

OL1-ST

Low Intensity Red LED Solar Obstruction Light

FAA Type L-810 / ICAO Type A, B & E FAA Type L-810



Overview

The OL1-ST is a low-intensity red LED solar-powered obstruction light suitable for a diverse range of applications, including marking of wind turbines, bridges, towers and other structures that present a hazard to aviation. The wide asymmetrical vertical profile meets or exceeds the requirements of the FAA L-810 and ICAO Types A, B & E obstacle lights.

Key Features

- Five-year limited warranty
- 96% Reduced energy consumption versus incandescent
- Aviation clear Acrylic Fresnel lens
- Painted cast aluminum base, stainless steel latches and hardware for corrosion protection.
- Available in side hub or bottom hub configurations
- No special tools required for installation or maintenance
- Neoprene gasket for weather proofing

Optional Features

- GPS Synchronisation
- Data Ports: RS-232 or RS-485
- External charging plug • Monitoring via:
 - Alarm/monitoring wire (beacon healthy)
 - RS-232 or RS-485 data port
 - Alarm/monitor connection option

General Specifications	
Battery Voltage	12 VDC
Operating Voltage	9 - 18 VDC
Lead Crystal Battery	12Ah or 24Ah (2x12Ah)
Battery Life	6 yrs est. @ 21°C
Charging	Stops at -30°C
Solar Panels	Mono-crystalline
Solar Panel Orientation	Vertical 4 panels 90° in azimuth

Typical Current Draw 12V @25C		
Type	Intensity	Night
FAA L-810	32.5Cd (Fixed/Steady)	126mA
ICAO Type A	10Cd (Fixed/Steady)	33mA
ICAO Type B	32Cd (Fixed/Steady)	126mA
ICAO Type E*	32Cd (Flashing 30FPM)	49.5mA
*Flash Pattern 0.5s On, 1.5s Off		
Day Current	3.8mA	
Light Off Current	2.5mA (4.5mA with GPS)**	
**The GPS sync options require 10mA for 2 minutes every 20 minutes (1mA average)		



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Easy Programming

Using the IR Remote, user can program one feature at a time; the OL1-ST confirms the settings by flashing the programming code back to the user.

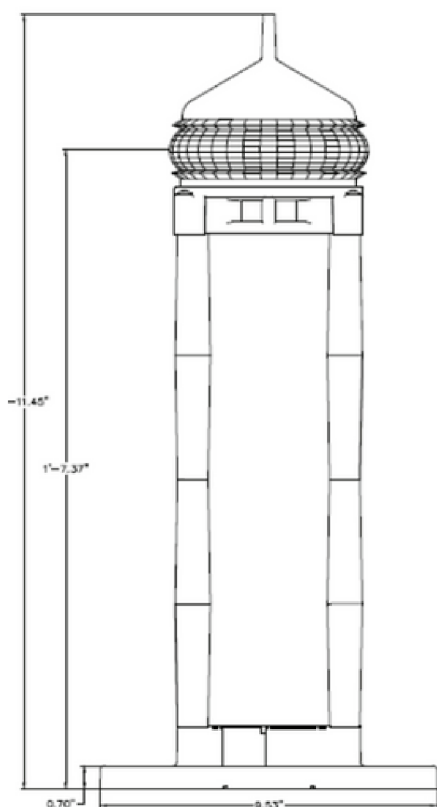
Programmable values include:

- Flash characters
- Effective intensity
- Day/night transition levels
- Synchronization control
- Sleep and test modes
- Transport mode (allows unit to be programmed prior to deployment)
- Low battery voltage cut out

Standards & Compliance

The OL1-ST complies with:

- US FAA AC 150/5345-43H Specification for Obstruction Lighting Equipment
- ICAO Annex 14, Volume I International Standards and Recommended Practices Seventh Edition, July 2016



Environmental	
Operating Temperature	-30°C to +50°C
Ingress Rating	IP-68: 1 Hour immersion in 1.5 meters of water
Cooling Pressure	Convection
Equalisation	Membrane in solar body
Salt	Continuous exposure to saltwater and spray
Wind	140Kt
Ice Loading	25kg/m ²
Shock / Vibration	75g shock / 5g vibration in all directions

Materials	
Obstacle Light	
Lens	Acrylic
Sealing	Lens glued in position
Bird Spike	Plastic center spike
Solar Power Pack and Base	
Body and Base	Injection molded UV-stable Polycarbonate
Sealing	O-Ring

