

# FAA L-810 Low Intensity Obstruction Light

AV-OL Series Universal AC or Universal DC Dual Light Fixture



## Features

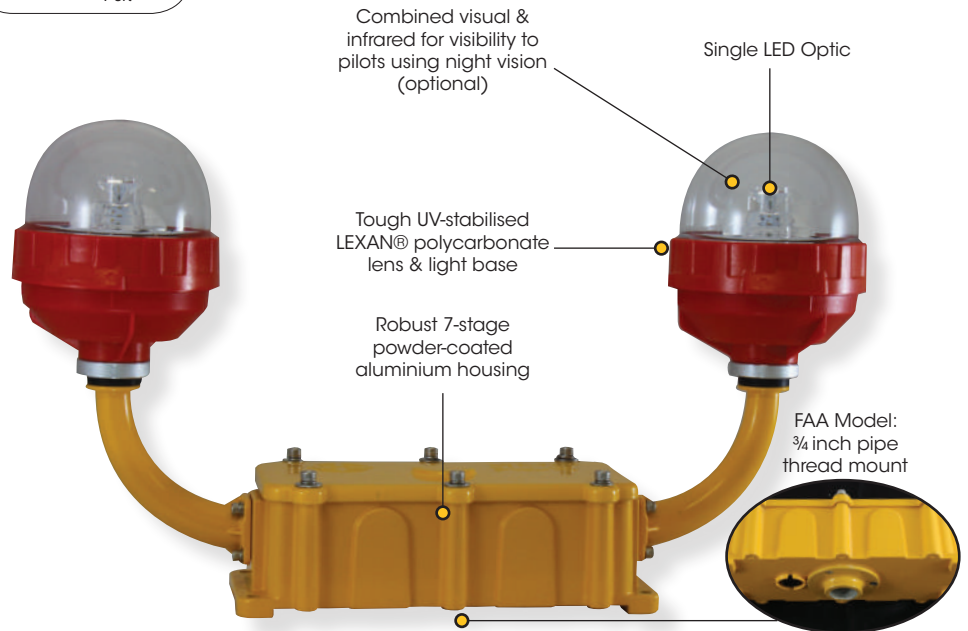
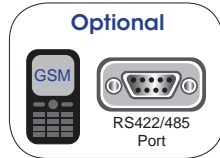
- Cost effective, energy efficient obstruction lighting solution
- Available in universal DC: will accept between 12-48VDC
- Available in universal AC: will accept between 110-240VAC 50/60Hz
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- Optional solar powered configurations available
- Dual light fixture enables simultaneous twin operation or redundant failsafe
- Alarm contact for remote monitoring
- Light sensor for day/night operation
- LED technology reduces maintenance time and costs
- Available with optional GSM monitoring for VDC model
- Available with optional RS422/485 communications port for monitoring for VDC model
- Optional combined visual/IR for pilots using NVG

## Applications

- Low Intensity Obstruction Light for marking obstacles that do not exceed 45 metres (150 feet) in height

## Compliance

- FAA AC150/5345-43G for L-810 Steady-burning Red Obstruction Light
- FAA Engineering Brief No. 67D



**This Avlite dual light fixture is a steady burning, low intensity LED obstruction light designed to comply with FAA L-810 requirements. The model can be used for marking obstacles up to 45 metres (150 feet) above ground which pose a danger to aircraft at night, such as telecommunication towers, wind turbines, buildings and other tall structures.**

Avlite's LED obstruction lights offer an ultra bright, energy efficient and cost effective lighting solution. The light fixture is available in two configurations, universal DC (12-48VDC) or universal AC (110-240VAC 50/60Hz).

The dual light fixture can be configured to different operational states. Both light fixtures may be set to operate steady-burning. Alternatively, the dual light fixture may consist of a main light and a standby light. If the main light should ever fail the standby light will automatically switch on to ensure the obstacle is always clearly marked.

The advanced light optic uses a single LED for minimal power consumption. The corrosion resistant, polycarbonate lens is specifically designed for use with LEDs to maximize light intensity and uniformity. Integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently and the light will begin operation automatically.

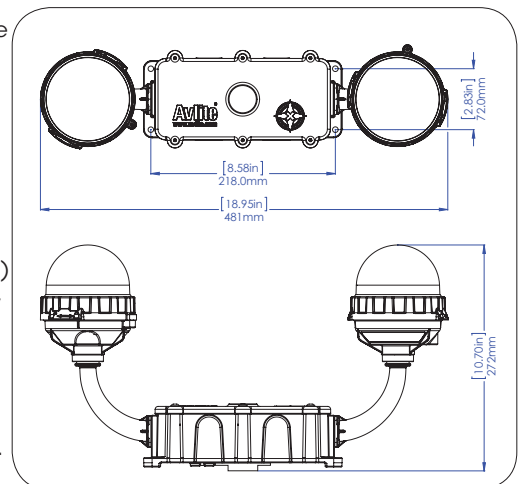
The light fixture incorporates internal diagnostic checking and an alarm contact for remote monitoring. Typically the alarm relay is energised in normal operation and is released if there is an LED or power fault.

All obstruction lights also have an adjustable operation mode setting to allow the user to easily toggle between dusk-till-dawn and 24 hour operation modes.

**The obstruction light is also available with combined visual and infrared (IR) for visibility to pilots using night vision.**

### Optional GSM Monitoring

The Avlite dual obstruction light (VDC model) is available with GSM Cell-Phone Monitoring, enabling operators to remotely monitor the status of their installation. The system can also be configured to send out SMS text messages or e-mail alerts to designated operators should alarm conditions be triggered, such as low voltage or light failure.



# FAA L-810 Low Intensity Obstruction Light

AV-OL Series Universal AC or Universal DC Dual Light Fixture

## SPECIFICATIONS \* \*

### Light Characteristics

Light Source  
Available colors  
Peak Intensity (cd)†  
Horizontal Output (degrees)  
Vertical Divergence (degrees)

Reflector Type  
Intensity Adjustments  
Operation Mode Adjustment

LED Life Expectancy (hours)

### Electrical Characteristics

Current Draw (mA)‡

Power (W)‡

Current Draw (mA)‡

Power (W)‡

Circuit Protection  
Operating Voltage  
Temperature Range

### Physical Characteristics

Body Material  
Lens Material  
Lens Diameter (mm/inches)  
Lens Design  
Mounting  
Height (mm/inches)  
Width (mm/inches)  
Mass (kg/lbs)  
Product Life Expectancy

### Environmental Factors

Humidity  
Icing  
Wind Speed

### Certifications

CE  
Quality Assurance  
FAA

Waterproof

### Intellectual Property

Trademarks

### Warranty \*

### Options Available

## 12-48 VDC

As tested;  
FAA: AV-OL-FL810-12-R LED  
Red as standard. Other colors available on request, including IR  
Complies with FAA L-810 obstruction lights  
360  
FAA Model: as per FAA L-810 obstruction light specification  
Single LED Optic  
FAA Model: 32.5cd  
User-adjustable between dusk-fill-down & 24 hour operation  
>100,000

Failover Configuration @ 12V:  
FAA L-810 @ 32.5cd Steady-on with relay energised: I<sub>max</sub> = 120

FAA L-810 @ 32.5cd Steady-on with relay energised & IR: P<sub>max</sub> = 1.44

Dual Lit Configuration @ 12V:  
FAA L-810 @ 32.5cd Steady-on with relay energised: I<sub>max</sub> = 240

FAA L-810 @ 32.5cd Steady-on with relay energised & IR: P<sub>max</sub> = 2.88

Integrated  
12 - 48 VDC  
-40 to 80°C

7-stage powder-coated aluminium  
LEXAN® Polycarbonate  
- UV stabilized  
100 / 3 7/8  
Single LED Optic  
FAA Model: ¾ inch pipe thread  
FAA Model: 272 / 10¾  
481 / 19  
2.3 / 5  
Up to 12 years

0 to 100%, MIL-STD-810F  
22kg per square inch  
Up to 240kph

EN61000-6-3:1997. EN61000-6-1:1997  
ISO9001:2008  
L-810 Steady-burning Red Obstruction Light  
IP67

AVLITE® is a registered trademark of Avlite Systems

3 year warranty

- Variety of solar/battery configurations
- GSM Cell-Phone Monitoring
- Dual visual/IR output
- IR LED
- RS422/485 communications port

## 110-240 VAC

As tested;  
FAA: AV-OL-FL810-UM-R LED  
Red as standard. Other colors available on request, including IR  
Complies with FAA L-810 obstruction lights  
360  
FAA Model: as per FAA L-810 obstruction light specification  
Single LED Optic  
FAA Model: 32.5cd  
User-adjustable between dusk-fill-down & 24 hour operation  
>100,000

n/a

FAA L-810 @ 32.5cd Steady-on with relay energised: P<sub>max</sub> = 3  
S<sub>max</sub> = 8VA  
Note: One light head ON at one time (redundant switch over function)

Integrated  
110 - 240 VAC 50/60Hz  
-40 to 80°C

7-stage powder-coated aluminium  
LEXAN® Polycarbonate  
- UV stabilized  
100 / 3 7/8  
Single LED Optic  
FAA Model: ¾ inch pipe thread  
FAA Model: 272 / 10¾  
481 / 19  
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Up to 12 years

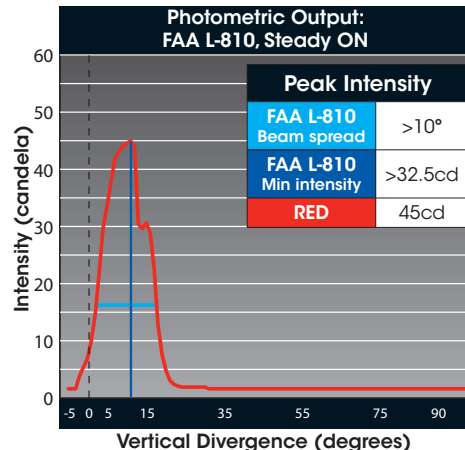
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- Dual visual/IR output
- IR LED



## HOW TO ORDER

### FAA Compliant Dual Light Fixture

AV-OL-FL810-[Model]-[Color]-[D]-[?]-[?]

**Product No.:** \_\_\_\_\_

**Model:**  
12 = 12-48 VDC  
UM = 110-240 VAC

**Color:**  
R = Red  
IR = Infrared  
RIR = Combined Red/IR

**Dual Fixture:**  
[D] = Dual light fixture

**Monitoring & Control:**  
GSM = GSM (VDC model only)  
[blank] = No GSM

**RS Communications Port:**  
RS = RS communications port (VDC model only)  
[blank] = No RS communications port

Note: Please contact your Avlite representative for optional power supply solutions

\* Specifications subject to change or variation without notice  
• Subject to standard terms and conditions  
† Intensity setting subject to solar availability  
‡ When used in redundant fail-safe mode

