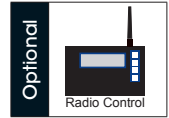


Solar Powered ICAO Type A or Type B Low Intensity Obstruction Light

AV-OL-425-ILAB with Radio Control



- LED Optic
- Solar powered, self-contained
- Small form factor
- Easy to handle & install
- Field replaceable components
- Monitoring options available
- Optional ON/OFF switch & external charging port

Features

- Integrated solar/battery system
- User-replaceable solar modules
- IP68 waterproof rating
- Optional NVG Mode - Illumination invisible to naked eye to support covert operations
- Optional worldwide 2.4GHz Encrypted RF Radio Control - Secure control of all operational modes from anywhere on the airfield. Worldwide ISM use frequency
- AvMesh® integrated Mesh Network - Each light is a receiver/transmitter to expand communication range
- Radio Transceiver - Internal to light head, no external antenna
- Modes of Operation - Programmable lighting groups, dusk-till-dawn operation, adjustable intensity, sequence flashing

Applications

Solar Powered Low Intensity Obstruction Light

Certifications

Low Intensity Type A & B Obstruction Light, ICAO Annex 14, Volume 1, Sixth Edition, July 2013, 'Aerodrome Design and Operations'

Avlite's Solar powered ICAO LIOL Type A or B is a robust, completely self-contained solar powered LED obstruction light.

The AV-OL-425-ILAB model has four premium-grade solar modules integrated into the solar chassis, and mounted to collect sunlight at all angles. The solar array charges the 24Ah battery during daylight hours, and at dusk the light will automatically begin operation.

The rugged design of this self-contained light ensures in excess of 12 years reliable service with minimal ongoing maintenance. Specifically designed for the harshest of environments, this light features a 7-stage, powder-coated aluminium top, base and internal chassis. The rubber, extruded corners provide additional impact resistance.

The advanced light optic uses high intensity LEDs. The tough polycarbonate lens is specifically designed for use with LEDs to maximize light intensity and uniformity. The light head is interchangeable between units, and can be replaced onsite by the operator if required.

The unit can also be supplied in varying colour outputs to suit other applications including runway edge lighting. For military applications the unit is also available in infrared (IR).

The AV-OL-425-ILAB has non-precision IFR and VFR capability with both visible and near infrared lighting outputs. The airfield lights can be controlled anywhere in the airfield by handheld radio controller or in the air traffic control tower with virtually unlimited range using an encrypted repeating mesh network.

The AV-OL-425-ILAB wireless RF light has an extended range through the use of the **AvMesh®** communication network. The proprietary **AvMesh®** network enables each light to transmit and receive commands, allowing the airfield to be expanded or altered at any time.

AvMesh® is self-realizing, meaning once deployed the airfield lights will undertake a period of network mapping, whereby the system automatically determines an efficient path to relay command messages through the airfield.

AvMesh® has redundancy. Once the system has mapped an efficient relay of command messages, a secondary sub-network is mapped for added redundancy.

The AV-OL-425-ILAB has three selectable modes; always on, dusk-till-dawn and standby. When set to dusk-till-dawn mode, integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently and the light will begin operation automatically.

Lights are able to be assigned to a 'light group', and groups can be controlled independently using the wireless handheld controller. Sequenced approach can also be easily set up via the serial port and controller.

Tested to MIL-STD's for environmental exposure including shock and vibration, extreme temperature and humidity, the unit is designed to offer years of maintenance-free service and operate in some of the world's harshest environments.



The AV-SB-10 Solar Booster™ can be connected to AV-OL-425-ILAB light to provide additional solar collection to charge the battery. The Avlite Solar Booster™ can be used in areas of reduced sunlight to help ensure optimum battery charge or where longer periods of high intensity mode is required.



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SPECIFICATIONS * * AV-OL-425-ILAB

Light Characteristics

Light Source	As tested AV-OL-425
Available colours	Red as standard. Other colours available on request, including IR
Peak Intensity (cd)†	Complies with ICAO LIOLA & LIOLB
Horizontal Output (degrees)	360
Vertical Divergence (degrees)	as per ICAO Type A/B specification
Available Flash Characteristics	>250 including steady-on (user-adjustable)
LED Life Expectancy (hours)	>100,000

Electrical Characteristics

Circuit Protection	Integrated
Operating Voltage (V)	12
Power (W)	Type A: 1 Type B: 2
Temperature Range	-40 to 80°C

Solar Characteristics

Solar Module Type	Multicrystalline
Output (watts)	20
Charging Regulation	Microprocessor controlled

Power Supply

Battery Type	SLA (Sealed Lead Acid)
Battery Capacity (Ah)	24
Nominal Voltage (V)	12
Autonomy (nights)	Steady-on: >15 (Type A) >10 (Type B)

Radio Controlled

Frequency	2.4GHz ISM Band
Range	Up to 1.4km relayed
Expandability	AvMesh®
Compliance	FCC / CE

Physical Characteristics

Body Material	7-stage powder coated aluminium
Lens Material	LEXAN® Polycarbonate - UV stabilized
Lens Diameter (mm/inches)	155 / 6 1/8
Lens Design	Multi LED Optic
Mounting	4 hole 200mm bolt pattern
Height (mm/inches)	507 / 20
Width (mm/inches)	233 / 9 1/8
Mass (kg/lbs)	14 / 30 7/8
Product Life Expectancy	12 years plus

Environmental Factors

Humidity	0 to 100%, MIL-STD-810F
Icing	48.5lbs per square inch / 3.41kg per square cm
Wind Speed	Up to 160kph / 100mph
Shock	MIL-STD-202G, Test Condition G, Method 213B
Vibration	MIL-STD-202G, Test Condition B, Method 204

Certifications

CE	EN61000-6-3:1997. EN61000-6-1:1997
Quality Assurance	ISO9001:2008
Waterproof	IP68

Intellectual Property

Patents	Patents pending
Trademarks	AVLITE® is a registered trademark of Avlite Systems

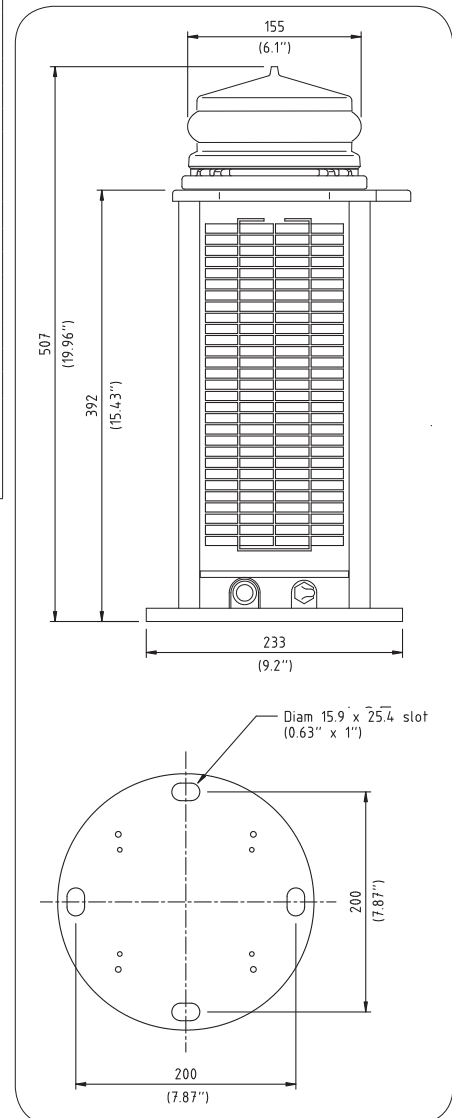
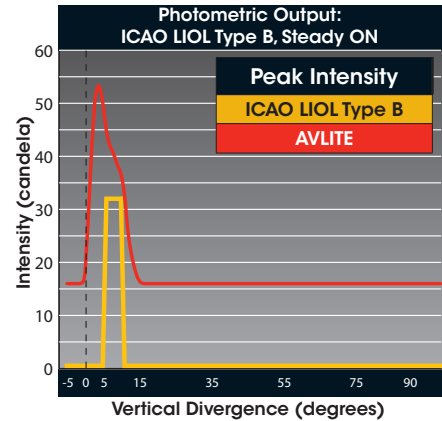
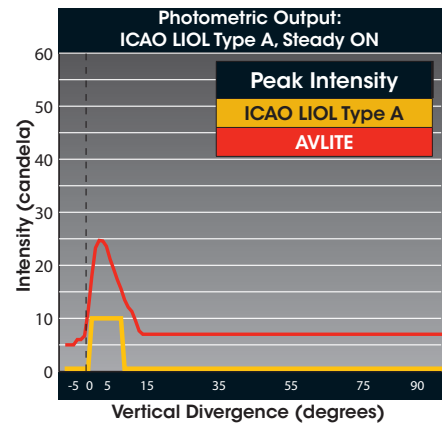
Warranty *

Options Available

- 3 year warranty
- Radio Controlled - FCC compliant
- IR LEDs
- External ON/OFF Switch
- External Battery Charging Port
- Solar Booster™



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



Optional External ON/OFF Switch & External Charging Port

This model can be fitted with an optional, external ON/OFF switch. The light can also be fitted with an optional external charging port for charging the battery while it is stored for extended periods.

Optional Radio Control

The light is available with optional radio-control which can be used in conjunction with a PALC or simple handheld controller. Users can wirelessly control ON/OFF functions, adjust light intensities or switch between visual and IR (tactical) operational modes.

