

FAA L-810 Low Intensity Obstruction Light

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

Optional



GSM



Intertek

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 150 feet (45 metres) 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.

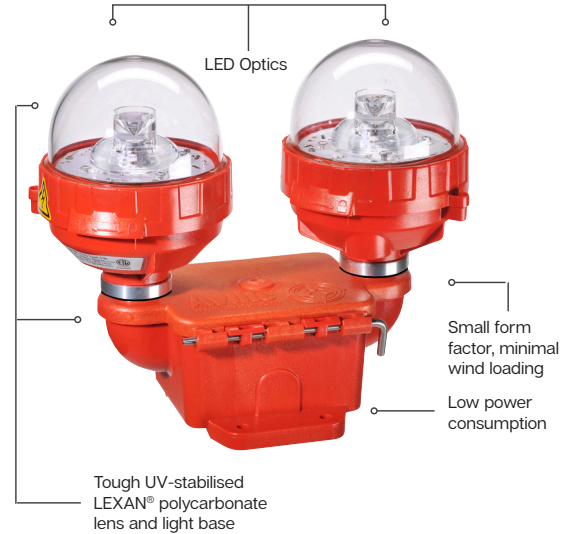
The advanced light optic uses a single LED for minimal power consumption. The corrosion resistant, polycarbonate lens is specifically designed for use with LEDs to maximize light intensity and uniformity. Integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently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

Optional GSM Monitoring

The Avlite dual obstruction light is available with GSM Cell-Phone Monitoring via a separate control box, 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.



Cost Effective

- Energy efficient lighting solution
- low maintenance costs
- Low LED power consumption

Features

- Alarm contact for remote monitoring
- Integrated light sensor for day/night operation
- Simultaneous twin operation or redundant failsafe
- Marks obstacles up to 150 feet (45 metres) above ground

Applications

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

Optional

- Solar power configurations
- Combined visual and Infrared visibility
- GSM monitoring
- Available in universal DC (12-48VDC) or AC (110-240VAC)
- Optional RS422/485 communication port for monitoring & synchronization for VDC models

Easy Install

- Adjustable operation mode

Compliance

- FAA Engineering Brief No. 67D

Certifications

- FAA L-810 Low Intensity Obstruction Light, FAA AC NO: 150/5345-43G
- DGAC L-810, Low Intensity Obstruction Light

Technical Specifications **

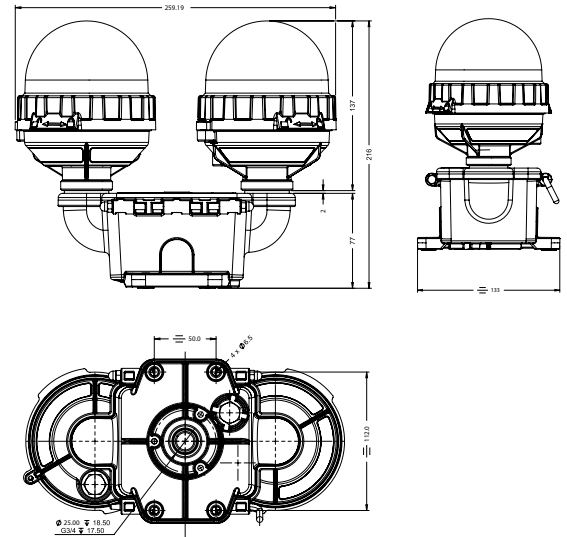
| FAA L-810 LIOL Dual Fixture | | |
|--|--|--|
| 12-48 VDC | | 110-240 VAC |
| Light Characteristics | | |
| Light Source | As tested; FAA: AV-OL-FL810-12-R LED | As tested; FAA: AV-OL-FL810-12-R LED |
| Available colors | Red as standard. Other colors available on request, including IR | Red as standard. Other colors available on request, including IR |
| Peak Intensity (cd)* | Complies with FAA L-810 obstruction lights | Complies with FAA L-810 obstruction lights |
| Horizontal Output (degrees) | 360 | 360 |
| Vertical Divergence (degrees) | as per FAA L-810 obstruction light specification | as per FAA L-810 obstruction light specification |
| Reflector Type | Single LED Optic | Single LED Optic |
| Operation Mode Adjustment | User-adjustable between dusk-till-dawn & 24 hour operation | User-adjustable between dusk-till-dawn & 24 hour operation |
| LED Life Expectancy (hours) | >100,000 | >100,000 |
| Electrical Characteristics | | |
| Failover Configuration @ 12V: Power (W)‡ | FAA L-810 @ 32.5cd Steady-on with relay energized: Pmax = 1.44 | FAA L-810 @ 32.5cd Steady-on with relay energized: Pmax = 5 Smax = 13.4VA |
| Dual Lit Configuration @ 12V: Power (W)‡ | FAA L-810 @ 32.5cd Steady-on with relay energized: Pmax = 2.88 | FAA L-810 @ 32.5cd Steady-on with relay energized: Pmax = 4 Smax = 10.6VA |
| Circuit Protection | Integrated | Integrated |
| Operating Voltage | 12 – 48 VDC | 110 – 240 VAC 50/60Hz |
| Temperature Range | -40 to 80°C | -40 to 80°C |
| Physical Characteristics | | |
| Body Material | Reinforced Polycarbonate composite – UV stabilized | Reinforced Polycarbonate composite – UV stabilized |
| Lens Material | LEXAN® Polycarbonate – UV stabilized | LEXAN® Polycarbonate – UV stabilized |
| Lens Diameter (mm/inches) | 100 / 3 7/8 | 100 / 3 7/8 |
| Lens Design | Single LED Optic | Single LED Optic |
| Mounting | FAA Model: 1/2 inch pipe thread | FAA Model: 1/2 inch pipe thread |
| Height (mm/inches) | FAA Model: 216 / 8 1/2 | FAA Model: 216 / 8 1/2 |
| Width (mm/inches) | 259.2 / 10 1/4 | 259.2 / 10 1/4 |
| Depth (mm/inches) | 133 / 5 1/4 | 133 / 5 1/4 |
| Mass (kg/lbs) | 1.15 / 2.53 | 1.15 / 2.53 |
| Product Life Expectancy | 12 years plus | 12 years plus |
| Environmental Factors | | |
| Humidity | 0 to 100%, MIL-STD-810F | 0 to 100%, MIL-STD-810F |
| Icing | 3.41kg per square cm / 48.5lbs per square inch | 3.41kg per square cm / 48.5lbs per square inch |
| Wind Speed | Up to 240kph / 150mph | Up to 240kph / 150mph |
| Certifications | | |
| CE | EN61000-6-3:2007 EN61000-6-1:2007 FCC 47 CFR Part 15, subpart B | EN61000-6-3:2007 EN61000-6-1:2007 FCC 47 CFR Part 15, subpart B |
| Quality Assurance | ISO9001:2015 | ISO9001:2015 |
| FAA, DGAC-Mexico | L-810 Medium Intensity Obstruction Light (Qualified by Intertek) | L-810 Medium Intensity Obstruction Light (Qualified by Intertek) |
| Waterproof | IP68 | IP68 |
| Intellectual Property | | |
| Trademarks | AVLITE® is a registered trademark of Avlite Systems | AVLITE® is a registered trademark of Avlite Systems |
| Warranty * | 5 year warranty | 5 year warranty |
| Options Available | <ul style="list-style-type: none"> Variety of solar/battery configurations GSM Cell-Phone Monitoring GPS Synchronisation RS422/485 communications port | <ul style="list-style-type: none"> Variety of solar/battery configurations Dual visual/IR output IR LED |

CE * Specifications subject to change or variation without notice
 ** Subject to standard terms and conditions

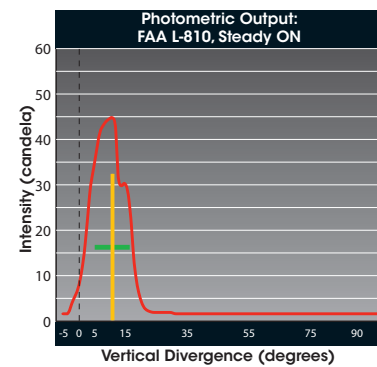
FAA Monitoring Requirement

The FAA states that 'conspicuity is achieved only when all recommended lights are working' and 'any outage should be corrected as soon as possible'. The operational status of all lights should be confirmed at least once every 24 hours. If a structure is not easily inspected by visual observation, an automatic monitoring system should be used. Avlite has a selection of automatic monitoring systems available for use with their obstruction light range to comply with FAA requirements.

Technical Illustration



Photometric Output



| Peak Intensity |
|-------------------------|
| FAA L-810 Beam spread |
| FAA L-810 Min intensity |
| AVLITE |

How to Order FAA L-810 LIOL Dual Fixture

AV-OL-D-[Chassis]-[?]-[?]-[?]

Segment: _____

Product Type: Obstruction Light Dual

Enclosure: B1, B2, B3, S1, S2, S3

Standard: _____

Input: DC, UM

LED Configuration: RR, RIR

Enclosure:
 B1: Base feed, Splitter, Concurrent
 B2: Base feed, Splitter, Failover
 B3: Base feed, Splitter, Synchronous
 S1: Side Feed, Splitter, Concurrent
 S2: Side Feed, Splitter, Failover
 S3: Side Feed, Splitter, Synchronous