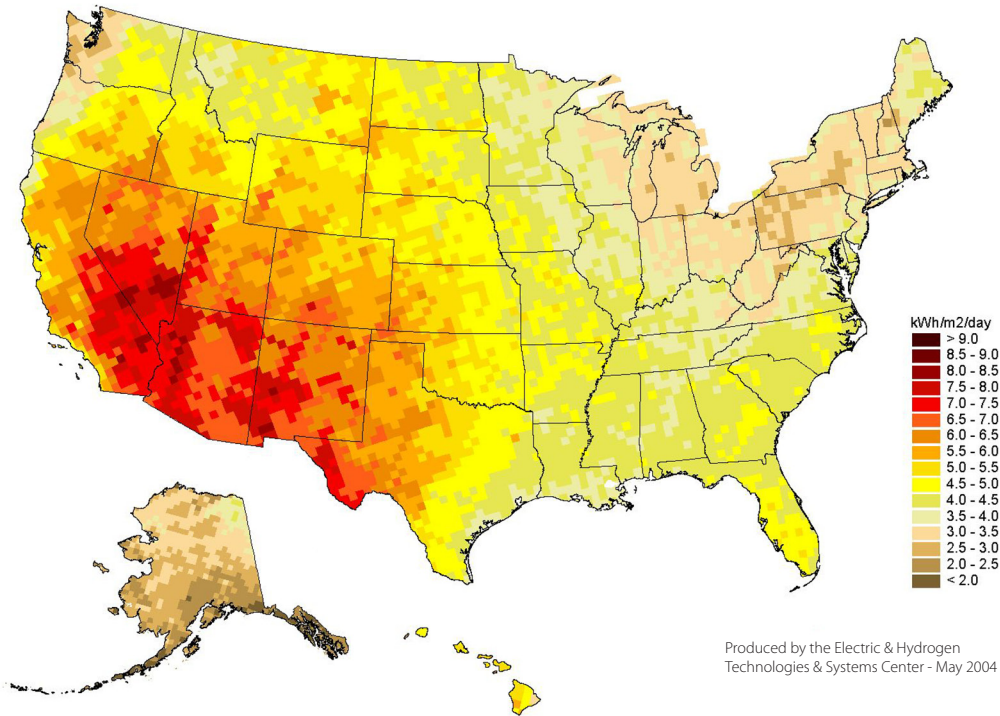


**PRL864 Type
Red Flashing LED
Obstruction Light**

SunPOWR Solar Powered Obstruction Light Systems

continued from front

Annual Direct Normal Solar Radiation (Two-Axis Tracking Concentrator)



Solar Panel Selection

The size of the solar panel required depends on the area of the world where the panel is to be installed. The panel will have to be twice as large in Seattle as it would be in Arizona. The number of sun hours available will determine the size of the panel required to produce enough power to operate the lights. The size will be calculated at the factory.

Meets FAA/ ICAO Intensity Standards

The PRTO Series SunPOWR system uses a steady red LED light. The PRL864 SunPOWR system uses a flashing red LED light, per FAA and ICAO advisories. The FAA specifies 32.5 candela intensity for towers up to 150 feet and 2,000 candela intensity flashing beacons on taller structures.

LED LIGHT SPECIFICATIONS

- Threaded 1" bottom hub for mounting
- Resistant to shock and vibration
- Weather resistant
- Earth grounding
- Self contained wiring compartment

SINGLE PRTO SERIES

Power: 4 watts
 12-48VDC
 Weight: 2 lbs



DUAL PRTO SERIES

Power: 8 watts
 12-48VDC
 Weight: 6 lbs



PRL864 BEACON

Power: 48 watts
 120/240VAC/48VDC
 Weight: 32 lbs

