



## APPLICATION



# LED Low-intensity L810 Solar Aviation Obstruction Light

## AL-LS-A1A

with upgraded batteries

AL-LS-A1A is a self-contained obstruction light which consist of solar panel, battery and lamp. There is no need for external power input. The vertical degree of the solar panel is adjustable to ensure it could get the most sunlight in different area.

It is designed for marking top of obstacle that do not exceed 45 meters in height.

### Compliance

- ICAO Annex 14 Volume 1, Seventh edition, 2016, table 6-1, 6-2 Low Intensity Type A / B / E Obstruction Light
- FAA L-810

### Features

#### Electrical

- 3 high power CREE LED, make sure LED keep bright while use

#### Physical

- With bird needle to prevent bird drop
- UV & vibrations protected polycarbonate lens for converging light
- Powder coated die casting aluminum base, light fastness, resist snow and rain
- Battery box made of corrosion resistant 304 stainless steel
- Self-contained without external power supply, Cable cost saving & cabling job saving, No wiring job, nice & easy installation
- Solar panel vertical degree is adjustable

#### System design

- Solar panel as sensor(Photo diode) for day & night working mode (dusk to dawn mode)
- ON/OFF button under base make local control easy
- Steady/Flashing(20fpm) adjustable switch available
- Solar panel angel is adjustable
- Surge and lightning protection

#### Optional

- Infrared LED for pilot using NVG(Night Vision Goggles)
- Stainless steel needle strips for solar panel

### Application

- AL-LS-A1A solar low-intensity light is specialized used on the top of the High Chimney, Telecommunication tower, Wind Turbine where there is no cable power supply and those facilities which have high requirements on lightning protection.
- Used alone on the top of obstacle which height is less than 45meter

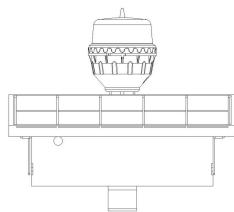
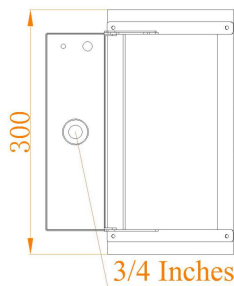
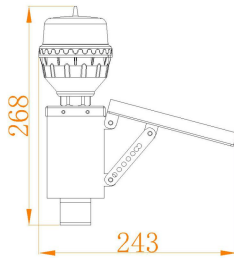


# LED Low-intensity L810 Solar Aviation Obstruction Light

## AL-LS-A1A

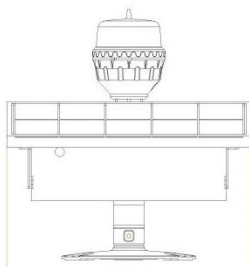
with upgraded batteries

### Dimension(mm)



(Standard mounting)

*(Elevated Mounting bracket or other kind of type mounting is charged separately, and size is customized)*



(Elevated Mounting)

### SPECIFICATIONS

### AL-LS-A1A LED Low-intensity L810 Solar Aviation Obstruction

#### Light Characteristics

Light Source	3 High intensity CREE LED
Emitting Color	Red
Intensity(cd)	>32.5cd
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	10
Flash Characteristics	Steady/Flashing(20fpm) adjustable
Operation Mode	Dusk-to-Dawn operation
LED Life Experience(hours)	>100,000 (6-8 years night use only)

#### Electrical Characteristics

Operating Voltage	12
Circuit Protection	Integrated

#### Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	12
Charging Regulation	Microprocessor controlled

#### Battery Characteristics

Battery type	Lithium ion Phosphate (LiFePO4) These batteries are more suitable for high temperature applications than Lithium ion batteries
Nominal Voltage (V)	12
Battery Service Life	Average 6-8 years
Autonomy (hours)	Steady: ≥90, Flashing: ≥180

#### Physical Characteristics

Lamb Body Material	UV protected Polycarbonate
Base Material	Powder coated stainless steel 304
Installation Size	3/4inch thread hole(standard)
Overall Size (mm)	268×243×300
Weight(kg)	3
Product Life Expectancy	Average 5 years

#### Environmental Factors

Ambient Temperature(°C)	-55~70
Humidity	0~90%
Wind Speed	80m/s
Waterproof	IP65

#### Compliance

ICAO	Annex 14 Volume 1,'Aerodrome Design and Operations' Seventh edition July 20163, table 6-1, 6-2, Low-intensity Type A/B/E Obstacle Light L-810
FAA	L-810

#### Optional

NVG - compatible infrared (IR) LED