

# FAA L-810 Low Intensity Obstruction Light



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



Model shown with optional 1 inch pipe thread adaptor

Standard Model

### LED Optic

- Low power consumption
- Combined visual & infrared visibility for pilots using night vision (optional)
- Small form factor, minimal wind loading
- Tough UV-stabilized LEXAN® polycarbonate lens & light base
- Easily installs to 3/4 inch pipe thread
- Monitoring options available

### 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
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- Alarm contact for remote monitoring
- Light sensor for day/night operation
- LED technology reduces maintenance time & costs
- Easily retrofits with existing installations
- Optional solar powered configurations available
- Optional combined visual/IR for pilots using NVG
- Available with optional GSM monitoring
- Available with optional RS422/485 communications port for monitoring & synchronization for VDC model

**This Avlite 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 which pose a threat to aircraft, 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).

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.

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

The unit is available with either a 3/4 or 1 inch thread type - making it simple to retrofit with existing installations.

The obstruction light also has 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) visibility for pilots using night vision.**

### Optional GSM Monitoring

The Avlite single obstruction light 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.

### Applications

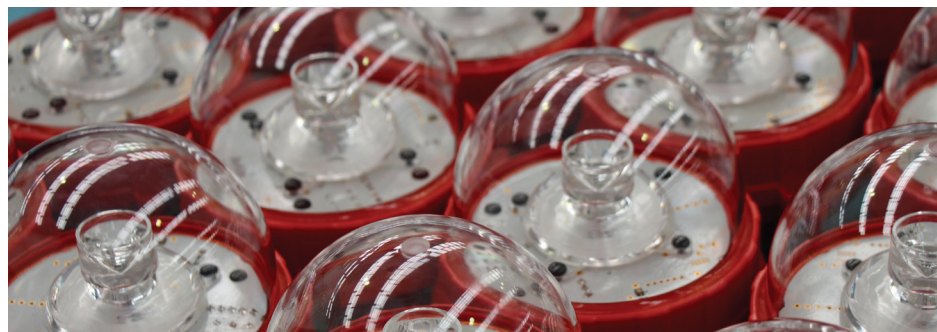
Low Intensity Obstruction Light for marking top of obstacles that do not exceed 150 feet (45 metres) in height

### Certifications

- FAA L-810 Low Intensity Obstruction Light, FAA AC 150/5345-43G
- DGAC L-810, Low Intensity Obstruction Light

### Compliance

FAA Engineering Brief No. 67D



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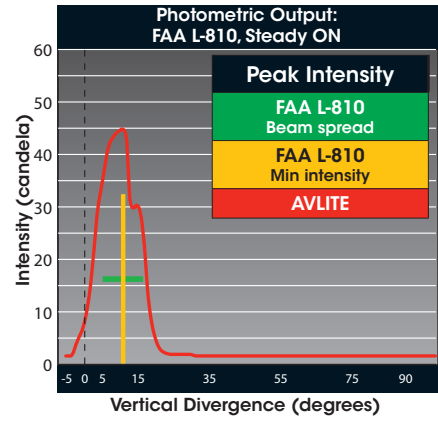
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SPECIFICATIONS * *	FAA L-810 LIOL Single Fixture	
	12-48 VDC	110-240 VAC
<b>Light Characteristics</b>		
Light Source	As tested: FAA: AV-OL-FL810-12-R LED	As tested: FAA: AV-OL-FL810-UM-R LED
Available colors	Red as standard. Other colors available 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
Intensity Adjustments	32.5cd	32.5cd
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
<b>Electrical Characteristics</b>		
Operating Voltage	12 - 48 VDC	110 - 240 VAC
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 = 2 Smax = 5.3VA
Circuit Protection	Integrated	Integrated
Temperature Range	-40 to 80°C	-40 to 80°C
<b>Physical Characteristics</b>		
Body Material	LEXAN® Polycarbonate - UV stabilized	LEXAN® Polycarbonate - 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	Standard Model: 3/4 inch pipe thread	Standard Model: 3/4 inch pipe thread
Height (mm/inches)	Standard Model: 137 / 5 1/2	Standard Model: 137 / 5 1/2
Width (mm/inches)	121 / 4 3/4	121 / 4 3/4
Depth (mm/inches)	121 / 4 3/4	121 / 4 3/4
Mass (kg/lbs)	0.4 / 7/8	0.4 / 7/8
Product Life Expectancy	12 years plus	12 years plus
<b>Environmental Factors</b>		
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
<b>Certifications</b>		
CE	EN61000-6-3:2007 EN61000-6-1:2007	EN61000-6-3:2007 EN61000-6-1:2007
Quality Assurance	ISO9001:2015	ISO9001:2015
FAA, DGAC.	L-810 Low Intensity Obstruction Light (Qualified by Intertek)	L-810 Low Intensity Obstruction Light (Qualified by Intertek)
Waterproof	IP67	IP67
<b>Intellectual Property</b>		
Trademarks	AVLITE® is a registered trademark of Avlite Systems	AVLITE® is a registered trademark of Avlite Systems
<b>Warranty *</b>	5 year warranty	5 year warranty
<b>Options Available</b>	<ul style="list-style-type: none"> <li>Variety of solar/battery configurations</li> <li>GSM Cell-Phone Monitoring</li> <li>Dual visual/IR output</li> <li>IR LED</li> <li>RS422/485 communications port</li> <li>Threaded adaptor to fit one (1) inch pipe</li> </ul>	<ul style="list-style-type: none"> <li>GSM Cell-Phone Monitoring</li> <li>Dual visual/IR output</li> <li>IR LED</li> <li>Threaded adaptor to fit one (1) inch pipe</li> </ul>



\* Specifications subject to change or variation without notice  
 \* Subject to standard terms and conditions  
 † Intensity setting subject to solar availability



### HOW TO ORDER

**FAA L-810 LIOL Single Fixture**

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

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

**Certification:** FL810 = FAA L-810 LIOL

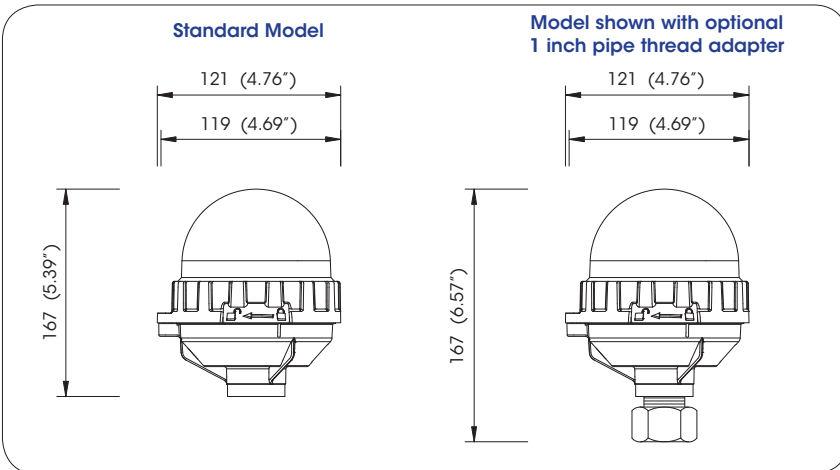
**Model:**  
 12 = 12-48 VDC  
 UM = 110-240 VAC

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

**Monitoring & Control:**  
 GSM = GSM  
 [blank] = No monitoring & control

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

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



### i 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.

