ICAO Low Intensity Obstruction Light

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

Features

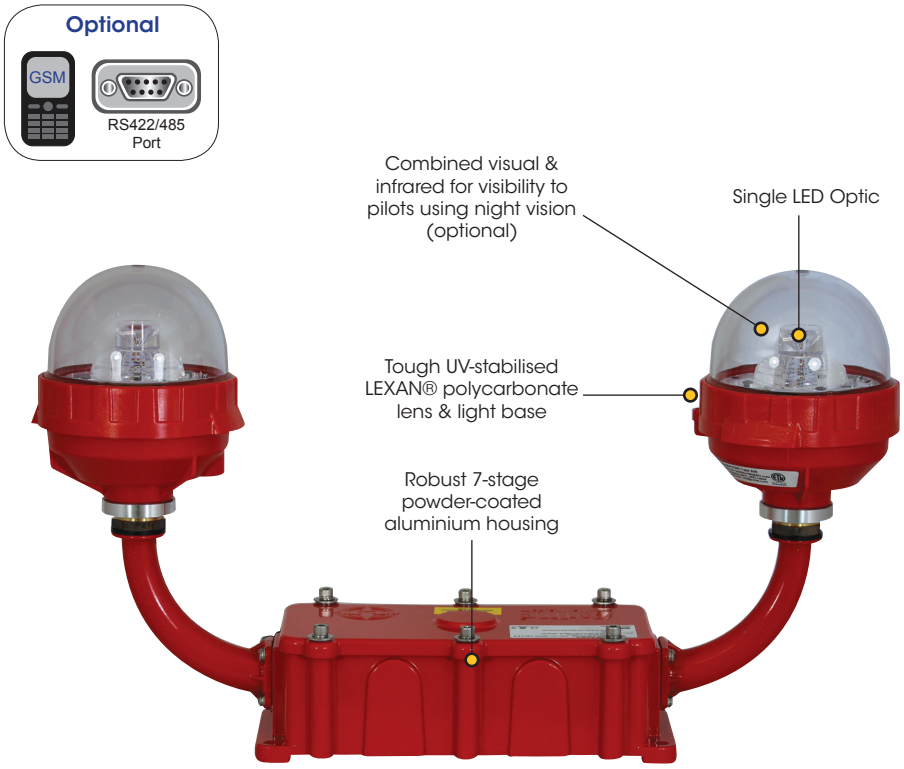
- Cost effective, energy efficient obstruction lighting solution
- Available in universal DC: will accept between 12-48VDC
- Available in universal AC: will accept between 110-240VAC
- User-adjustable intensity to toggle between ICAO LIOL Type A (10cd) & LIOL Type B (32cd)
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- 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 for DVC model
- Available with optional RS422/485 communications port for monitoring for VDC model
- Optional combined visual/IR for pilots using NVG

Applications

- Low Intensity Obstruction Light for marking obstacles that do not exceed 45 metres in height

Certifications

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



This Avlite dual light fixture is a steady burning, low intensity LED obstruction light designed to comply with ICAO LIOL Type A & Type B requirements. The model can be used for marking obstacles up to 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).

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. The alarm relay is energised in normal operation and is released if there is an LED or power fault.

The ICAO model has adjustable intensity settings allowing the user to easily toggle between 10cd (ICAO Type A) and 32cd (ICAO Type B).

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) for visibility to pilots using night vision.

Optional GSM Monitoring & Control

The Avlite dual obstruction light (VDC model) 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.

Avlite®
www.avlite.com

Avlite Systems
AUSTRALIA
t: +61 (0)3 5977 6128

USA
t: +1 (603) 737 1310

w: **www.avlite.com**
e: **info@avlite.com**

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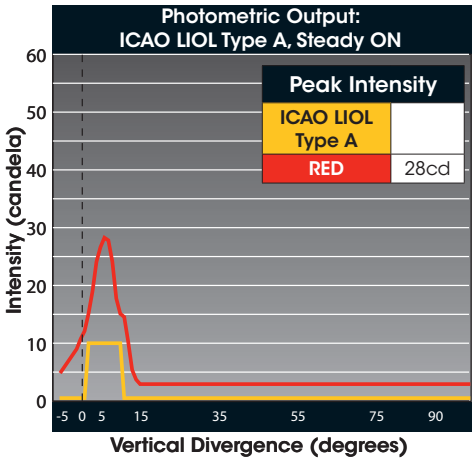
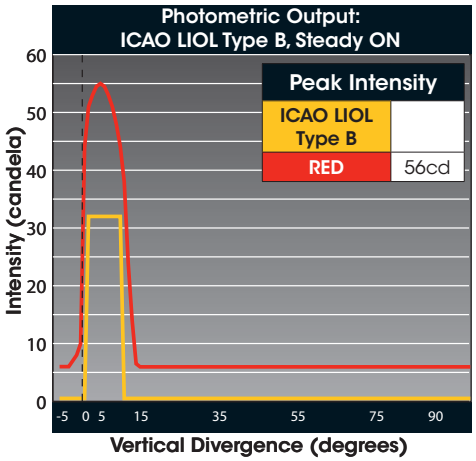
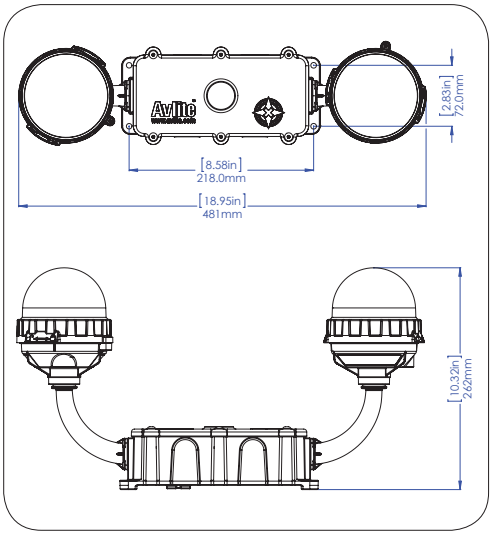
ICAO Low Intensity Obstruction Light

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

SPECIFICATIONS • *	ICAO Type A & Type B LIOL Dual Fixture	
	12–48 VDC	110–240 VAC
Light Characteristics		
Light Source	As tested; ICAO: AV-OL-ILAB-12-R (Type A) & AV-OL-ILAB-12 (Type B)	As tested; ICAO: AV-OL-ILAB-UM-R (Type A) & AV-OL-ILAB-UM (Type B)
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 ICAO LIOLA & LIOLB	Complies with ICAO LIOLA & LIOLB
Horizontal Output (degrees)	360	360
Vertical Divergence (degrees)	as per ICAO Type A/B specification	as per ICAO Type A/B specification
Reflector Type	Single LED Optic	Single LED Optic
Intensity Adjustments	User-adjustable between 10cd & 32cd	User-adjustable between 10cd & 32cd
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:		
Current Draw (mA)‡	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Imax = 75 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Imax = 180	n/a
Power (W)‡	ICAO LIOL Type A @ 10cd Steady-on with relay energised & IR: Pmax = 0.9 ICAO LIOL Type B @ 32cd Steady-on with relay energised & IR: Pmax = 2.16	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 3 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 4.5 Smax = 12VA
Dual Lit Configuration @ 12V:		
Current Draw (mA)‡	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Imax = 150 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Imax = 360	n/a
Power (W)‡	ICAO LIOL Type A @ 10cd Steady-on with relay energised & IR: Pmax = 1.8 ICAO LIOL Type B @ 32cd Steady-on with relay energised & IR: Pmax = 4.32	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 6 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 9 Smax = 24VA
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 / 3 7/8	100 / 3 7/8
Lens Design	Single LED Optic	Single LED Optic
Mounting	ICAO Model: 4 x 6.5mm mounting holes	ICAO Model: 4 x 6.5mm mounting holes
Height (mm/inches)	ICAO Model: 262 / 10 3/8	ICAO Model: 262 / 10 3/8
Width (mm/inches)	481 / 19	481 / 19
Mass (kg/lbs)	2.3 / 5	2.3 / 5
Product Life Expectancy	Up to 12 years	Up to 12 years
Environmental Factors		
Humidity	0 to 100%, MIL-STD-810F	0 to 100%, MIL-STD-810F
Icing	22kg per square inch	22kg per square inch
Wind Speed	Up to 240kph	Up to 240kph
Certifications		
CE	EN61000-6-3:2007 EN61000-6-1:2007	EN61000-6-3:2007 EN61000-6-1:2007
Quality Assurance	ISO9001:2008	ISO9001:2008
ICAO	Low Intensity Obstruction Light Type A & B	Low Intensity Obstruction Light Type A & B
Waterproof	IP67	IP67
Intellectual Property		
Trademarks	AVLITE® is a registered trademark of Avlite Systems	AVLITE® is a registered trademark of Avlite Systems
Warranty *	4 year warranty	4 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 • 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

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AUSTRALIA
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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:
GSM = GSM
RF = Radio Control
[blank] = No monitoring & control

RS Communications Port:
RS = RS communications port
[blank] = No RS communications port

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