

Obstruction Lighting



Avlite Systems has an extensive range of LED obstruction lighting to clearly mark structures such as telecommunication towers, wind turbines and buildings. Avlite's LED obstruction lights offer an ultra bright, energy efficient, cost effective lighting solution.

Avlite has a wide variety of obstruction light models and product options to suit many lighting applications. Models are available in universal AC, universal DC and self-contained solar powered units. The self contained units are easy to install and require minimal maintenance. Cabling or additional hardware is not required, and intensity and flash patterns can be programmed into the lights or controlled externally by one of Avlite Systems' optional Monitoring and Control Systems.

Product Range

Solar Obstruction Lights

The Avlite AV-60 and AV-70 obstruction lights are completely solar powered removing reliance on grid-power helping to reduce installation time and running costs. The internal solar module charges the battery during daylight hours and an internal photodiode automatically activates the light once the ambient light threshold drops sufficiently.

Features

- Integrated solar/battery system
- does not rely on grid power
- High-performance solar modules to maximise solar collection
- Fast & easy to deploy
- Ultra-high intensity, energy efficient LEDs
- User-replaceable battery
- Zero electricity costs
- Low maintenance
- IP68 dustproof & waterproof rating

Compliance

- FAA AC150/5370-2E for construction and barricade installations



AV-60 Model

AV-70 Model

Monitoring & Control Options - AV-70 Model only



Solar Powered ICAO Low Intensity Type A Obstruction Lights

Avlite's Solar powered ICAO LIOL Type A is a robust, completely self-contained solar powered LED obstruction light. The AV-C310 model has four 3 watt (12watt total) premium-grade solar modules integrated into the solar chassis, and mounted to collect sunlight at all angles. The AV-C410 model has four larger 5watt panels (20watt total) for use in areas of lower sunlight to maximise solar collection.

Features

- Integrated solar/battery system - does not rely on grid power
- Ultra-high intensity, energy efficient LEDs
- User-replaceable battery & solar modules
- Zero electricity costs
- Low maintenance
- IP68 dustproof & waterproof rating
- Available in two power supply sizes to suit various locations

Compliance

- Low Intensity Type A Obstruction Light, ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Forth edition July 2004, table 6.3



Monitoring & Control Options



Solar Powered ICAO Low Intensity Type A Obstruction Lights

The AV-23 is a low intensity solar powered obstruction light designed to offer users years of maintenance-free operation. This completely self-contained unit with integrated solar module and battery system saves users considerably in power, cabling and on-going maintenance associated with traditional incandescent systems.

During daylight hours the solar module will charge the battery and the light will automatically begin operation at dusk once the ambient light threshold drops sufficiently.

Features

- Integrated solar/battery system - does not rely on grid power
- High-performance 10watt solar module to maximise solar collection
- User-replaceable 7.5Ah SLA battery
- Ultra-high intensity, energy efficient LEDs
- Zero electricity costs
- Low maintenance

Compliance

- Low Intensity Type A & B Obstruction Light, ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Fourth edition July 2004, table 6.3



AV-23 Model



Universal AC or Universal DC FAA & ICAO Low Intensity Obstruction Light

This Avlite light fixture is a steady burning, low intensity LED obstruction light designed to comply with FAA L-810 and ICAO LIOL Type A & B requirements.

Adjustable intensity settings allow the user to easily toggle between 10cd (ICAO Type A) and 32cd (ICAO Type B) light intensities. The light fixture is available in two configurations, universal DC (12-48VDC) or universal AC (110-240VAC).

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 intensity to toggle between ICAO LIOL Type A (10cd) & LIOL Type B (32cd)
- Alarm contact for remote monitoring
- Light sensor for day/night operation
- Easily retrofits with existing installations
- Optional solar powered configurations available
- Optional combined visual/IR for pilots using NVG
- Optional RS422/485 communications port for monitoring DC version



Compliance

- Low Intensity Type A & B Obstruction Light, ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Fourth edition July 2004, table 6.3
- FAA AC150/5345-43F for L-810 Steady-burning Red Obstruction Light. Certification pending early 2013
- FAA Engineering Brief No. 67D

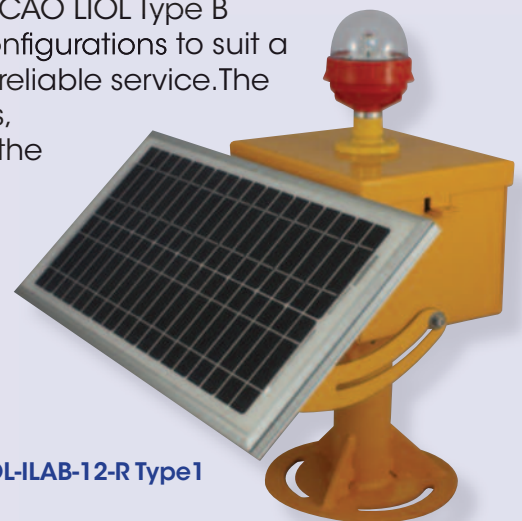
Solar Powered Complete Light Assembly FAA & ICAO Low Intensity Obstruction Light

Avlite's low intensity LED obstruction light complete assembly is a self-contained, solar powered obstruction light designed to comply with FAA L-810 and ICAO LIOL Type B requirements. The assembly is available in two solar/battery configurations to suit a range of installations and ensures years of maintenance-free reliable service. The solar modules charge the battery during daylight hours, and the light automatically begins operation at dusk once the ambient light threshold drops sufficiently.

Features

- Cost effective, energy efficient obstruction lighting solution
- Integrated solar/battery system
- Available in two power supply sizes to suit various locations
- Light sensor for day/night operation
- LED technology reduces maintenance time and costs
- Optional combined visual/IR for pilots using NVG
- Optional RS422/485 communications port for monitoring DC version
- Also available with dual light fixture for redundant failsafe

Monitoring & Control Options



AV-OL-ILAB-12-R Type1

Compliance

- Low Intensity Type A & B Obstruction Light, ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Fourth edition July 2004, table 6.3
- FAA AC150/5345-43F for L-810 Steady-burning Red Obstruction Light. Certification pending early 2013
- FAA Engineering Brief No. 67D

Universal AC or Universal DC Dual Fixture FAA & ICAO Low Intensity Obstruction Light

This Avlite light fixture is a steady burning, low intensity, universal DC (12-48VDC) or AC (110-240VAC) LED obstruction light designed to comply with FAA L-810 and ICAO LIOL Type A & B requirements. 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.

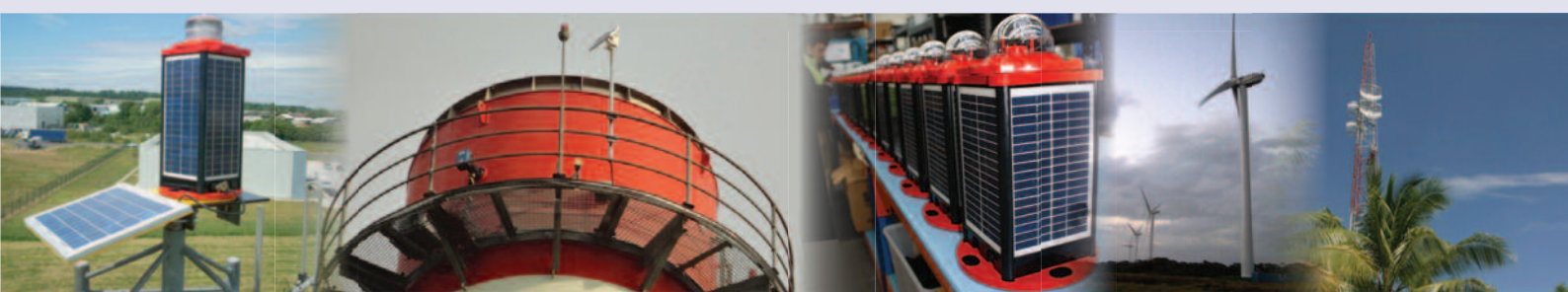
Features

- 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 intensity to toggle between ICAO LIOL Type A (10cd) & LIOL Type B (32cd)
- 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
- DC version available with 2.4GHz Radio Control
- DC version available with GSM monitoring
- DC version available with RS422/485 communications port for monitoring



Compliance

- Low Intensity Type A & B Obstruction Light, ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Fourth edition July 2004, table 6.3
- FAA AC150/5345-43F for L-810 Steady-burning Red Obstruction Light. Certification pending early 2013
- FAA Engineering Brief No. 67D



Monitoring Systems

Alarm Contact for Remote Monitoring

Selected Avlite obstruction lights are available with alarm contact for remote monitoring.

The alarm relay is energised in normal operation and is released if the LED fails.

Multiple lights can be connected in a 'daisy-chain' formation creating an open circuit.

If one light in the chain should fail, breaking the circuit, the alarm will be triggered.



GSM Cell-Phone Monitoring & Control

GSM Cell-Phone Monitoring is a cost effective option giving operators remote control over flash code and intensity settings as well as other features for GSM-enabled lights. The system can be configured to send out alarm SMS text messages to designated cell-phone numbers.

The GSM Monitoring System is a completely integrated module designed to allow convenient monitoring of Avlite lights using a cell-phone and web access from remote locations. Each light is fitted with its own SIM card, which provides a designated cell-phone contact number for each individual light. Any network operator can be used providing they have GSM coverage.

Features

- Monitor light status using any cell-phone or Avlite's secure website user portal
- Reports pre-programmed alarm conditions automatically to designated cell-phone numbers and email addresses
- Access lantern diagnostics remotely via SMS text message
- Light responds only to authorised users
- Trend analysis of historical data enables proactive maintenance scheduling
- Low cost monitoring



GPS Synchronisation

Avlite has utilized the latest advancements in GPS technology to develop a synchronisation system that can be incorporated into various lights. The lights are fitted with an internally integrated GPS module and, using overhead satellites, multiple lights set to the same flash pattern will flash in unison. Using this system, lights can flash in synchronisation without distance or line of sight limitations. Avlite's GPS system provides users with the ability to clearly mark obstructions, oil platforms or general boundaries.

Features

- Longer range flash synchronisation via GPS satellites
- No limitation on distance or objects between lights
- Each light operates independently - no operator intervention required
- Internal GPS module with no external components required, maintaining IP68 dustproof & waterproof rating of the light
- Lights set to the same flash pattern will come into synchronisation





Radio Control

Various Avlite obstruction lights have the option to be operated by a wireless handheld controller, enabling personnel to remotely activate and set specific characteristics of the lights. Using advanced proprietary software, the airfield lighting system has a large operational range. The operating range of the hand-held controller is up to 1.4km.

Features

- 2.4GHz worldwide accepted radio control
- 128bit security encryption
- SHUT DOWN or turn all lights 'ON' remotely within seconds
- In addition to obstruction lights, multiple Avlite RF fixtures such as taxiway and runway lights can also be controlled using the same controller



HOW TO ORDER AV-OL Series Obstruction Lights:

ICAO Compliant

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

Product No.: _____

Model: _____

12 = 12-48 VDC
UM = 110-240 VAC

Color: _____

R = Red
IR = Infrared
RIR = Combined Red/IR

Single or Dual Fixture: _____

[blank] = Single light fixture
[D] = Dual light fixture

Solar/Battery Configuration: _____

CT1 = Type 1
CT2 = Type 2
[blank] = No solar/battery configuration

Monitoring & Control: _____

G = GSM
RF = Radio Control
G-RF = GSM & Radio Control
[blank] = No monitoring & control

RS Communications Port: _____

RS = RS communications port
[blank] = No RS communications port

FAA Compliant

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

Product No.: _____

Model: _____

12 = 12-48 VDC
UM = 110-240 VAC

Color: _____

R = Red
IR = Infrared
RIR = Combined Red/IR

Single or Dual Fixture: _____

[blank] = Single light fixture
[D] = Dual light fixture

Solar/Battery Configuration: _____

CT1 = Type 1
CT2 = Type 2
[blank] = No solar/battery configuration

Monitoring & Control: _____

G = GSM
RF = Radio Control
G-RF = GSM & Radio Control
[blank] = No monitoring & control

RS Communications Port: _____

RS = RS communications port
[blank] = No RS communications port



Industry Standards

To warn aircraft of potential dangers caused from obstacles, authorities such as ICAO and the FAA issue industry standards governing the marking of obstacles such as buildings and towers.

Avlite can provide an obstruction lighting solution to meet industry standards. Obstruction lighting guidelines vary depending on geographic location, weather conditions and terrain. Avlite Systems suggests you contact your local authority to obtain guidelines specific to your region.



Avlite[®]
www.avlite.com

Avlite Systems is a world-class solar aviation lighting systems manufacturer with a proven reputation for rapid, innovative, and agile technology solutions designed specifically for defense, government, civil and humanitarian aid operations in the most remote, toughest environments.

Avlite's manufacturing process includes experienced electronics and software engineers, a skilled production team, sophisticated machinery and first rate ISO9001:2008 quality assurance procedures.

Agile Manufacturing

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Product Innovation

•

Precision Construction

•

Total Quality Management

•

Rapid Turnaround



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Eco-friendly: Zero CO₂ emissions!



Using clean, pollution-free energy from the sun to power the lights offers an eco-friendly and cost effective lighting solution. Because Avlite Systems' solar aviation lights are run using solar power there are zero carbon dioxide emissions!