

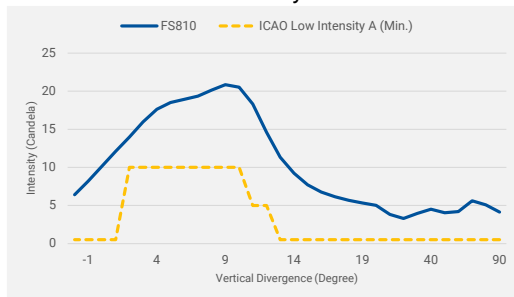
FS810 Series Solar Powered Low Intensity Obstruction Light

• ICAO LIOL-A • Red steady > 10cd



COMPLIANCE

- Obstacle Light Low Intensity Type A, ICAO Annex 14 Volume I July 2016



APPLICATIONS

- Telecommunication Tower
- TV/Radio Tower
- Transmission Tower
- High-rise building
- Industrial Chimney & Cooling Tower
- Tower Crane
- Bridge
- Wind turbine
- Airfield & helipad
- Storage tank & Water tower
- Oil & Gas offshore platform

OVERVIEW

FS810 is an ICAO certified solar powered low intensity obstruction light. FS810 steady-burning conforms to ICAO Obstacle Lighting low intensity type A.

FS810 is a self-contained solar powered low intensity obstruction light. Integrated four-side solar panels and MPPT (Maximized Power Point Tracking) microcontroller enable this model to maximize solar power output.

Incorporated SBM (Smart Battery Management) program reduces energy consumption. By detecting ambient solar irradiance, FS810 can self-adjust LED outputs for extending autonomy. It also protects the VRLA battery pack from over-charging and over-discharging.

FS810's LED module consists of 16 units of ultra-bright OSRAM LEDs. REDDOT novel convex lens optimizes photometric performance. In addition to regular visible red color, FS810 NVG compatible version with IR LEDs or Red/IR dual LEDs is a night vision solution for pilots being able to view obstruction lights using Night Vision Goggles.


FS810 comes with 20W-PV and 16AH-battery. Once fully charged, the autonomy can reach up to 20 days (suitable for $PSH \geq 4$).

FEATURES

- 16 pcs of ultra-bright OSRAM LEDs, reliable light source ensures long lifespan
- Four-side solar panels and integrated MPPT maximize sunlight collection
- High-grade VRLA battery provides long lifetime
- Integrated SBM (Smart Battery Management) for saving energy to extend autonomy
- Novel convex lens provides excellent light distribution
- Autonomy up to 20 days once fully charged during insufficient sunlight days
- Protective vent for expelling battery gas and reducing condensation
- Automatically off if continue working 18 hours
- IP67 ON-OFF switch for protecting the battery from over-discharging
- GE polycarbonate lenses, UV-stabilized
- Aluminum base with powder painted, corrosion-resistant
- IP67 waterproof protection, silicon gasket enhanced
- Excellent shock and vibration resistant
- A handle on the light shoulder makes carrying and lifting easier for deployment
- Flash rate adjustable, steady/20-60FPM
- NVG compatible with IR LEDs or Red/IR dual LEDs
- GPS available for synchronizing flash



SPECIFICATIONS

| Item | | FS810 Specifications |
|-----------------------|-----------------------------------|---|
| | |  |
| LIGHT OUTPUT | Effective Intensity | Steady burning >10cd |
| | Vertical beam | >10° |
| | Horizontal Spread | 360° |
| | Light Source | OSRAM LEDs |
| | LED Color | Red (for obstruction). White, yellow, green and blue are available for other applications |
| | LED Lifespan | 100,000 Hours |
| OPERATION | Flash Pattern | Steady / 20-60FPM adjustable |
| | Autonomy ^(Note1) | 20 days |
| | Suitable areas ^(Note2) | PSH≥4 |
| | ON&OFF Level | 70/100Lux |
| POWER SUPPLY | Solar Panel Type | Solar Module, Mono-Crystalline Silicon |
| | Solar Panel Efficiency | 15% |
| | Solar Panel Power | 4*5W |
| | Battery type | VRLA battery |
| | Battery Capacity | 12V/16 Ah |
| | Battery Replaceability | Yes, replaceable |
| | MECHANICAL STRUCTURE | Lens |
| Body | | Aviation yellow powder-coated extruding aluminum |
| Mounting | | Four Φ16*25 slot holes on 200mm bottom PCD |
| Net Weight | | 13KG |
| Dimension(W*H) | | 235mm * 400mm |
| Protection | | IP67 |
| Operation Temperature | | -40°C~+55°C |
| Operation Humidity | | 0-95% RH non-condensing |
| Wind resistance | | Max.240kph |
| OTHERS | Optional | •Flashing •GPS •Zigbee Wireless Monitoring •NVG compatible with IR LEDs |
| | Warranty | •5 years for light •2 years for battery •10 years for PV |

Notes: 1) The days of autonomy indicated in the specs table is once fully charges, how many days the solar light can run during cloudy/rainy days (12 working hours/day), without optional functions.

2) PSH is the abbreviation of Peak Sun Hours which reflects solar radiation. 1 Peak Sun Hour = 1000 W/m² of sunlight. The PSH given in the table is a yearly average value. The more PSH value is. The more solar energv potential is. As PSH value varies in different month. please consult REDDOT to select the safest solar obstruction light.

ORDERING CODE

| Main P/N | Steady/Flashing ^(Note1) | NVG Compatible | GPS ^(Note2) | Zigbee Wireless Monitoring ^(Note3) |
|----------|------------------------------------|--|---|--|
| FS810 | [Blank] (Steady) F (Flashing) | [Blank] (Only red LEDs) NVG (IR LEDs) RED-NVG (dual Red/IR LEDs) | [Blank] (without GPS) GPS (with GPS) | [Blank] (without Zigbee module) ZB (with Zigbee module) |

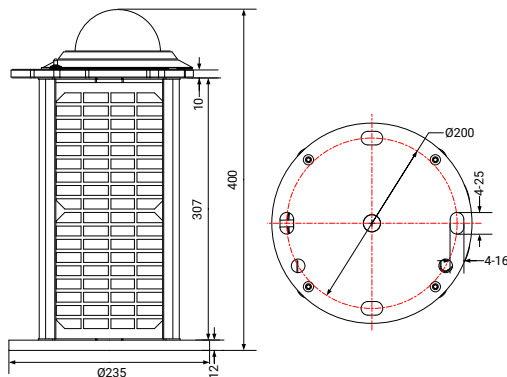
Notes: 1) With flash rate adjust switch, users can adjust flash rate among steady, 20FPM, 30FPM, 40FPM, 60FPM

2) GPS is applicable for flash unit

3) CTRW wireless monitoring box is needed to receive signals from solar lights with Zigbee modules.

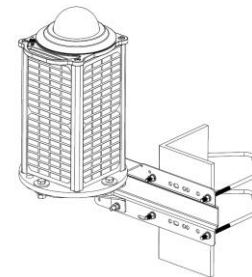
E.g.: FS810-NVG = Solar powered low intensity obstruction light, steady>10cd, with 4*5 PVs & 12V16Ah battery, with IR LEDs, NVG compatible

DIMENSIONS



MOUNTING

U-bolt mounting



AMP30150S bracket (U-bolt holders) for dia.30-150mm angular/tubular structures

