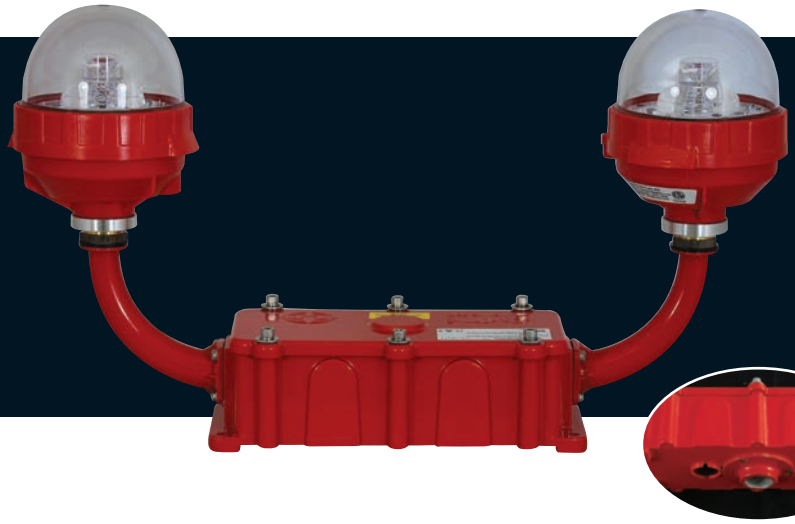
FAA L-810
Low Intensity Obstruction Light

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

Optional: GSM, RS422/485 Port



- 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
- ¾ inch pipe thread mount
- 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
- 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
- Available with optional RS422/485 communications port for monitoring & synchronization for VDC model
- Optional combined visual/IR for pilots using NVG

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

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 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.

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

Optional GSM Monitoring

The Avlite dual 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.

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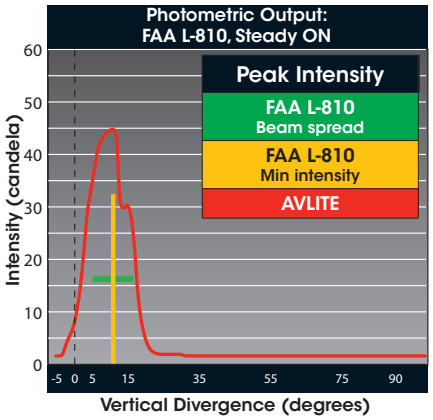
SPECIFICATIONS • *	FAA L-810 LIOL Dual Fixture	
	12–48 VDC	110–240 VAC
Light Characteristics		
Light Source	As tested; FAA: AV-OL-FL810-12-R LED	As tested; FAA: AV-OL-FL810-UM-R LED
Available colors	Red as standard. Other colors available on request, including IR	Red as standard. Other colors available 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
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	7-stage powder-coated aluminium	7-stage powder-coated aluminium
Lens Material	LEXAN® Polycarbonate – UV stabilized	LEXAN® Polycarbonate – UV stabilized
Lens Diameter (mm/inches)	100 / 3⅞	100 / 3⅞
Lens Design	Single LED Optic	Single LED Optic
Mounting	FAA Model: ¾ inch pipe thread	FAA Model: ¾ inch pipe thread
Height (mm/inches)	FAA Model: 272 / 10¾	FAA Model: 272 / 10¾
Width (mm/inches)	481 / 19	481 / 19
Depth (mm/inches)	121 / 4¾	121 / 4¾
Mass (kg/lbs)	2.3 / 5	2.3 / 5
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	EN61000-6-3:2007 EN61000-6-1:2007
Quality Assurance	ISO9001:2008	ISO9001:2008
FAA, DGAC.	L-810 Low Intensity Obstruction Light (Qualified by Intertek)	L-810 Low 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	• Variety of solar/battery configurations • GSM Cell-Phone Monitoring • Dual visual/IR output • IR LED • RS422/485 communications port	• Variety of solar/battery configurations • GSM Cell-Phone Monitoring • Dual visual/IR output • IR LED

CE

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



HOW TO ORDER

FAA L-810 LIOL Dual Fixture

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

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

Fixture Type:
D = Dual fixture

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

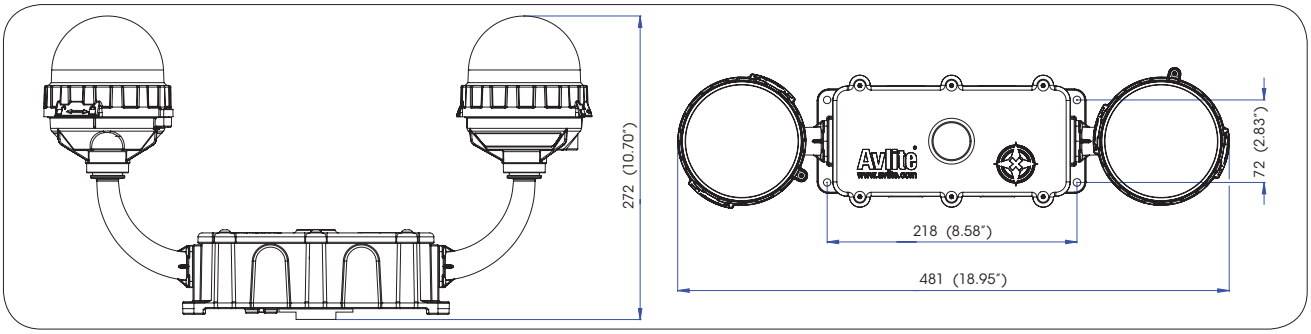
RS Communications Port:
RS = RS communications port (VDC model)
[blank] = No RS communications port

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

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.



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