

OL1-ST

FAA Type L-810 / ICAO Type A, B & E
Low Intensity Red LED Solar Powered Obstruction Light

TWR
Enlightened Technology



Ideal for: Wind Turbines, Bridges, Towers

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.

FEATURES

- Programmable as ICAO Types A, B & E and FAA Type L-810 obstruction light
- Beam spread of 10° at 50% peak intensity
- Peak intensity at 8° above horizontal
- Available in 12Ah and 24Ah
- Sized to allow usage over wide range of locations
- Long life Lead Crystal battery capable of being charged down to a temperature of -30°C to +50°C
- Designed for 12 year service life (excluding battery)
- Warranty: 3 years for fixture and 1 year for battery
- Waterproof body up to IP-68

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

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 @25°C:

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 ¹	32Cd (Flashing 30FPM)	49.5mA

¹Flash 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)

OL1-ST

FAA Type L-810 / ICAO Type A, B & E
Low Intensity Red LED Solar Powered Obstruction Light

TWR

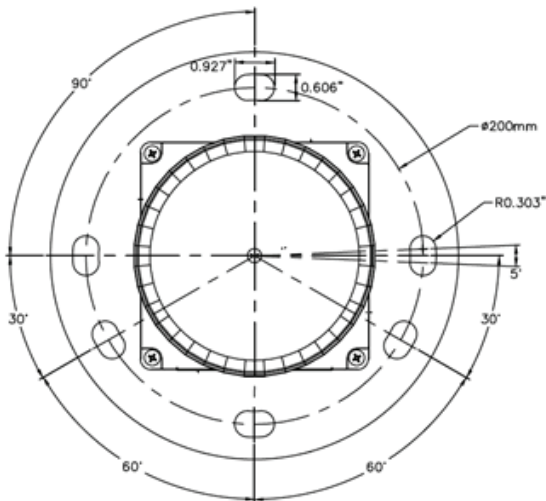
Enlightened Technology

ENVIRONMENTAL

Operating Temperature	-30°C to +50°C
Ingress Rating	IP-68: 1 Hour immersion in 1.5 metres of water
Cooling Pressure	Convection
Equalisation	Membrane in solar body
Salt	Continuos 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



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
- Synchronisation 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:

- United States Federal Aviation Administration AC 150/5345-43H Specification for Obstruction Lighting Equipment
- ICAO Annex 14, Volume I International Standards and Recommended Practices Seventh Edition, July 2016

