



LUXSOLAR® CATALOGUE

Safe Area LED Aircraft Warning Lights

rev_241127



www.luxsolar.com

Luxsolar® is a department of
CE2K S.r.l.





Luxsolar and LXS - registered trademarks CEZK S.r.l. - identify a series of special lighting suitable both for potentially explosive atmospheres and safe areas.

Today, after a decade marked by a growing global market presence, Luxsolar has become the first manufacturer of LED Aircraft Warning Lights offering a complete range from low to high intensity. All LUXSOLAR products, designed and manufactured in Italy, are the result of a constant R&D activity performed in-house.

Luxsolar mission is to create innovative products that combine high-tech and sustainable features. Our aim is to offer tailor-made lighting solutions in compliance to local and international regulations for airports, heliports, marine environments and elevated structures.

A handwritten signature in dark ink, appearing to read 'N. V. V. V.', is positioned above the LUXSOLAR logo and tagline.

LUXSOLAR

**everything is made for passion*

CERTIFICATION and TESTS

LUXSOLAR along with high quality and innovative products, offers to its customers fully compliant to latest International Rules lighting devices.

To guarantee the full compliance with all prescriptions, all our photometric tests are performed in accredited EN17025 laboratory.

Some of undertaken tests:

PHOTOMETRIC TESTS

- ICAO compliance test
- EASA compliance test
- FAA compliance test
- CAP168 compliance test
- CAP437 compliance test

MECHANICAL TESTS

- Vibration test
- Wind tunnel test
- Degree of protection test
- Climatic chamber test
- Salt atmosphere test



INDEX

AIRCRAFT WARNING LIGHTS FOR SAFE AREAS

Low Intensity Obstruction Light

▶ LIOL-A, LIOL-B and LIOL-E.....	6
▶ LXS-ONE-A and LXS-ONE-B.....	10
▶ SOLAR POWERED LOW INTENSITY.....	14
CONTROL BOX.....	20

Medium Intensity Obstruction Light

▶ MIOL-B and MIOL-C.....	26
▶ MIOL-A.....	29
▶ MIOL-AB and MIOL-AC.....	32
▶ MIOL-AB and MIOL-AC ALL IN ONE	35

High Intensity Obstruction Light

▶ HIOL-A 120° and HIOL-AB/AC 120° (LXS-RUG).....	39
▶ HIOL-B 120° and HIOL-BB/BC 120° (LXS-RUG).....	43
CONTROL PANEL	45

SYSTEMS CONFIGURATION

Light positioning

▶ Elevated structures <45m.....	56
▶ Elevated structures from 45m to 105m.....	57
▶ Elevated structures from 105m to 150m.....	58
▶ Elevated structures >150m.....	59

CONTACTS

C&E S.r.l.....	63
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LOW INTENSITY

LOW INTENSITY OBSTRUCTION LIGHT



As specified by Annex 14 of ICAO regulation, Low Intensity Obstruction Lights (LIOL) should be used to warn the presence of obstacles up to 45m height, such as telecommunication towers, wind turbines, chimneys, cranes, buildings and other structures.

Low Intensity Obstruction Lights are the simplest devices according to ICAO standards and they have the following characteristics and uses:

- LIOL Type A (intensity $>10\text{cd}$, red steady burning) can be used alone;
- LIOL Type B (intensity $>32\text{cd}$, red steady burning), can be used either alone or in combination with medium intensity obstacle lights Type B, Type AB or with high intensity obstacle lights Type AB;
- LIOL Type E (intensity $>32\text{cd}$, red flashing), can be used either alone or in combination with medium intensity obstacle lights, Type B. Flashing rate will be set at the same rate of other flashing beacons installed on the structure.



LOW INTENSITY

LIOL-A, LIOL-B and LIOL-E LOW INTENSITY OBSTRUCTION LIGHT

Polycarbonate UV resistant dome

►Standard circuits or TWIN*
►Infrared version*

Anti-condensation Gore-Tex valve

Anodised aluminium body with heat-sink pins

Stabilised light output: LIOL-A: >10cd
LIOL-B: >32cd
LIOL-E: >32cd

Based on LED technology
Red flashing light
Red steady burning light

Polyurethane foam

GRP UV resistant box for electronic circuit



IP66



*as option

LUXSOLAR L810-LXS Low Intensity Obstruction Light is compliant to ICAO (Low Intensity - Type A, B or E), FAA (Type L-810), ENAC and EASA certified.

With a low-weight and compact body, high quality and ultra-bright LEDs, optical reflector for an optimum beam spread, LUXSOLAR LIOL-A/B/E product is your best choice for an efficient, long life and reliable Aircraft Warning Obstacle Light.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



LOW INTENSITY

LIOL-A, LIOL-B and LIOL-E TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light - Steady Burning
- RED light - Flashing
- LIOL-A: >10 cd
- LIOL-B: >32 cd
- LIOL-E: >32 cd (flashing light)
- Cd emission: +6° and +10°
- Horizontal beam radiation: 360°
- Vertical beam spread: >10°
- Optical reflector

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins for maximum heat dissipation
- Polycarbonate UV resistant dome
- Polyurethane foam
- Terminal JB for connection in Glass Reinforced Polyester (GRP), black colour
- Degree of protection: IP66
- Operating temperature AC version: from -30°C to +50°C
- Operating temperature DC version: from -40°C to +50°C
- Lamp unit weight: 1kg approx.
- Anticondensation Goretex valve
- SS304 beacon support bracket

ELECTRICAL FEATURES

- Power supply AC or DC
- Power consumption LIOL-A: 2W @12/24Vdc
- Power consumption LIOL-B: 2,8W @12/24Vdc
- Power consumption LIOL-E: 2W @12/24Vdc
- LED feeded at constant current

ORDER CODE

OPTIONS

- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)
- Automatic changeover from normal to stand-by LED circuit
- Fault alarm
- IR Wavelength - 850nm, compatible with pilot's NVG
- LUXSOLAR Cloud Monitoring System - Low Impact

APPLY TO

- Airport
- Stack
- High Building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

- DGAC/STAC approval nr. 2013A048
- ENAC approval nr. 0135182/ENAC/CIA
- EASA test report (EN17025 laboratory) nr. 326-QL20-R03/R04
- CE marking

COMPLIANCE

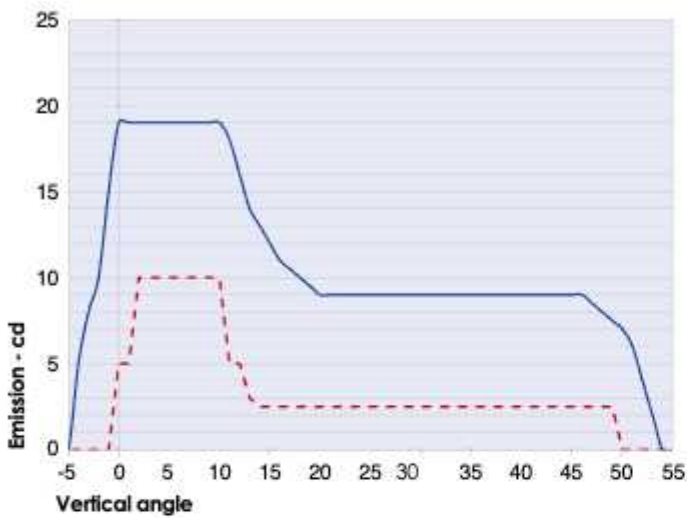
- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Low intensity, Type A-B steady burning obstacle light, Type E flashing obstacle light
- FAA AC150/5345-43; E.B. #67 type L-810
- EASA CS-ADR-DSN, Chapter Q

LXS ORDERING CODE	[A] = Type A >10cd Steady Burning	[B] = Type B >32cd Steady Burning	[E] = Type E >32cd Flashing	JB GRP	115Vac	230Vac	12Vdc	24Vdc	48Vdc	TWIN	"INFRA RED"	SS304 SUPPORT	"FAULT CONTACT"	"AUTO SWITCH"	"TWILIGHT SENSOR"	*READY for CLOUD
L810-LXS-AR-[...].GS6R0S	*	*	*	*	*	*						*				
L810-LXS-AR-[...].GS2R1T	*	*	*	*			*	*		*		*	*	*	*	*
L810-LXS-AR-[...].GS2R2T	*	*	*	*			*	*		*		*	*	*	*	*
L810-LXS-AR-[...].GS2R1I	*	*	*	*			*	*		*		*	*	*	*	*
L810-LXS-AR-[...].GS6R1T	*	*	*	*	*	*			*	*		*	*	*	*	*
L810-LXS-AR-[...].GS6R2T	*	*	*	*	*	*			*	*		*	*	*	*	*
L810-LXS-AR-[...].GS6R1I	*	*	*	*	*	*			*	*		*	*	*	*	*
L810-LXS-AR-[...].GS7R1T	*	*	*	*					*	*		*	*	*	*	*
L810-LXS-AR-[...].GS7R2T	*	*	*	*					*	*		*	*	*	*	*
L810-LXS-AR-[...].GS6R1TI	*	*	*	*	*	*			*	*		*	*	*	*	*
L810-LXS-AR-[...].GS6R2TI	*	*	*	*	*	*			*	*		*	*	*	*	*
L810-LXS-AR-[...].GS2R1TI	*	*	*	*			*	*		*		*	*	*	*	*
L810-LXS-AR-[...].GS2R2TI	*	*	*	*			*	*		*		*	*	*	*	*

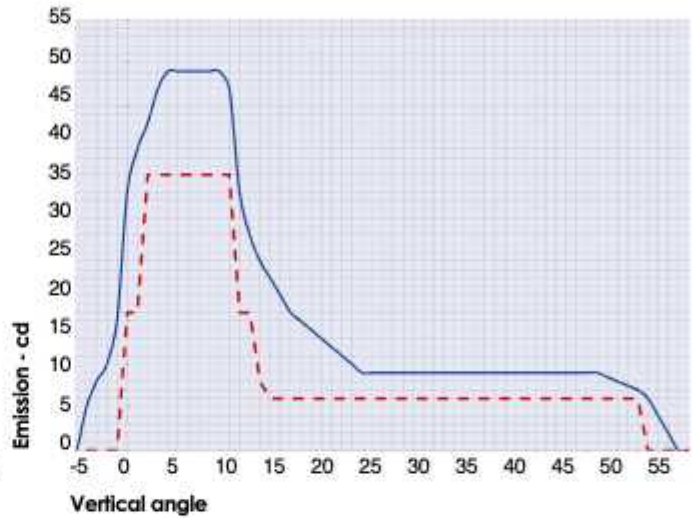
*Please specify "CLOUD" at the end of the code to add an innovative monitoring technology, specifically designed to receive and upload data on customer dedicated LUXSOLAR Web Dashboard. Through this system you will be able to monitor the status of the system, receive real-time reports and diagnostic.

LOW INTENSITY

LIOL-A, LIOL-B and LIOL-E TECHNICAL SPECIFICATIONS

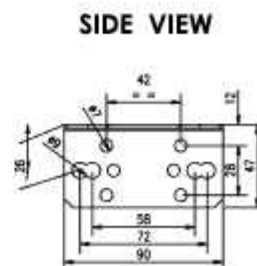
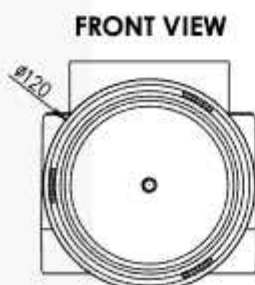
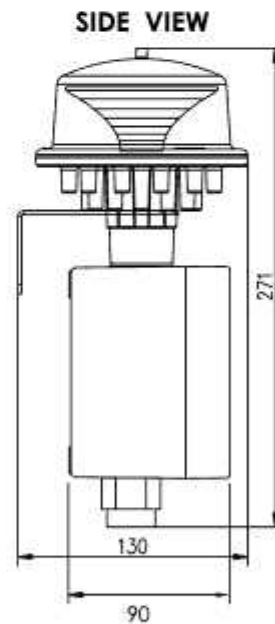
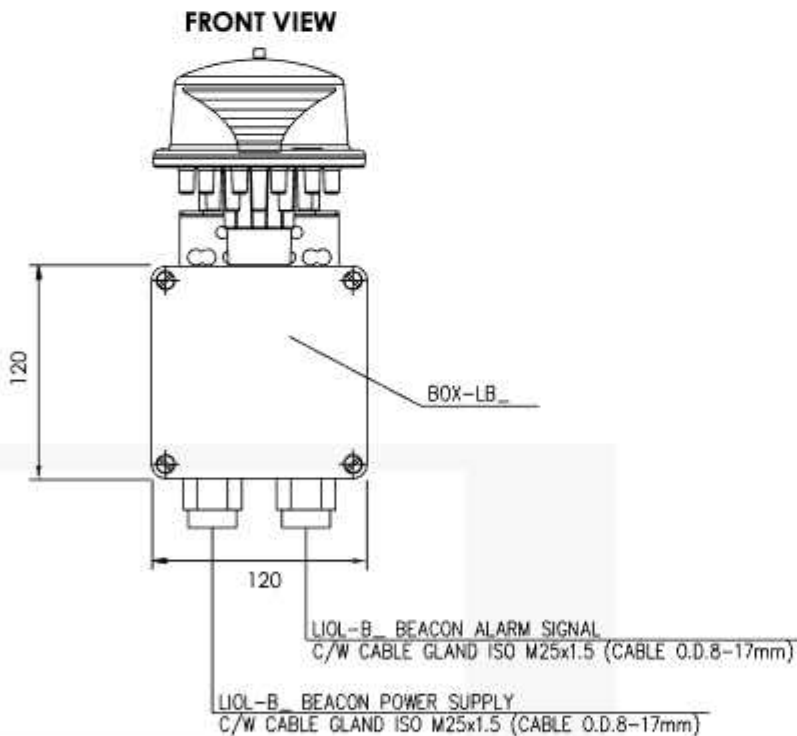


— L810-LXS-A average emission level
- - - ICAO ANNEX 14 low intensity type A Minimum Required Intensity



— L810-LXS-B/E average emission level
- - - ICAO ANNEX 14 low intensity type B and E Min Required Intensity

TECHNICAL DRAWING



LOW INTENSITY OBSTRUCTION LIGHT LXS-ONE



As specified by Annex 14 of ICAO regulation, Low Intensity Obstruction Lights (LIOL) should be used to warn the presence of obstacles up to 45m height, such as telecommunication towers, wind turbines, chimneys, cranes, buildings and other structures.

Low Intensity Obstruction Lights are the simplest devices according to ICAO standards and they have the following characteristics and uses:

- LIOL, Type A (intensity $>10\text{cd}$, red steady burning) can be used alone;
- LIOL, Type B (intensity $>32\text{cd}$, red steady burning), can be used either alone or in combination with medium intensity obstacle lights Type B, Type AB or with high intensity obstacle lights Type AB;



LOW INTENSITY

LXS-ONE-A/LXS-ONE-B

Stabilised light output:

LIOL-A: >10cd

LIOL-B: >32cd

EDPM gasket



PMMA lens

Anodised aluminium body

Cable Gland: M12x½

Beacon support bracket

IP66

PATENTED

LUXSOLAR L810-LXS-ONE Low Intensity Obstruction Light is compliant to ICAO (Low Intensity - Type A or B), FAA (Type L-810) and EASA certified.

With an ultra low-weight (less than 300gr) and smallest body for an obstruction light device, high quality and ultra-bright mono-LED, optical PMMA lens for an optimum beam spread, LUXSOLAR LIOL-A/B LXS-ONE product is your best choice for an efficient, long life and reliable Aircraft Warning Obstacle Light.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



LOW INTENSITY

LXS-ONE-A and LXS-ONE-B TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light - Steady Burning
- LIOL-A: >10 cd
- LIOL-B: >32 cd
- Peak intensity: @5°
- Horizontal beam radiation 360°
- Vertical beam spread >10°
- PMMA lens

MECHANICAL FEATURES

- PMMA dome and lens
- Anodised aluminium body
- EPDM gasket
- SS304 Beacon support bracket
- Degree of protection: IP66
- Operating temperature: -20°C to +60°C
- Dimension (Øxh): 68x60mm
- Lamp unit weight: 260gr

ELECTRICAL FEATURES

- Nominal input voltage: 9 - 60 VDC
- Power consumption: 0,8W (Type A) @12/24Vdc
- Power consumption: 3,1W (Type B) @12/24Vdc
- LED feeded at constant current

APPLY TO

- Airport
- Stack
- High Building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

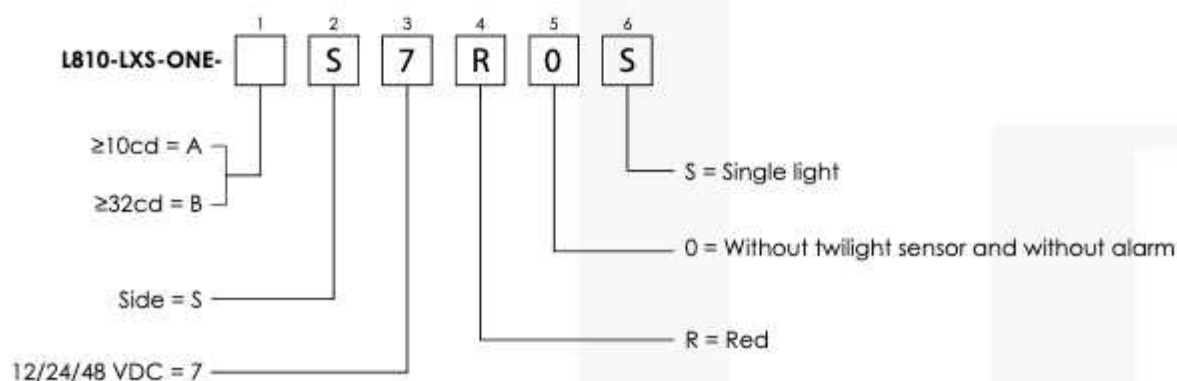
CERTIFICATIONS

- ICAO/EASA test report (EN17025 laboratory) nr. 326-QL20-R01/R02
- CE marking

COMPLIANCE

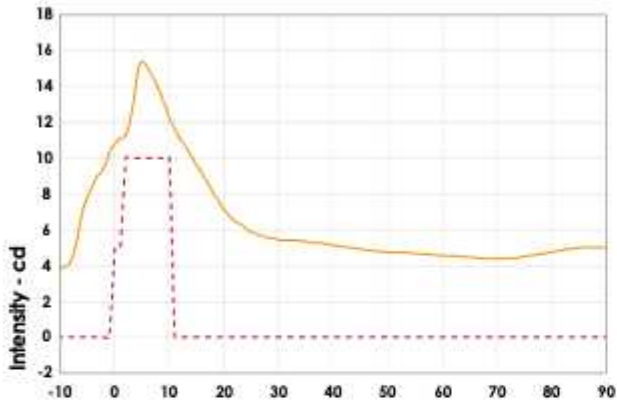
- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Low intensity, Type A-B steady burning obstacle light
- FAA AC150/5345-43; E.B. #67 type L-810
- EASA CS-ADR-DSN, Chapter Q

ORDER CODE



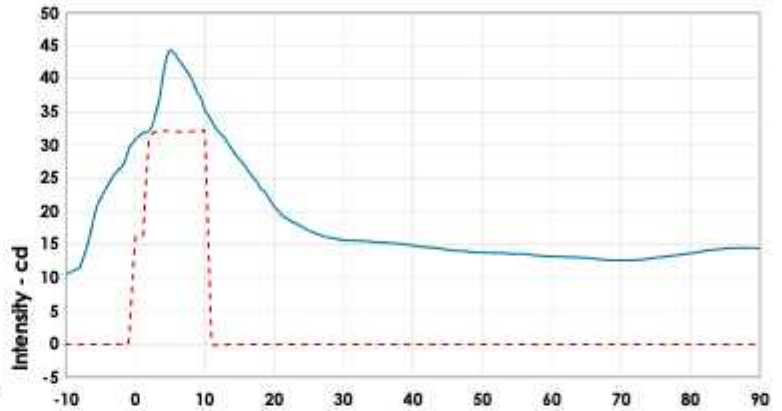
LOW INTENSITY

LXS-ONE-A and LXS-ONE-B TECHNICAL SPECIFICATIONS



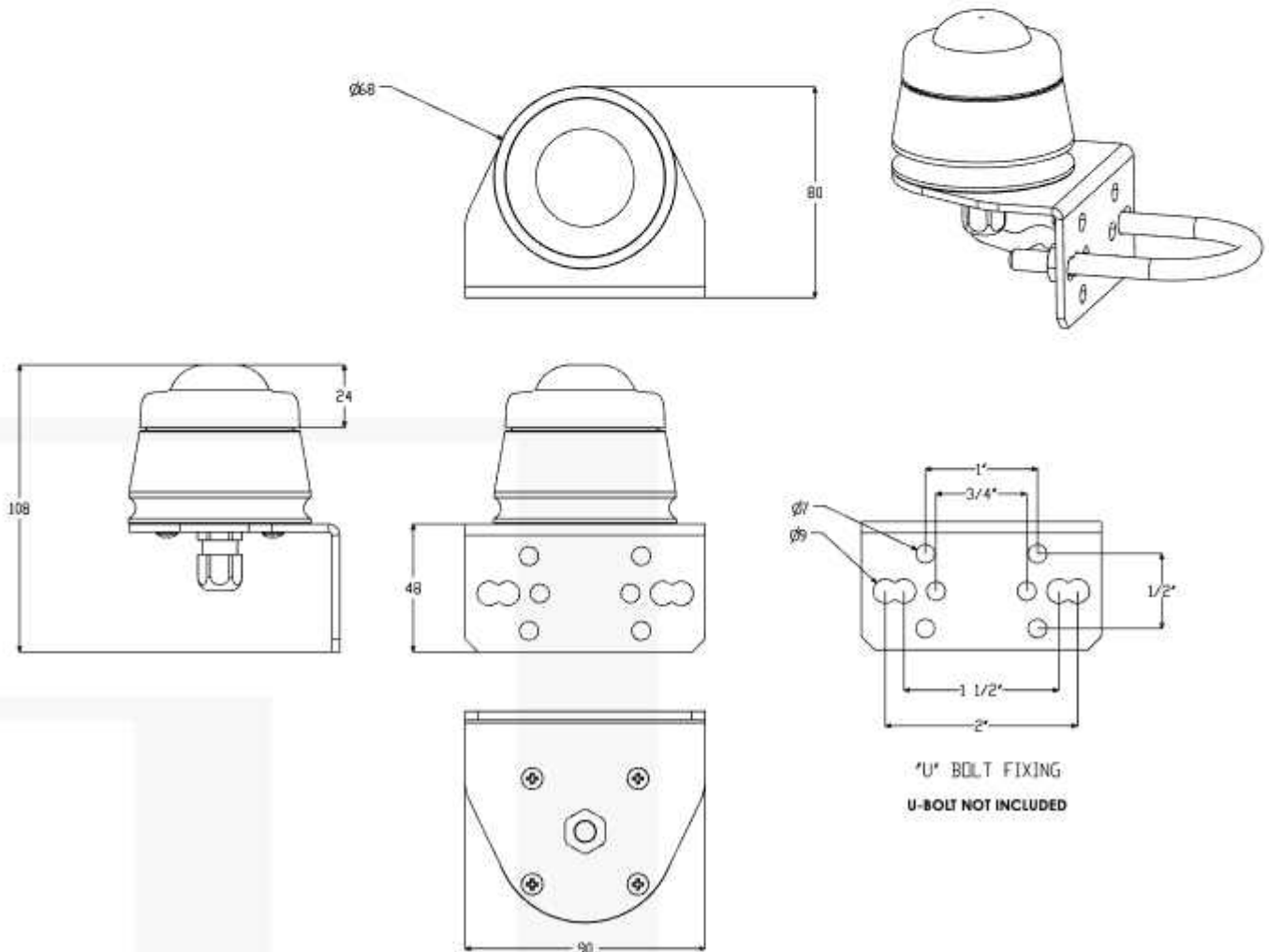
Vertical angle

- L810-LXS-ONE-A average emission level
- - ICAO ANNEX 14 low intensity type A Minimum Required Intensity



Vertical angle

- L810-LXS-ONE-B average emission level
- - ICAO ANNEX 14 low intensity type B Min Required Intensity



LXS SOLAR POWERED LOW INTENSITY OBSTRUCTION LIGHT



Low Intensity Obstruction Lights (LIOL) indicate the presence of elevated structures to aircrafts. As per ICAO Annex 14, these lights are used on: chimneys, cranes, telecom towers, buildings and other structures up to 45m height.

Low Intensity Obstruction Lights have the following characteristics and uses:

- LIOL Type A (intensity >10cd, red steady burning);
- LIOL Type B (intensity >32cd, red steady burning);
- LIOL Type E (intensity >32cd, red flashing).



SOLAR LOW INTENSITY

LXS SOLAR POWERED LOW INTENSITY OBSTRUCTION LIGHT



IP66

PATENTED

LUXSOLAR L810-LXS-SOL SOLAR POWERED Low Intensity Obstruction Light is compliant to ICAO/EASA (Low Intensity Type A, Type B and Type E), FAA (Type L-810).

Product LUXSOLAR L810-LXS-SOL is an advanced solar low intensity obstacle light. Made with high quality materials, this product is low weight and resistant to harsh climatic conditions. The light is provided with an integrated solar panel and Lithium battery for long autonomy and optical reflector to guarantee compliance with ICAO/EASA and FAA standards.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



SOLAR LOW INTENSITY

LXS SOLAR POWERED LIOL TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light - Steady Burning
- RED light - Flashing
- LIOL-A: >10 cd
- LIOL-B: >32 cd
- LIOL-E: >32 cd (flashing light)
- Cd emission: +6° and +10°
- Horizontal beam radiation: 360°
- Vertical beam spread: >10°
- Optical reflector

MECHANICAL FEATURES

- Body: polyamide
- Cover: polycarbonate UV stabilized high resistance
- Degree of protection: IP66
- Operating temperature: -20°C / +55°C
- Mounting: 4 hole 200mm bolt pattern
- Weight: 1,5kg
- Switch ON/OFF with magnetic sensor

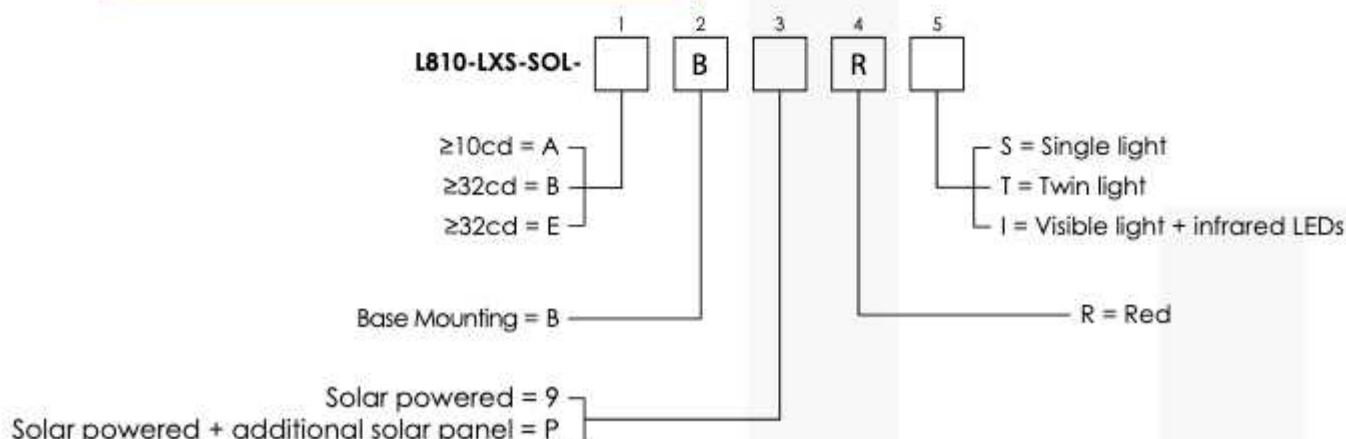
ELECTRICAL FEATURES

- Integrated circuit protection
- Recharge connector for external power source

SOLAR SYSTEM

- Lithium battery
- Monocrystalline high efficiency solar module
- Charging regulation: MPPT (Maximum Power Point Tracking)
- Solar cell works as twilight sensor
- LIOL-A/B Autonomy approx:
 - 75h, steady burning mode (*)
 - 800h, flashing mode @ 20 fpm (*)

ORDER CODE



(*)Autonomy depends upon light settings, installation location and weather conditions
Automatic regulation of luminous intensity in function of the status of the battery

OPTIONS

- Twin version: two separate LED circuits in the same fixture (normal + stand-by)
- Automatic changeover from normal to stand-by LED circuits
- IR wavelength - 850nm, compatible with pilot's NVG

APPLY TO

- Marine
- Airport
- Stack
- High Building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

- EASA test report (EN17025 laboratory) nr. 326-QL20-R03/R04
- CE marking

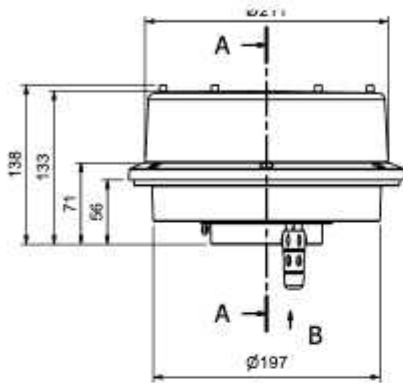
COMPLIANCE

- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Low intensity, Type A-B steady burning obstacle light, Type E flashing obstacle light
- FAA AC150/5345-43; E.B. #67 type L-810
- EASA CS-ADR-DSN, Chapter Q

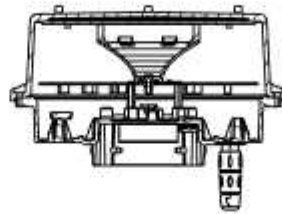
SOLAR LOW INTENSITY

LXS SOLAR POWERED LIOL TECHNICAL DRAWINGS

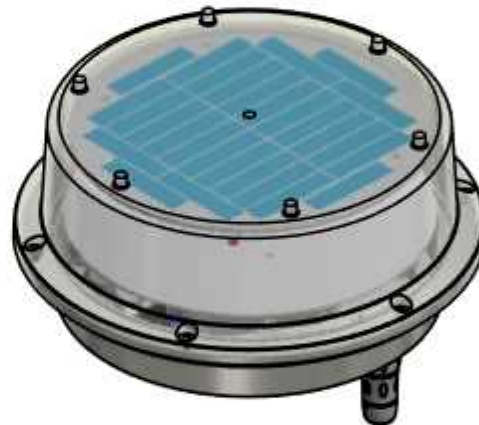
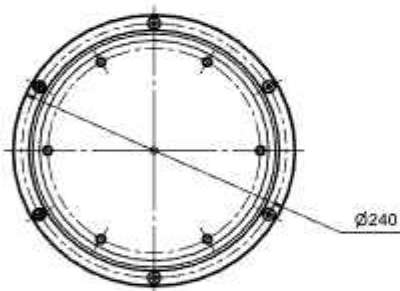
SIDE VIEW



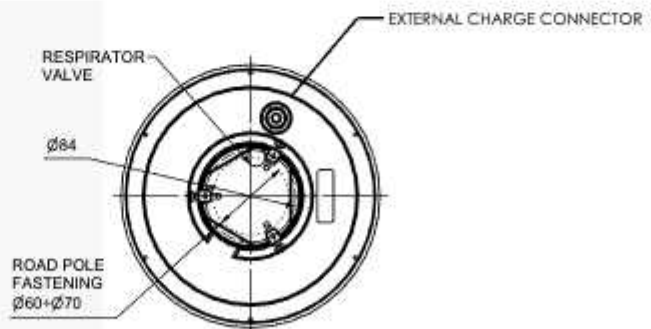
SEZ: A-A



TOP VIEW

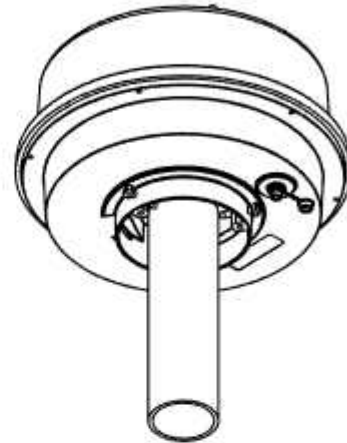
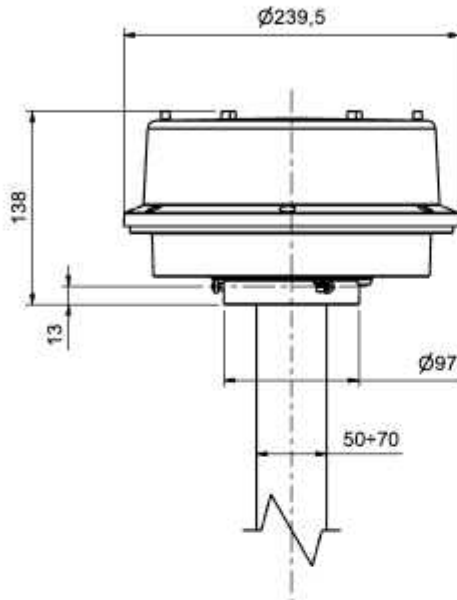


BOTTOM VIEW

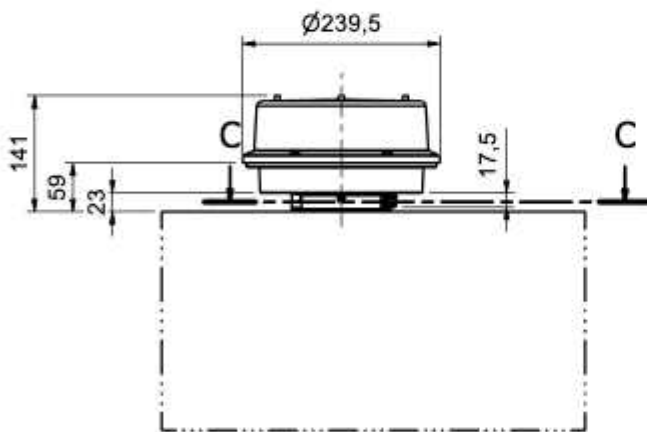


SOLAR LOW INTENSITY

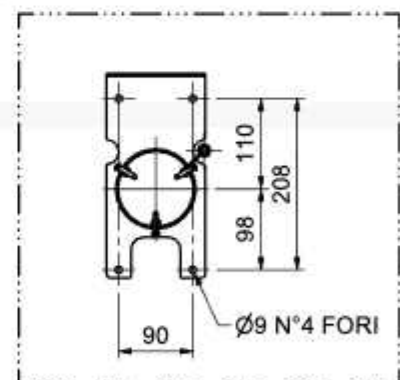
LXS SOLAR POWERED INSTALLATIONS



Pole Installation: No extra support required. Permitted pole size: 50-70 mm.



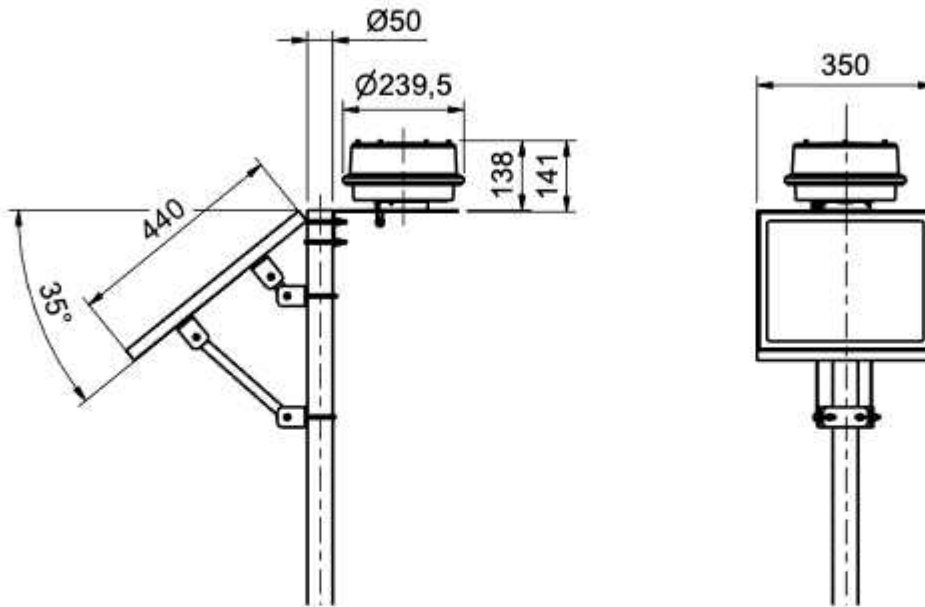
SEZ: C-C



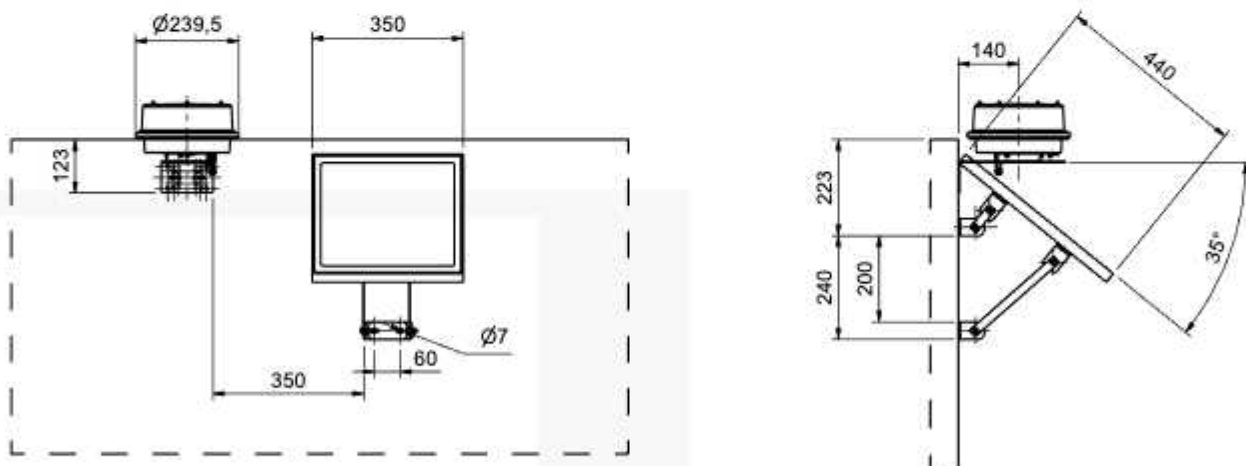
Surface/Wall Installation: Light support plate. Code: MAR-12C-0016-R3 (required).

SOLAR LOW INTENSITY

LXS SOLAR POWERED INSTALLATIONS



Pole Installation: Light support plate (optional) Cod. MAR-12C-0016-R3.
Additional panel 10Wp-2p + panel support (optional, upon request)



Surface/Wall Installation: Light support plate Cod. MAR-12C-0016-R3.
Additional panel 10Wp-2p + panel support (optional, upon request)

LOW INTENSITY

LOW INTENSITY AWL SYSTEM CONTROL BOX



LUXSOLAR L810-LXS-CB is a unit designed to control SINGLE or TWIN Low Intensity L810-LXS beacons.

The installation of more than one signalling device on the same obstacle is defined AWL system. To simplify management of AWL system composed by Low Intensity Obstruction Lights we designed L810-LXS-CB unit to control up to nr. 08 SINGLE L810-LXS or up to no. 04 TWIN L810-LXS beacons.

For an easy beacons' control and maintenance, with the L810-LXS-CB you will be able to activate the system, manage fault contacts and test the lamps from one unique small control box. L810-LXS-CB box and related beacons are then an ideal solution for AWL configurations where reliability and reduced dimension are needed.



LOW INTENSITY

LOW INTENSITY CONTROL BOX TECHNICAL SPECIFICATIONS



OPTICAL FEATURES

- Based on LED technology
- RED light - Steady Burning
- RED light - Flashing
- LIOL-A: >10 cd
- LIOL-B: >32 cd
- LIOL-E: >32 cd (flashing light 20 - 40 fpm)
- Horizontal beam radiation: 360°

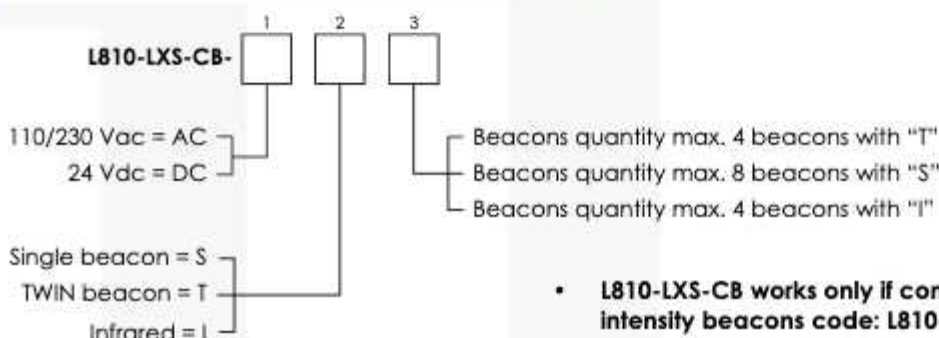
LIGHT MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins for maximum heat dissipation
- Polycarbonate UV resistant dome
- Terminal JB for connection in Glass Reinforced Polyester (GRP), black colour
- Degree of protection: IP66
- Operating temperature: -20°C to +50°C
- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)

BOX MECHANICAL FEATURES

- Enclosure material: Glass Reinforced Polyester (GRP), black colour
- Anticondensation Goretex valve
- Degree of protection: IP65
- Box dimension: 120x220x90mm
- Weight: 1,5kg approx
- Operating temperature: - 20°C /+ 50°C

ORDER CODE



- **L810-LXS-CB works only if connected to LUXSOLAR low intensity beacons code: L810-LXS-[...]GS8R8S/GS8R8T/GS8R8I**

ELECTRICAL FEATURES

- Power supply 18/32VDC or 110/230VAC 50/60Hz
- Beacon electronic alarms available on terminals
- Overvoltage protection
- Twilight sensor
- Lamp test button
- Automatic changeover from normal to stand-by LED circuit

OPTIONS

- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)
- IR Wavelength - 850nm, compatible with pilot's NVG
- A GPS module can be installed for multiple systems controlling LIOL-E beacons (low intensity flashing red light)
- LUXSOLAR® Cloud Monitoring System

APPLY TO

- Tower crane
- Transmission line
- Radio and television tower
- Wind mast measurement
- Antenna

CERTIFICATIONS

- DGAC/STAC approval nr. 2013A048
- ENAC approval nr. 0135182/ENAC/CIA
- EASA test report (EN17025 laboratory) nr. 326-QL20-R03/R04
- CE marking

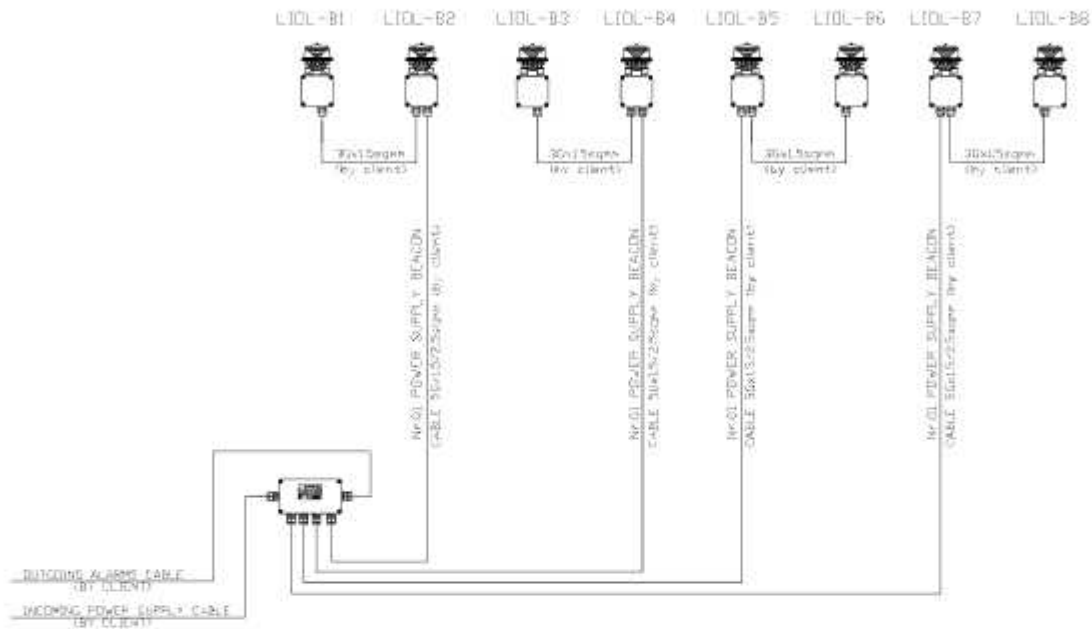
COMPLIANCE

- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Low intensity, Type A-B steady burning obstacle light, Type E flashing obstacle light
- FAA AC150/5345-43; E.B. #67 type L-810
- EASA CS-ADR-DSN, Chapter Q

LOW INTENSITY

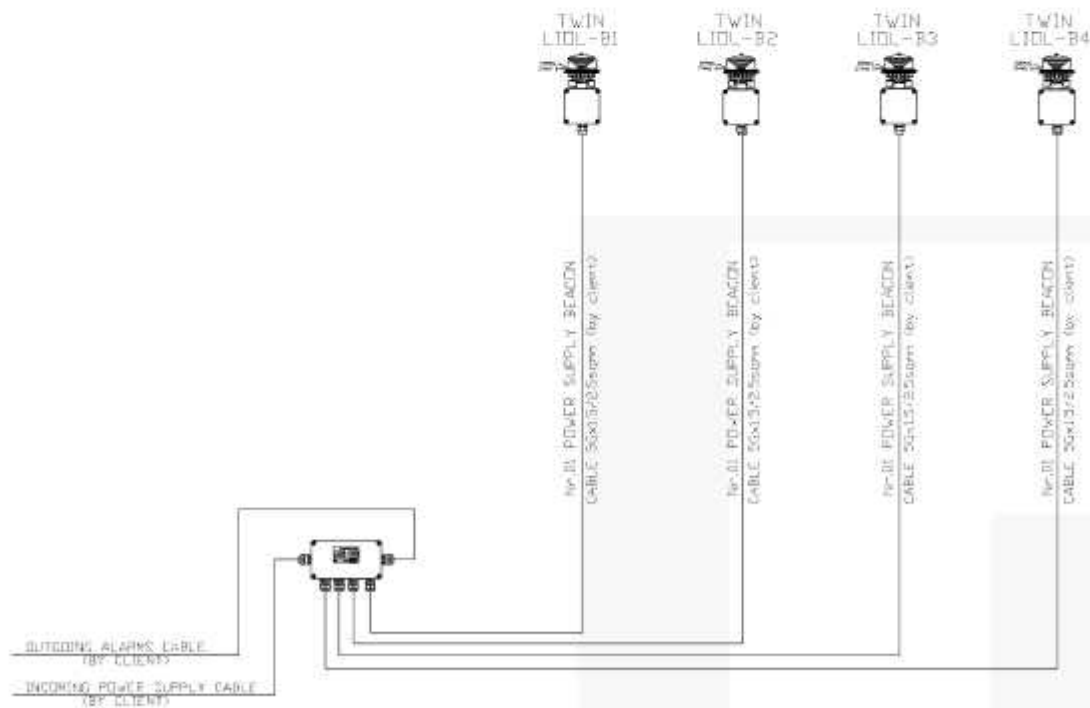
LOW INTENSITY CONTROL BOX TECHNICAL SPECIFICATIONS

CONFIGURATION WITH N°08 SINGLE LIOL-B



Maximum distance with 1,5sqmm cable: 300mt
Maximum distance with 2,5sqmm cable: 500mt

CONFIGURATION WITH N°04 TWIN LIOL-B



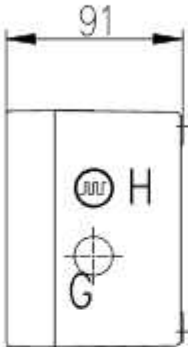
Maximum distance with 1,5sqmm cable: 300mt
Maximum distance with 2,5sqmm cable: 500mt

LOW INTENSITY

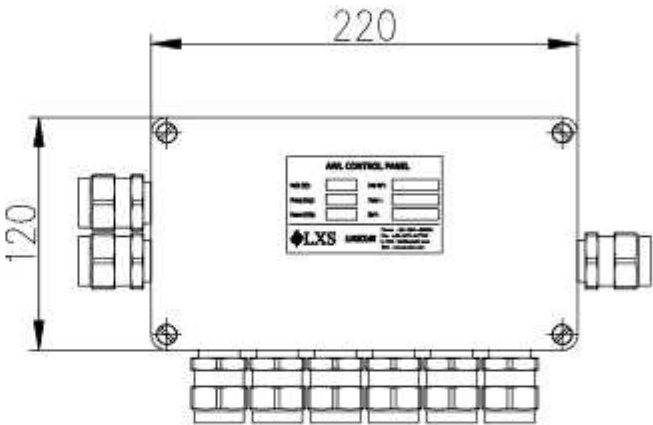
LOW INTENSITY CONTROL BOX TECHNICAL DETAILS

BOX GRP TECHNICAL DETAIL

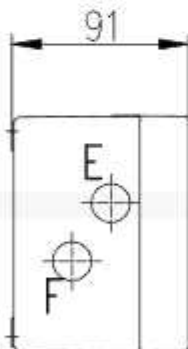
RIGHT SIDE VIEW



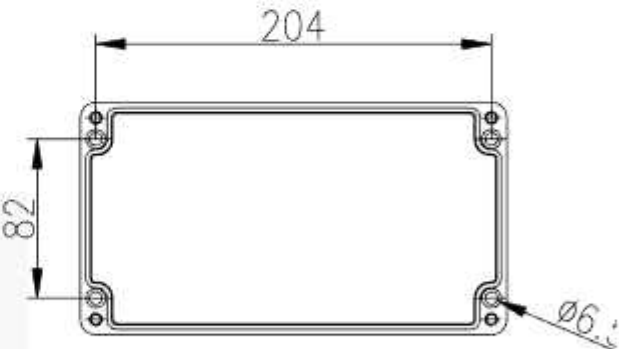
FRONT VIEW



LEFT SIDE VIEW



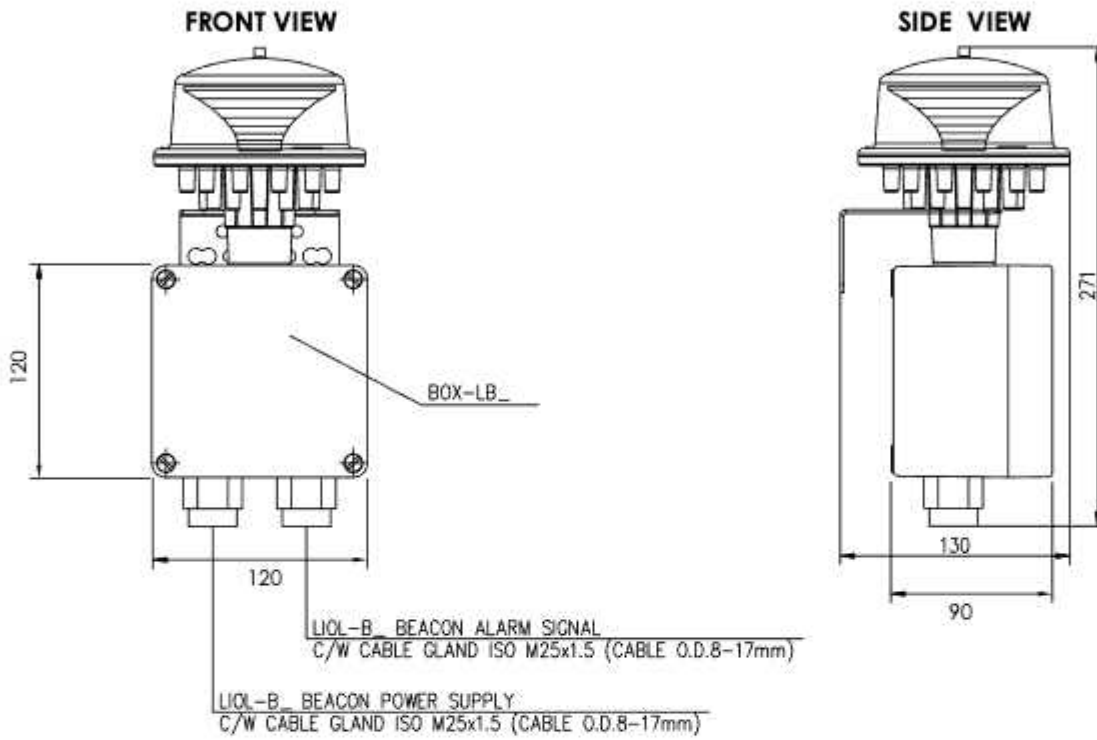
FLIXING DETAILS



LOW INTENSITY

LOW INTENSITY CONTROL BOX TECHNICAL SPECIFICATIONS

LIOL GRP TECHNICAL DETAIL



MEDIUM INTENSITY OBSTRUCTION LIGHT



According to Annex 14 of ICAO regulations, Medium Intensity Obstruction Lights (MIOL) should be used to warn the presence of obstacles with an height between 45m and 150m, such as telecommunication towers, wind turbines, chimneys, cranes, buildings and other structures.

Medium Intensity Obstruction Lights include three type of beacons, with different characteristics and uses:

- MIOL, Type A (intensity 20.000cd, day-mode white flashing; 2.000cd, night-mode white flashing) should be used alone;
- MIOL, Type B (intensity 2.000cd, night-mode red flashing) should be used either alone or in combination with Low Intensity Obstacle Lights, Type B or Type E;
- MIOL, Type C (intensity 2.000cd, night-mode red steady burning) should be used either alone or in combination with Medium Intensity Obstacle Lights, Type AC.

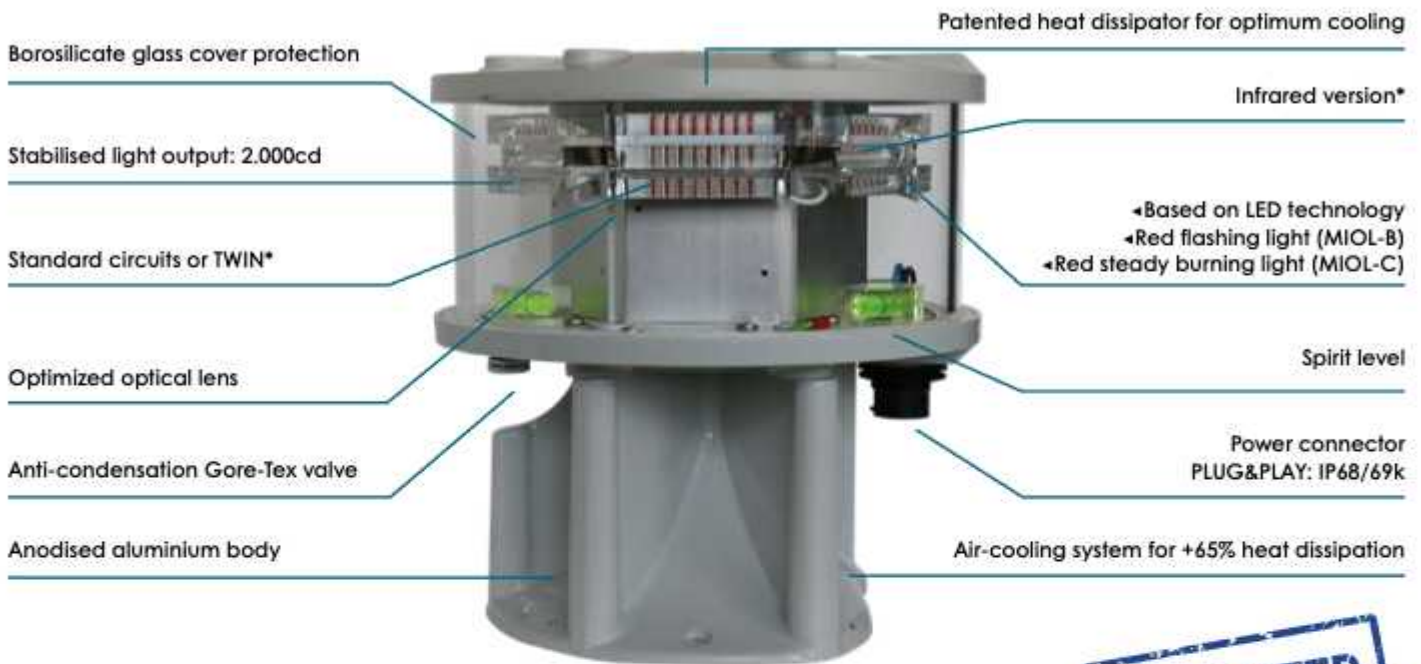
LUXSOLAR offers to its customers also DUAL type beacons in the same light fixture, suitable to be used during the day (with white LEDs) and during the night (with red LEDs); these beacons are:

- DUAL MIOL, Type AB (intensity 20.000cd, day-mode white flashing; 2.000cd, night-mode red flashing) should be used in combination with Low Intensity Obstacle Lights, Type B or Type E;
- DUAL MIOL, Type AC (intensity 20.000cd, day-mode white flashing; 2.000cd, night-mode red steady burning) should be used in combination with Medium Intensity Obstacle Lights, Type C.



MEDIUM INTENSITY

MIOL-B/MIOL-C



note: electronic beacon driver in a separate enclosure

*as option

IP66



LUXSOLAR L864-LXS-200 Medium Intensity Obstruction Light is compliant to ICAO (Medium Intensity - Type B or C), FAA (Type L-864), ENAC and EASA certified.

With a compact body, high quality and ultra-bright LEDs, customized lenses and patented shape for optimum light emission and beacon cooling LUXSOLAR MIOL-B/C-LXS-200 product is the most up-to-dated and technologically advanced Aircraft Warning Light.

This LED device is designed to not contain any electronic component (that is available in a separate control local panel): a huge advantage in terms of increased life-time and suitability to all environments (beacons can stand extreme weather conditions) and in terms of an easy maintenance (in case of maintenance or periodic checks on electronic components, these can be done at ground or easily accessible levels).

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-B and MIOL-C TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light 2.000cd
- Flashing (MIOL-B) or Steady (MIOL-C)
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens
- Light output alignment device

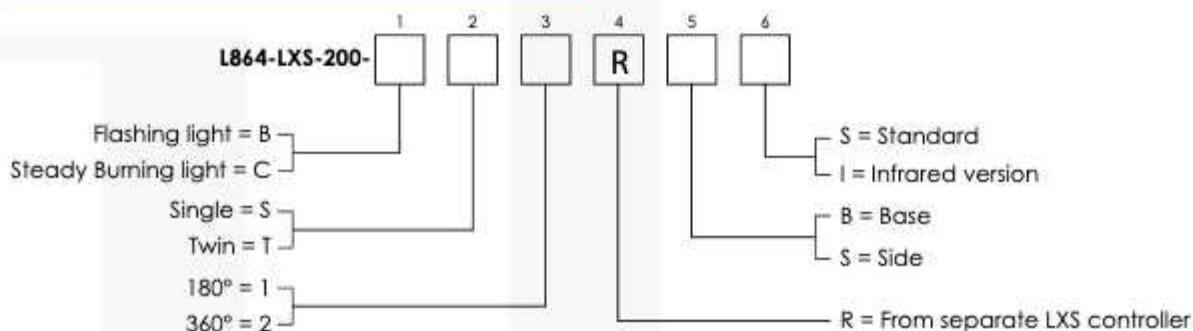
MECHANICAL FEATURES

- Anodised aluminium body, painted RAL7035
- Borosilicate glass cover protection
- Silicon rubber, VMQ
- Base wind collector and internal heat sink for optimum cooling
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -30°C to +50°C
- Lamp unit weight: 6kg
- SS304 beacon support bracket
- Equipped with separate control box for beacon power supply

ELECTRICAL FEATURES

- Power supply by LUXSOLAR remote control panel (see dedicated datasheet for panel):
 - 12/24 VDC;
 - 48 VDC;
 - 115/230VAC;
 - Other power supply range available;
- Average power consumption for MIOL-B (flashing):
 - @20fpm: 1,5W
 - @40fpm: 3W
 - @60fpm: 4,5W
- Average power consumption for MIOL-C (Steady Burning): 21W
- Peak power consumption MIOL-B/C: 30VA
- LED feeded at constant current
- No RF-radiations
- Range section of connectable conductors: 0,5mm² to 2,5mm²
- Cable outer diameter range: 7mm to 14mm

ORDER CODE



OPTIONS

- LUXSOLAR Cloud Monitoring System
- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)

APPLY TO

- ATC tower
- Stack
- High building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

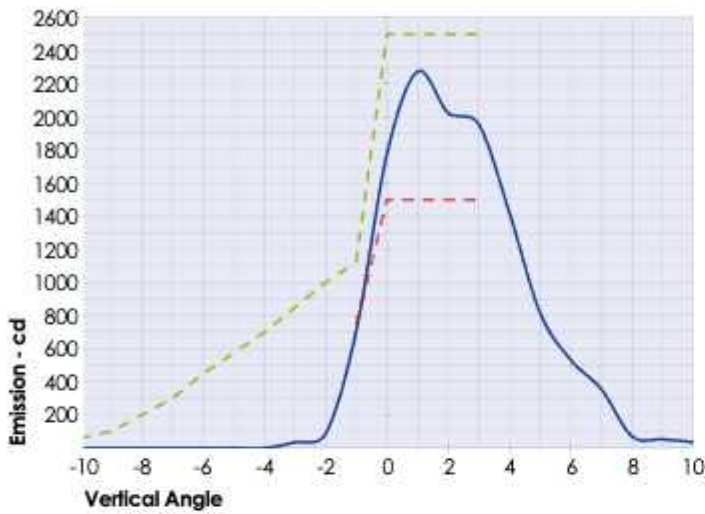
- DGAC/STAC approval nr. 2013A037
- ENAC approval nr. 0135182/ENAC/CIA
- EASA test report (EN17025 laboratory) nr. 326-QL20-R09/R10
- FAA test report (EN17025 laboratory) nr. 880-QL18-R03
- CE marking

COMPLIANCE

- ICAO Aerodromes - Annex 14 Vol. 1, Ch.6: Medium intensity, Type B flashing obstacle light MIOL-B type or Type C steady burning obstacle light MIOL-C type;
- FAA AC150/5345-43; E.B. #67 type L-864;
- EASA Aerodromes Design - CS-ADR-DSN, Ch.Q: Medium intensity, Type B flashing obstacle light MIOL-B type or Type C steady burning obstacle light MIOL-C type

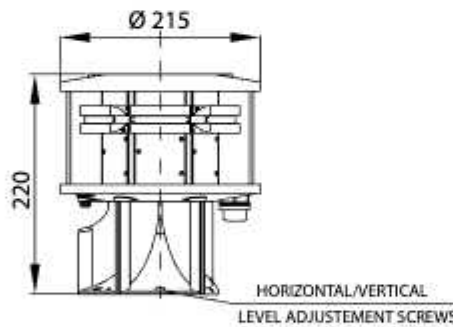
MEDIUM INTENSITY

MIOL-B and MIOL-C TECHNICAL SPECIFICATIONS

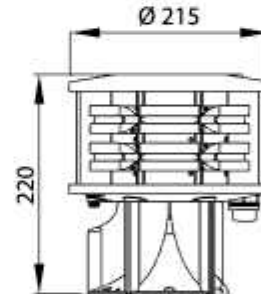


- L864-LXS-B/C average emission level at 90°C ambient temperature
- - ICAO ANNEX 14 medium intensity type B/C Min. Required Intensity
- - ICAO ANNEX 14 medium intensity type B/C Max. Required Intensity

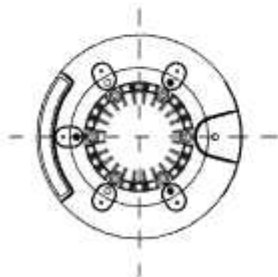
SINGLE VERSION
SIDE VIEW



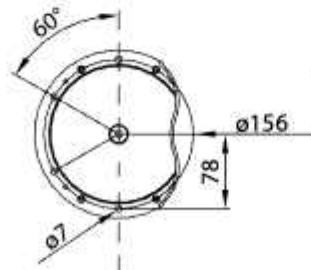
TWIN VERSION
SIDE VIEW



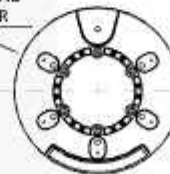
TOP VIEW



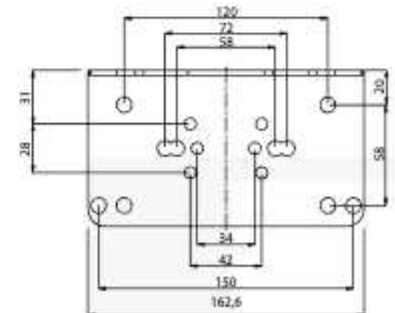
BOTTOM VIEW



BOTTOM VIEW
WITHOUT WIND
COLLECTOR



FIXING DETAILS SIDE
(not scale)



MEDIUM INTENSITY

MIOL-A



note: electronic beacon driver in a separate enclosure

*as option

IP66



LUXSOLAR L865-LXS-200 Medium Intensity Obstruction Light is compliant to ICAO and EASA (Medium Intensity - Type A), FAA (Type L-865) and ENAC certified.

With a compact body, high quality and ultra-bright LEDs, customized lenses and patented shape for optimum light emission and beacon cooling LUXSOLAR MIOL-A-LXS-200 product is the most up-to-dated and technologically advanced Aircraft Warning Light.

This LED device is designed to not contain any electronic component (that is available in a separate control local panel): a huge advantage in terms of increased life-time and suitability to all environments (beacons can stand extreme weather conditions) and in terms of an easy maintenance (in case of maintenance or periodic checks on electronic components, these can be done at ground or easily accessible levels).

CERTIFICATION



COMPLIANCE



FEATURES

BASE alu AL		DOME BOROSILICATE		-30°C +45°C		IP66		ON		no softglowing		LED SMD		DAY CD 20000		NIGHT CD 2000		OPTION TWIN CIRCUITS	
DAY 45W	NIGHT 10W	DAY 110W	NIGHT 13W	DAY 140W	NIGHT 18W	Photometric Test		ICAT 115		WINDUP OF COILS		EASY INSTALL		up to 80m/s					
Ø20 FPM		Ø40 FPM		Ø60 FPM															

TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-A TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- 20.000cd day mode, WHITE flashing
- 2.000cd night mode, WHITE flashing
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens
- Light output alignment device

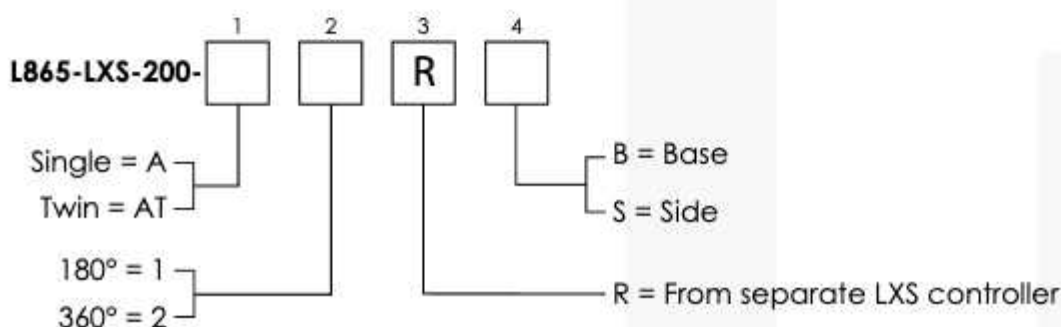
MECHANICAL FEATURES

- Anodised aluminium body, painted RAL7035
- Borosilicate glass cover protection
- Silicon rubber, VMQ
- Base wind collector and internal heat sink for optimum cooling
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -30°C to +50°C
- Lamp unit weight: 6kg
- SS304 beacon support bracket
- Equipped with separate control box for beacon power supply

ELECTRICAL FEATURES

- Power supply by LUXSOLAR remote control panel (see dedicated datasheet for panel):
 - 12/24 VDC;
 - 48 VDC;
 - 115/230VAC;
 - Other power supply range available;
- Average power consumption for MIOL-A:
 - @20fpm: 45W(day)
 - @40fpm: 110W(day)
 - @60fpm: 160W(day)
- Peak power consumption: 500VA
- LED feeded at constant current
- No RF-radiations
- Range section of connectable conductors: 0,5mm² to 2,5mm²
- Cable outer diameter range: 7mm to 14mm

ORDER CODE



OPTIONS

- LUXSOLAR Cloud Monitoring System
- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)

APPLY TO

- Airport
- Stack
- High Building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

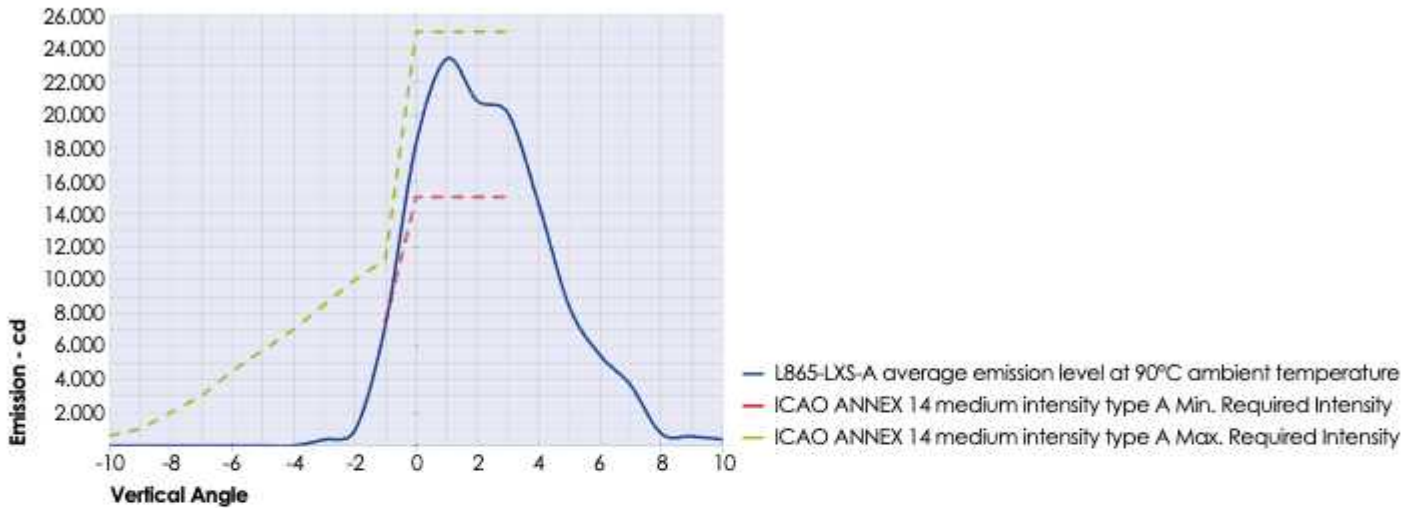
- DGAC/STAC approval nr. 2013A038
- ENAC approval nr. 0135182/ENAC/CIA
- CE marking

COMPLIANCE

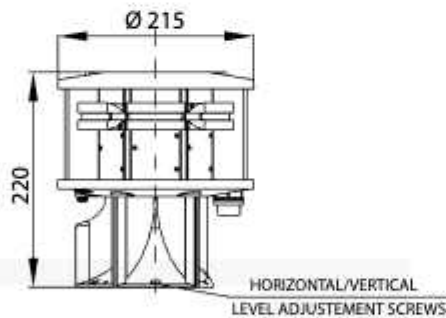
- ICAO Aerodromes - Annex 14 Vol. 1, Ch.6: Medium intensity, Type A flashing obstacle light MIOL-A type;
- FAA AC150/5345-43; E.B. #67 type L-865
- EASA Aerodromes Design - CS-ADR-DSN, Ch.Q: Medium intensity, Type A flashing obstacle light MIOL-A type

MEDIUM INTENSITY

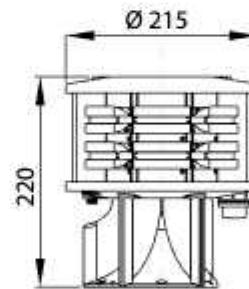
MIOL-A TECHNICAL SPECIFICATIONS



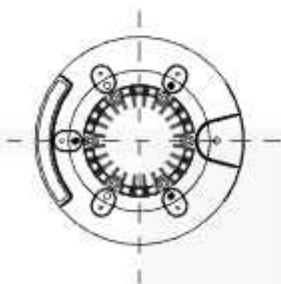
SINGLE VERSION
SIDE VIEW



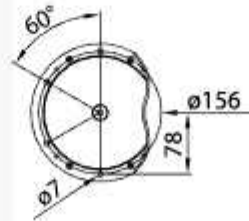
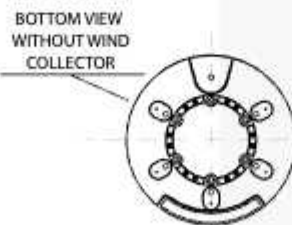
TWIN VERSION
SIDE VIEW



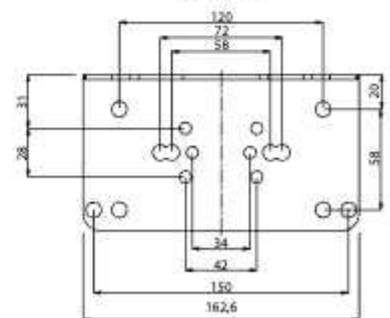
TOP VIEW



BOTTOM VIEW

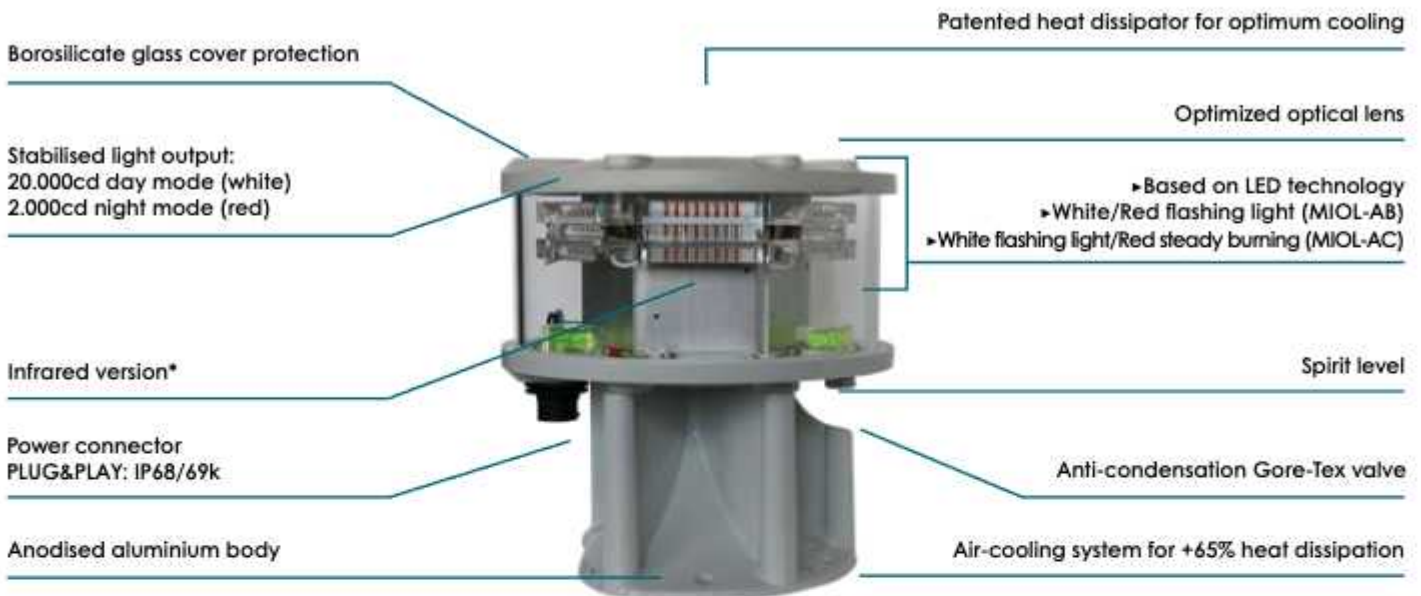


FIXING DETAILS SIDE
(not scale)



MEDIUM INTENSITY

MIOL-AB/MIOL-AC



NOTE: electronic beacon driver in a separate enclosure

*as option

IP66



LUXSOLAR L864/L865-LXS-200 Medium Intensity Obstruction Light is compliant to ICAO and EASA (Medium Intensity - Type AB and AC), FAA (Type L-864/L-865) and ENAC certified.

With a compact body, high quality and ultra-bright LEDs, customized lenses and patented shape for optimum light emission and beacon cooling LUXSOLAR MIOL-AB/AC-LXS-200 product is the most up-to-dated and technologically advanced Aircraft Warning Light.

This LED device is designed to not contain any electronic component (that is available in a separate control local panel): a huge advantage in terms of increased life-time and suitability to all environments (beacons can stand extreme weather conditions) and in terms of an easy maintenance (in case of maintenance or periodic checks on electronic components, these can be done at ground or easily accessible levels).

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-AB and MIOL-AC TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- 20.000cd day mode, WHITE light
- 2.000cd night mode, RED light
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens
- Light output alignment device

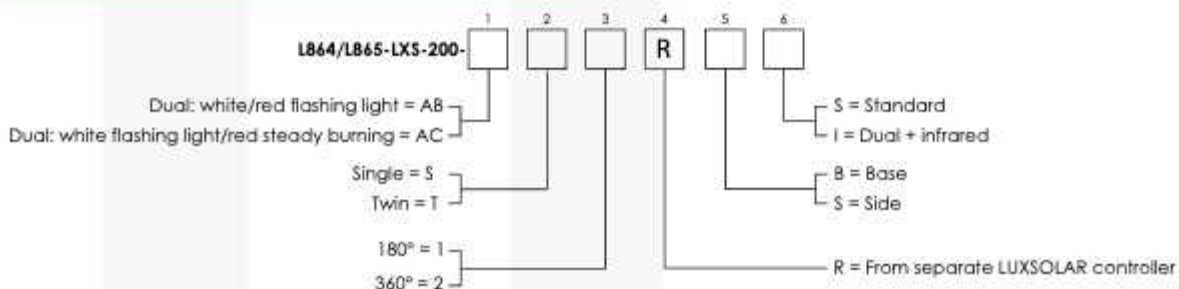
MECHANICAL FEATURES

- Anodised aluminium body, painted RAL7035
- Borosilicate glass cover protection
- Silicon rubber, VMQ
- Base wind collector and internal heat sink for optimum cooling
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -30°C to +50°C
- Lamp unit weight: 7kg
- SS304 beacon support bracket
- Equipped with separate control box for beacon power supply

ELECTRICAL FEATURES

- Power supply by LUXSOLAR remote control panel (see dedicated datasheet for panel):
 - 24 VDC;
 - 48 VDC;
 - 115/230VAC;
 - Other power supply range available;
- Average power consumption:
 - @20fpm day mode: 45W (MIOL-AB/MIOL-AC)
 - @20fpm night mode: 10W (MIOL-AB)
 - @40fpm day mode: 110W (MIOL-AB/MIOL-AC)
 - @40fpm night mode: 12W (MIOL-AB)
 - @60fpm day mode: 160W (MIOL-AB/MIOL-AC)
 - @60fpm night mode: 16W (MIOL-AB)
 - night mode (steady burning) MIOL-AC: 50W
- Peak power consumption MIOL-AB/AC: 600VA
- LED feeded at constant current
- No RF-radiations
- Range section of connectable conductors: 0,5mm² to 2,5mm²
- Cable outer diameter range: 7mm to 14mm

ORDER CODE



OPTIONS

- LUXSOLAR Cloud Monitoring System
- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)
- IR Wavelength - 850nm

APPLY TO

- Airport
- Stack
- High Building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

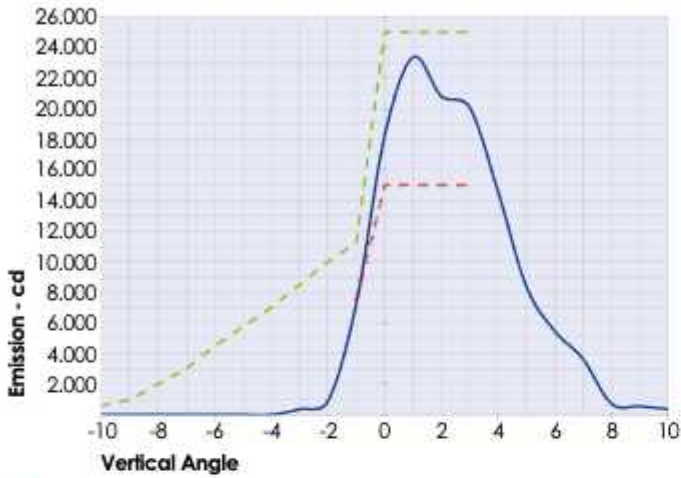
- DGAC/STAC approval nr. 2013A037/ 2013A038
- ENAC approval nr. 0135182/ENAC/CIA
- CE marking

COMPLIANCE

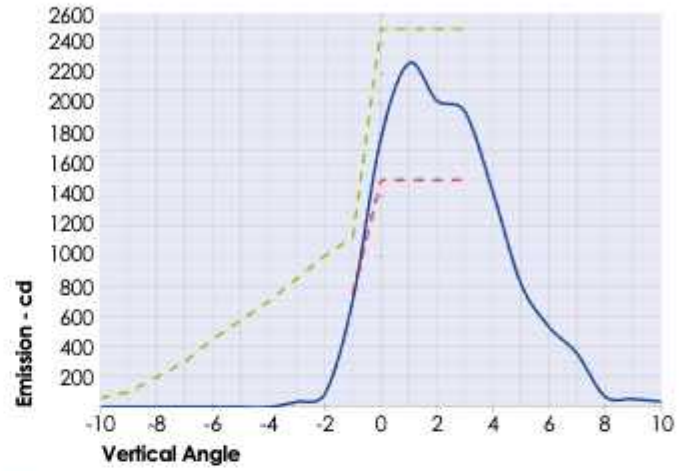
- ICAO Aerodromes - Annex 14 Vol.1, Ch. 6: Medium intensity, Type AB/AC
- FAA AC150/5345-43 E.B. #67 Lamp type Dual L-864/L-865
- EASA Aerodromes Design - CS-ADR-DSN, Ch.Q: Medium intensity, Type AB/AC flashing obstacle light MIOL-AB/AC type

MEDIUM INTENSITY

MIOL-AB and MIOL-AC TECHNICAL SPECIFICATIONS

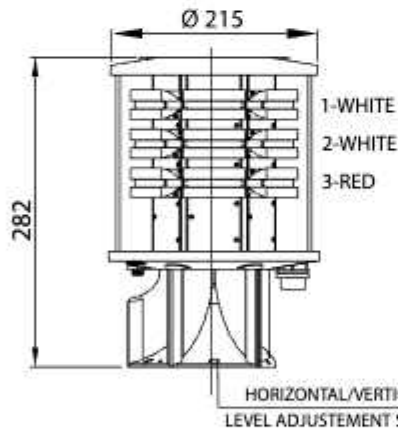


- L865-LXS-A average emission level at 90°C ambient temperature
- ICAO ANNEX 14 medium intensity type A Min. Required Intensity
- ICAO ANNEX 14 medium intensity A Max. Required Intensity

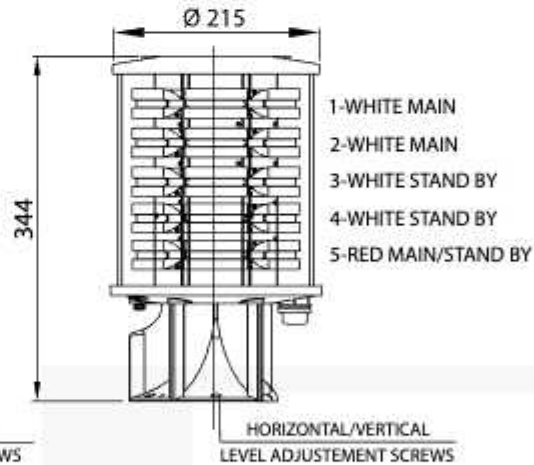


- L864-LXS-B/C average emission level at 90°C ambient temperature
- ICAO ANNEX 14 medium intensity type B/C Min. Required Intensity
- ICAO ANNEX 14 medium intensity type B/C Max. Required Intensity

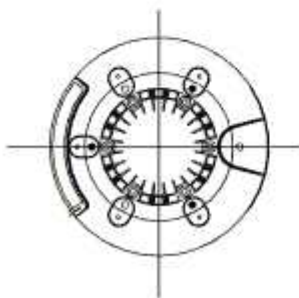
SIDE VIEW
SINGLE VERSION



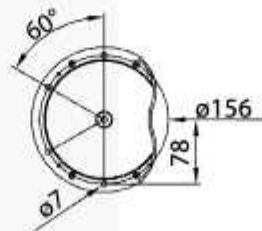
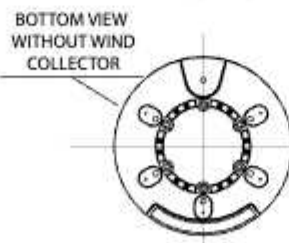
SIDE VIEW
TWIN VERSION



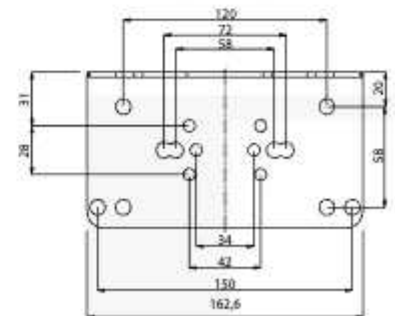
TOP VIEW



BOTTOM VIEW



FIXING DETAILS SIDE
(not scale)



MEDIUM INTENSITY

MEDIUM INTENSITY OBSTRUCTION LIGHT ALL-IN-ONE



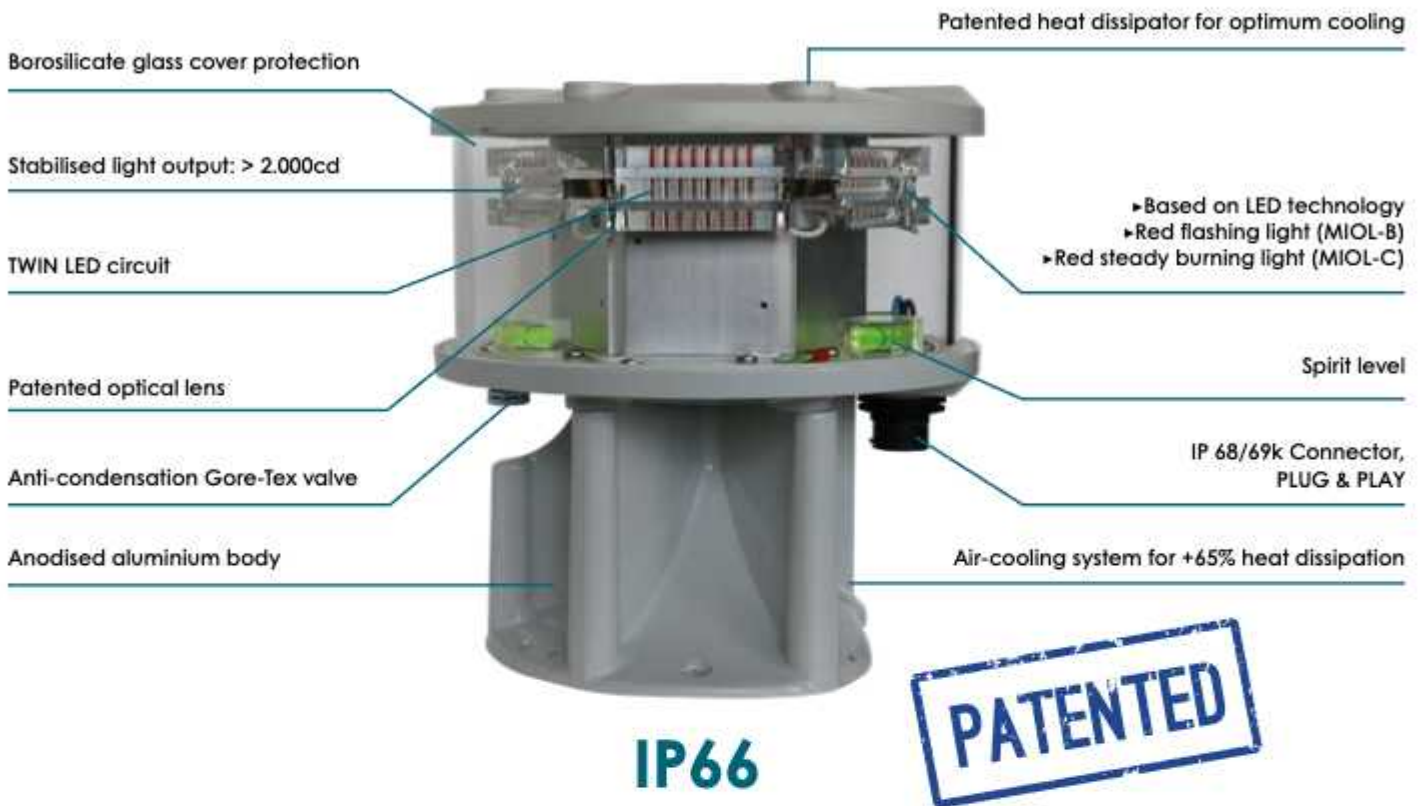
According to Annex 14 of ICAO regulation, Medium Intensity Obstruction Lights (MIOL) should be used to warn the presence of obstacles that could constitute hazard to air navigation.

LUXSOLAR MIOL-B/C ALL-IN-ONE beacon is the ideal solution when a compact and fully equipped device is needed; the perfect Aircraft Warning Light for transmission and telecommunication towers, meteorological masts and cranes.



MEDIUM INTENSITY

MIOL-B/MIOL-C ALL-IN-ONE

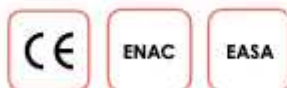


LUXSOLAR L864-LXS-ALL Medium Intensity Obstruction Light is compliant to ICAO (Medium Intensity - Type B or C), FAA (Type L-864), ENAC and EASA certified.

With a compact body, high quality and ultra-bright LEDs, patented lenses and patented shape for optimum light emission and beacon cooling; LUXSOLAR MIOL-B/C ALL-IN-ONE product is the most up-to-dated and technologically advanced Aircraft Warning Light. This LED device has been designed to concentrate in one fixture several features: TWIN version as standard characteristic (normal + stand-by LED circuit), built-in remote fault monitoring, twilight sensor and GPS module (option).

You just have to power supply the light, LUXSOLAR L864 ALL-IN-ONE will do the rest!

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-B/MIOL-C ALL-IN-ONE TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light
- MIOL-B: >2.000cd Flashing
- MIOL-C: >2.000cd Steady Burning
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens
- Light output alignment device

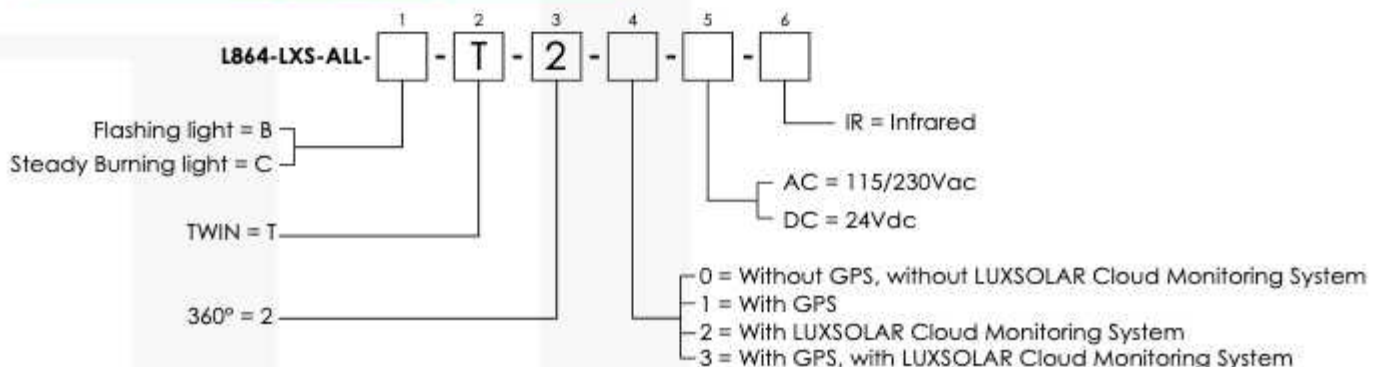
MECHANICAL FEATURES

- Anodised aluminium body, painted RAL7035
- Terminal JB for connection in Glass Reinforced Polyester (GRP), black colour
- Borosilicate glass cover protection
- Silicon rubber, VMQ
- Base wind collector and internal heat sink for optimum cooling
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -20°C to +45°C
- Lamp unit weight: 6kg approx.
- SS304 beacon support bracket
- TWIN version: two separate LED circuits in the same fixture (normal + stand-by)

ELECTRICAL FEATURES

- Power supply 24VDC (18-32VDC) or 115/230Vac
- Average power consumption for MIOL-B @24Vdc (flashing):
 - @20fpm: 2,4W
 - @40fpm: 3,7W
 - @60fpm: 5W
- Average power consumption for MIOL-C @24Vdc (Steady Burning): 21W
- Peak power consumption MIOL-B/C: 30VA
- LED feeded at constant current
- Surge arrester
- No RF-radiations
- Contact Fault Alarm - Free Voltage
- Automatic changeover from normal to stand-by LED circuit

ORDER CODE



ELECTRICAL FEATURES

- Photocell (twilight sensor)
- Recommended cables:
 - Power: 3x1,5mm² or 3x2,5mm²
 - Alarm: 2x1mm²
- Cable outer diameter range: 8mm to 17mm

OPTIONS

- GPS (Global Position System) module for synchronization among two or more light fixtures
- LUXSOLAR Cloud Monitoring System - Low Impact
- Astronomic clock
- IR Wavelength-850nm, compatible with pilot's NVG

APPLY TO

- ATC tower
- Stack
- High building
- Chimney
- Tower crane
- Pipe line
- Bridge
- Transmission line
- Radio and television tower
- Wind turbine
- Wind mast measurement
- Radar
- Antenna

CERTIFICATIONS

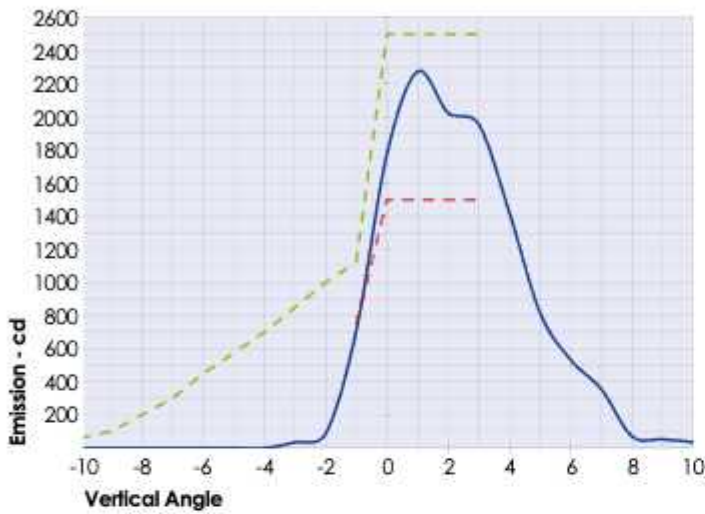
- DGAC/STAC approval nr. 2013A037
- ENAC approval nr. 0135182/ENAC/CIA
- EASA test report (EN17025 laboratory) nr. 326-QL20-R09/R10
- FAA test report (EN17025 laboratory) nr. 880-QL18-R03
- CE marking

COMPLIANCE

- ICAO Aerodromes - Annex 14 Vol. 1, Ch.6: Medium intensity, Type B flashing obstacle light MIOL-B type or Type C steady burning obstacle light MIOL-C type;
- FAA AC150/5345-43; E.B. #67 type L-864
- CAP168 Licensing of aerodromes, Ch.4 (MIOL-C)

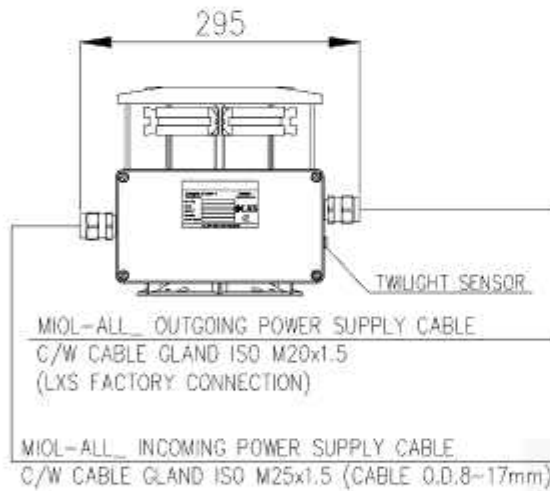
MEDIUM INTENSITY

MIOL-B/MIOL-C ALL-IN-ONE TECHNICAL SPECIFICATIONS

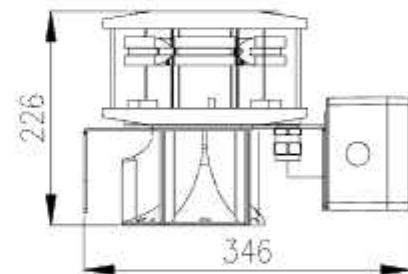


- L864-LXS-B/C average emission level at 90°C ambient temperature
- - ICAO ANNEX 14 medium intensity type B/C Min. Required Intensity
- - ICAO ANNEX 14 medium intensity type B/C Max. Required Intensity

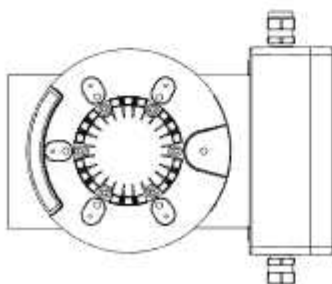
BEACON FRONT VIEW



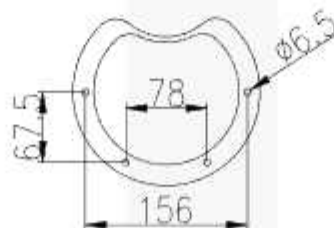
BEACON SIDE VIEW



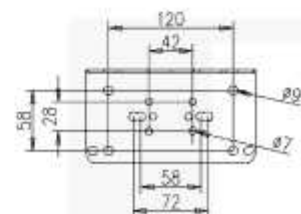
BEACON TOP VIEW



FIXING DETAILS BASE



FIXING DETAILS SIDE



HIGH INTENSITY

HIGH INTENSITY OBSTRUCTION LIGHT HIOL-A



According to Annex 14 of ICAO regulations, High Intensity Obstruction Lights (HIOL) should be used to warn the presence of obstacles with an height above 150m or when an aeronautical study indicates such lights as mandatory for the correct warning of an elevated structure, such as chimneys, cranes, buildings, bridges, high tension pylons and other buildings.

High Intensity Obstruction Lights include two type of beacons, with different characteristics and uses:

- HIOL Type A (intensity 200.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode white flashing), mainly used on skyscrapers, bridges, etc;

LUXSOLAR offers to its customers also DUAL type beacons in the same light fixture, suitable to be used during the day (with white LEDs) and during the night (with red LEDs); these beacons are:

- DUAL HIOL Type AB (intensity 200.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode red flashing) should be used in combination with Low Intensity Obstacle Lights, Type B;
- DUAL HIOL Type AC (intensity 200.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode red steady burning) should be used in combination with Medium Intensity Obstacle Lights, Type C.



HIGH INTENSITY

HIOL-A 120° and HIOL-AB/AC 120°



note: electronic beacon driver in a separate enclosure

*as option

IP66



LUXSOLAR L856-LXS-RUG High Intensity Obstruction Light is compliant to ICAO (High Intensity - Type A and Type AB/AC) and FAA (Type L-856). With a body designed for optimum light emission and increased cooling, high quality and ultra-bright LEDs and patented lenses; LUXSOLAR HIOL-A and HIOL-AB/AC product is the most up-to-dated and technologically advanced Aircraft Warning Light.

This LED device emits 200.000 candelas during day mode and through LUXSOLAR separate controller intensity is automatically adjusted in day/twilight/night mode; another advantage is the compact shape that allows to have in one light fixture also the DUAL mode (white LEDs for day and twilight and red LEDs for night).

LUXSOLAR L856-LXS-RUG is the right choice for skyscrapers, bridges and all high structures where high intensity visibility is required.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



HIGH INTENSITY

HIOL-A 120° and HIOL-AB/AC 120° TECHNICAL SPECIFICATIONS

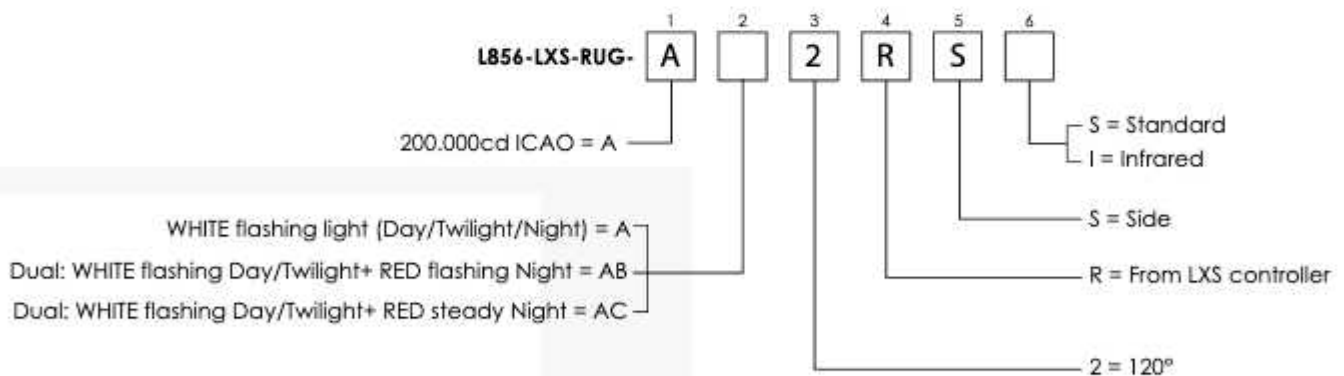
OPTICAL FEATURES

- Based on LED technology
- **WHITE light - HIOL A**
 - 200.000cd day mode
 - 20.000cd twilight mode
 - 2.000cd night mode
- **WHITE/RED light - HIOL AB/AC**
 - 200.000cd day mode
 - 20.000cd twilight mode
 - 2.000cd night mode
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 120°
- Vertical beam spread: +3 / +7°
- PMMA lens

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins for maximum heat dissipation
- Terminal JB for connection in Glass Reinforced Polyester (GRP), black colour
- Borosilicate glass cover protection
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -20°C to +50°C
- Lamp unit weight: 16kg
- SS304 beacon support base

ORDER CODE



ELECTRICAL FEATURES

- Electronic components installed inside separate LUXSOLAR controller
- Average power consumption LXS-RUG 120° @40fpm:
 - Day mode: 220W
 - Twilight mode: 26W
 - Night mode: 12W
- Peak power consumption: 1400VA
- No RF radiations
- LED feeded at constant current

OPTIONS

- IR wavelength 850nm, compatible with pilot's NVG

CERTIFICATIONS

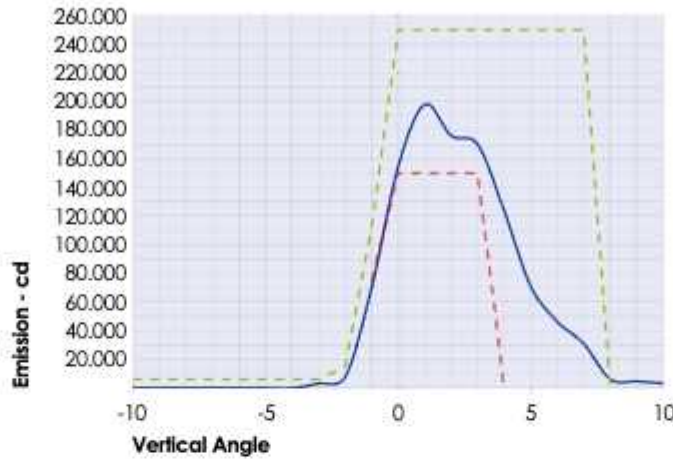
- CE marking

COMPLIANCE

- ICAO Aerodromes - Annex 14 Vol. 1, Ch. 6: High intensity, Type-A flashing obstacle light HIOL-A/AB/AC Type
- FAA AC150/5345-43 E.B. #67 type L-856
- EASA CS-ADR-DSN

HIGH INTENSITY

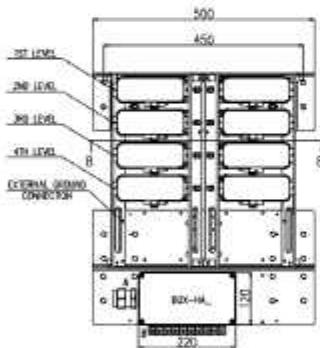
HIOL-A 120° and HIOL-AB/AC 120° TECHNICAL SPECIFICATIONS



- L856-LXS-RUG average emission level at 70°C ambient temperature
- - - ICAO ANNEX 14 high intensity - Min. Required Intensity ICAO
- - - ANNEX 14 high intensity - Max. Required Intensity

HIOL-A 120°

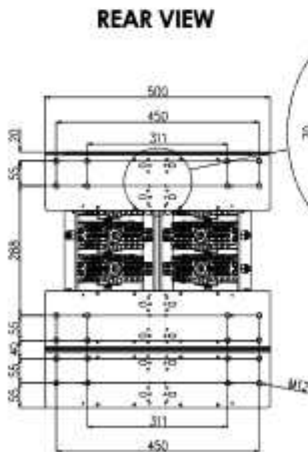
FRONT VIEW



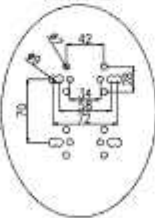
SIDE VIEW



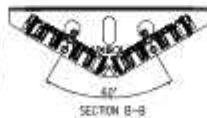
REAR VIEW



FRONT DETAILS

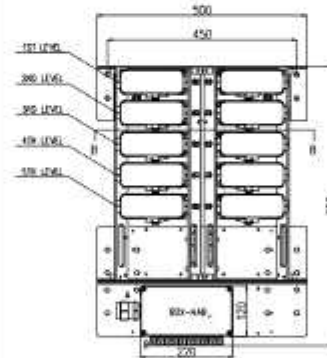


TOP VIEW



HIOL-AB/AC 120°

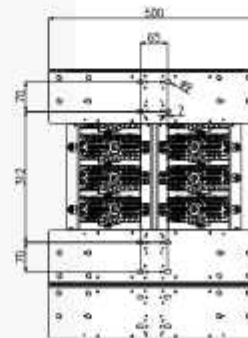
FRONT VIEW



SIDE VIEW



REAR VIEW



TOP VIEW



HIGH INTENSITY

HIGH INTENSITY OBSTRUCTION LIGHT HIOL-B



According to Annex 14 of ICAO regulations, High Intensity Obstruction Lights (HIOL) should be used to warn the presence of obstacles with an height above 150m or when an aeronautical study indicates such lights as mandatory for the correct warning of an elevated structure, such as chimneys, cranes, buildings, bridges, high tension pylons and other buildings.

High Intensity Obstruction Lights include two type of beacons, with different characteristics and uses:

- HIOL Type B (intensity 100.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode white flashing), mainly used on high voltage pylons where is not practicable install cable markers.

LUXSOLAR offers to its customers also DUAL type beacons in the same light fixture, suitable to be used during the day (with white LEDs) and during the night (with red LEDs); these beacons are:

- DUAL HIOL Type BB (intensity 100.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode red flashing) should be used in combination with Low Intensity Obstacle Lights, Type B;
- DUAL HIOL Type BC (intensity 100.000cd, day-mode white flashing; 20.000cd, twilight-mode white flashing; 2.000cd, night-mode red steady burning) should be used in combination with Medium Intensity Obstacle Lights, Type C.



HIGH INTENSITY

HIOL-B 120° and HIOL-BB/BC 120°



NOTE: electronic beacon driver in a separate enclosure

*as option

IP66



LUXSOLAR L857-LXS-RUG High Intensity Obstruction Light is compliant to ICAO (High Intensity - Type B and Type BB/BC) and FAA (Type L-857). With a body designed for optimum light emission and increased cooling, high quality and ultra-bright LEDs and patented lenses; LUXSOLAR HIOL-B and HIOL-BB/BC product is the most up-to-dated and technologically advanced Aircraft Warning Light.

This LED device emits 100.000 candelas during day mode and through LUXSOLAR separate controller intensity is automatically adjusted in day/twilight/night mode; another advantage is the compact shape that allows to have in one light fixture also the DUAL mode (white LEDs for day and twilight and red LEDs for night).

LUXSOLAR L857-LXS-RUG is the right choice for skyscrapers, bridges and all high structures where high intensity visibility is required.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



HIGH INTENSITY

HIOL-B 120° and HIOL-BB/BC 120° TECHNICAL SPECIFICATIONS

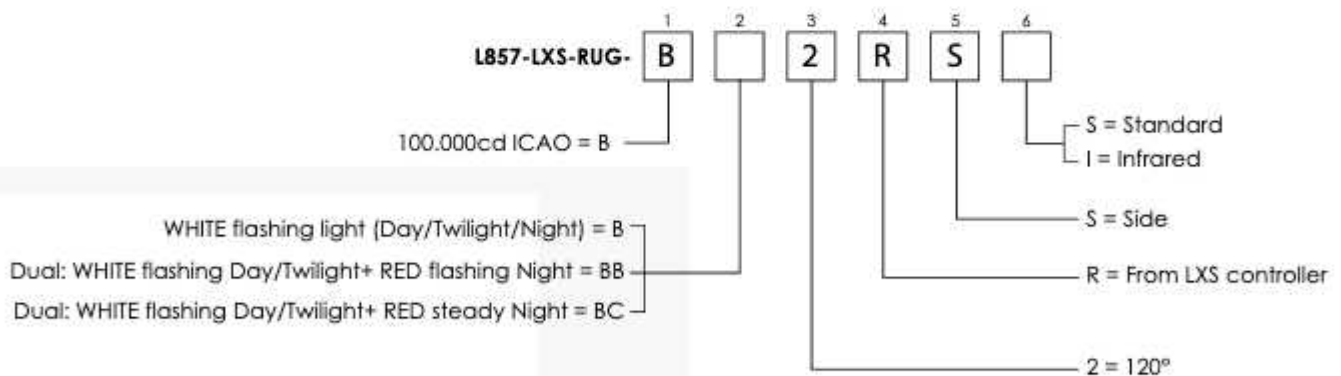
OPTICAL FEATURES

- Based on LED technology
- **WHITE light - HIOL B**
 - 100.000cd day mode
 - 20.000cd twilight mode
 - 2.000cd night mode
- **WHITE/RED light - HIOL BB/BC**
 - 100.000cd day mode
 - 20.000cd twilight mode
 - 2.000cd night mode
- Cd emission @ -0,5° and +4°
- Horizontal beam radiation: 120°
- Vertical beam spread: +3 / +7°
- PMMA lens

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins for maximum heat dissipation
- Terminal JB for connection in Glass Reinforced Polyester (GRP), black colour
- Borosilicate glass cover protection
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Operating temperature: -20°C to +50°C
- Lamp unit weight: 16kg
- SS304 beacon support base

ORDER CODE



ELECTRICAL FEATURES

- Electronic components installed inside separate LUXSOLAR controller
- Average power consumption LXS-RUG 120° @40fpm:
 - Day mode: 220W
 - Twilight mode: 26W
 - Night mode: 12W
- Peak power consumption: 1400VA
- No RF radiations
- LED feeded at constant current

OPTIONS

- IR wavelength 850nm, compatible with pilot's NVG

CERTIFICATIONS

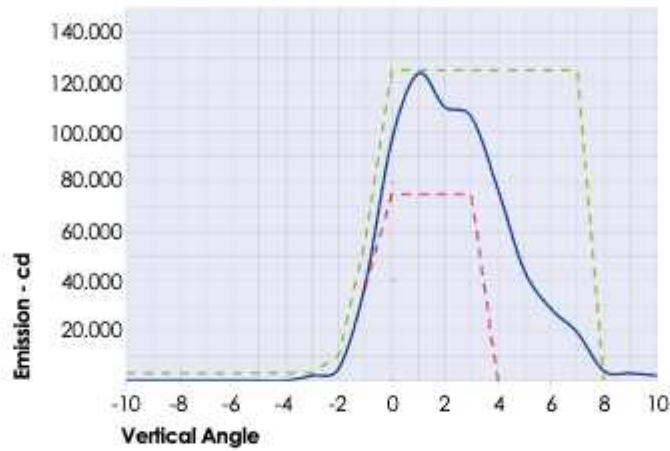
- CE marking

COMPLIANCE

- ICAO Aerodromes - Annex 14 Vol. 1, Ch. 6: High intensity, Type-B flashing obstacle light HIOL-B/BB/BC Type
- FAA AC150/5345-43 E.B. #67 type L-857
- EASA CS-ADR-DSN

HIGH INTENSITY

HIOL-B 120° and HIOL-BB/BC 120° TECHNICAL SPECIFICATIONS



- L857-LXS-RUG average emission level at 70°C ambient temperature
- - - ICAO ANNEX 14 high intensity type B - Min. Required Intensity
- - - ICAO ANNEX 14 high intensity type B - Max. Required Intensity

HIOL-B 120°

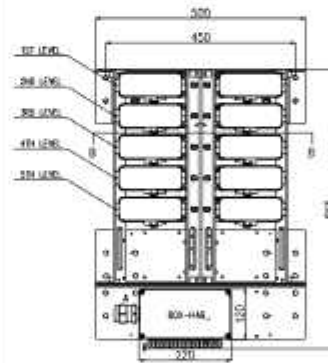
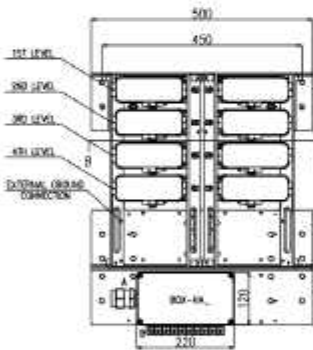
HIOL-BB/BC 120°

FRONT VIEW

SIDE VIEW

FRONT VIEW

SIDE VIEW



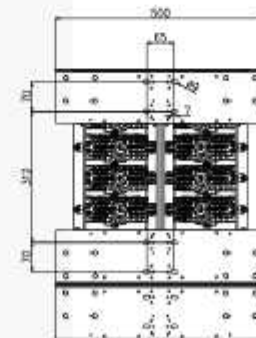
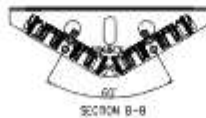
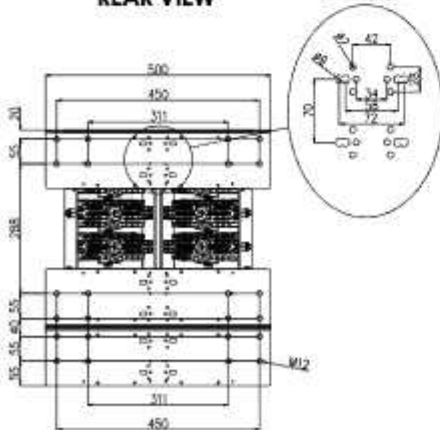
REAR VIEW

WIRING DETAILS

TOP VIEW

REAR VIEW

TOP VIEW



CONTROL PANEL

CONTROL PANEL FOR AWL SYSTEM



An **Aircraft Warning Light (AWL) System** is a set of beacon(s) and electronic components Wired and installed inside dedicated enclosures.

At **LUXSOLAR** we believe that every installation and maintenance activity has to be as **simple**, as **quick** and as **safe** as possible. This is the philosophy at the base of our AWL Systems and this is the reason why all our electronic components (specifically designed to properly drive our beacons) are not inside the lamp body but inside a control panel/controller box.

Advantages:

- **Easy maintenance:** periodic check activity is done in easy accessible areas.
- **Longer life:** beacons are often installed in areas subject to heat, smoke, harsh conditios that may affect electronic components life; install cards and drivers in a protected case and environment has positive results on the whole AWL System life.



CONTROL PANEL

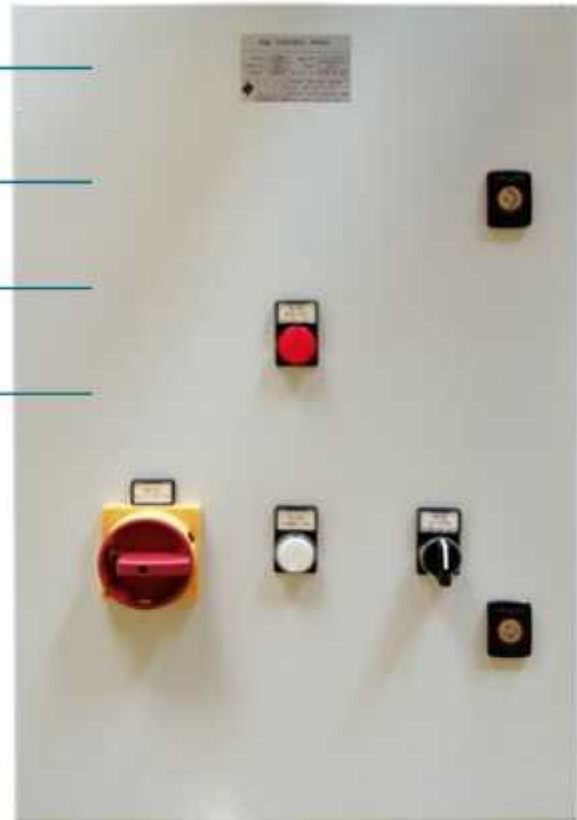
CONTROL PANEL FOR AWL SYSTEM

Mild steel material, painted RAL7035 as standard

IP65 protection degree

Suitable for wall mounting

Operators and lamps on front door



LUXSOLAR Control Local Panel suitable for safe area to control LUXSOLAR LED Aircraft Warning Lights as per IEC rules.

With high quality materials and components and customizable features according to customer's needs, LUXSOLAR control panel is designed and manufactured to drive and manage Aircraft Warning Lights in different configurations.

CERTIFICATION



FEATURES



TYPICAL APPLICATION



CONTROL PANEL

CONTROL PANEL FOR AWL SYSTEM TECHNICAL SPECIFICATIONS

STANDARD FEATURES

- Mild steel material, painted RAL7035
- Available for power supply (standard): 230Vac
- 0/I main isolating switch for power supply
- Module for simultaneous flashing (where applicable)
- AUTO/MAN or DAY/NIGHT/AUTO switch selector
- Beacon fault contacts available on terminals (free voltage)
- Local LED indicator for power on
- LUXSOLAR power electronics to feed and drive the beacons
- Overvoltage protection (surge arrester)
- Twilight sensor-Photocell (standard)
- Suitable for wall mounting (standard)
- Degree of protection: IP65 (standard)
- Operating temperature: -20C° to +50C° (standard)

OPTIONAL FEATURES

- GPS module for wireless synchronization among two or more AWL Systems
- Beacon(s) fault contact available on front door
- Thermostatic heater and hygostat
- Internal winterization (for extreme cold climate)
- Astronomic clock
- Scada System
- LUXSOLAR Cloud Monitoring System
- UPS/Battery back-up system
- SS304 or SS316 control panel enclosure material
- Degree of protection: IP66 (with additional transparent door)
- Available for other power supplies (110Vac, 24Vdc or 48Vdc)

DESIGN



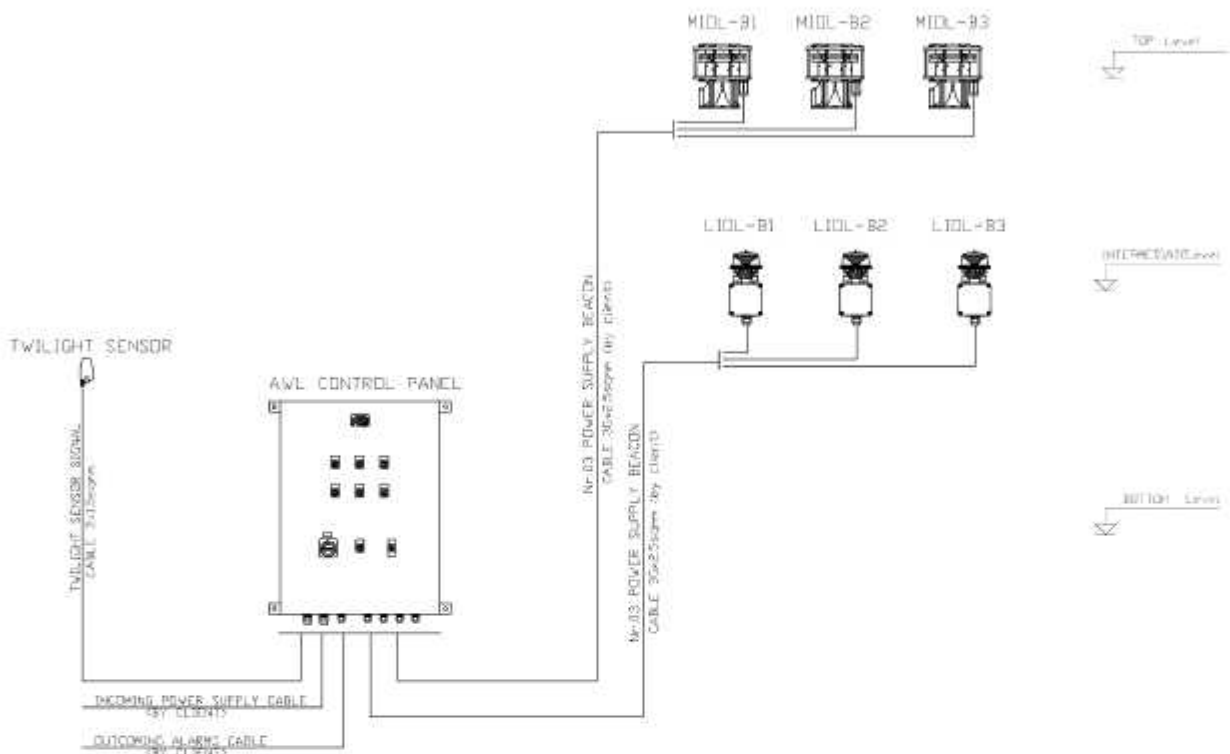
Our technical Team can assist you in the design, as per aviation rules, of your AWL System.

For any additional information please contact:
lx@luxsolar.com

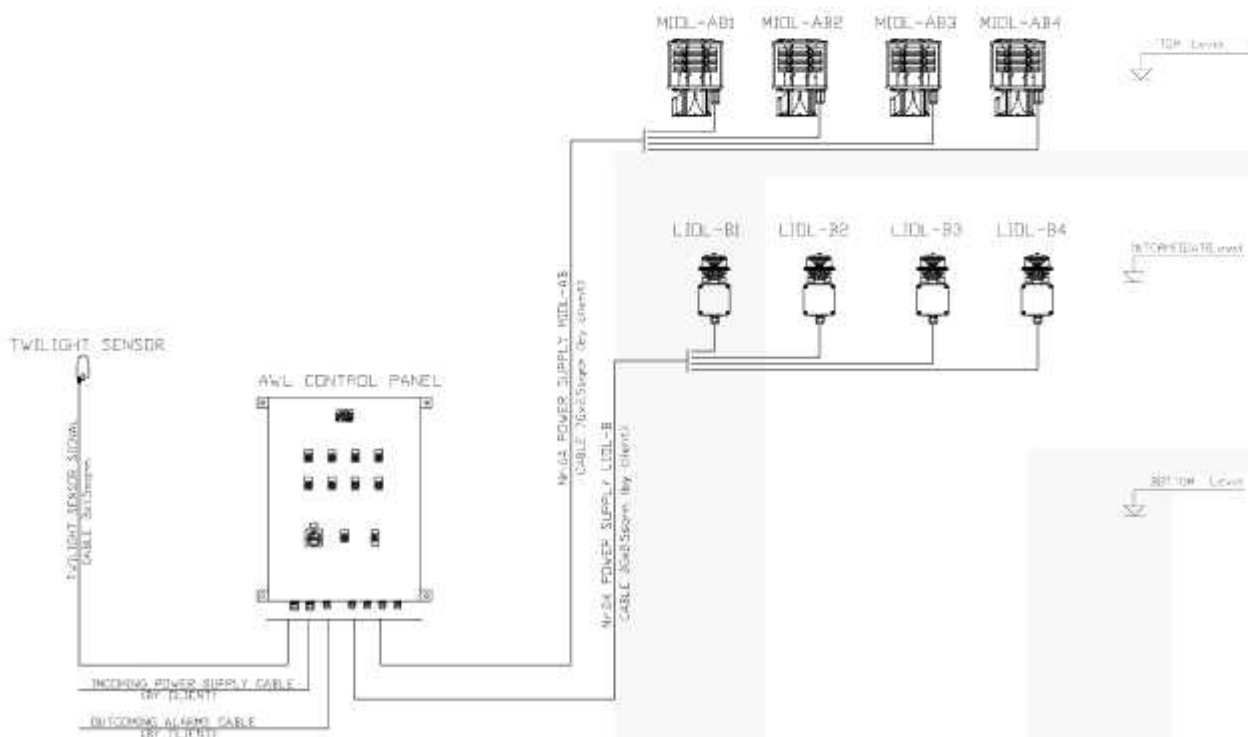
CONTROL PANEL

CONTROL PANEL FOR AWL SYSTEM TECHNICAL SPECIFICATIONS

TYPICAL DRAWING: AWL SYSTEM 3 MIOL-B + 3 LIOL-B



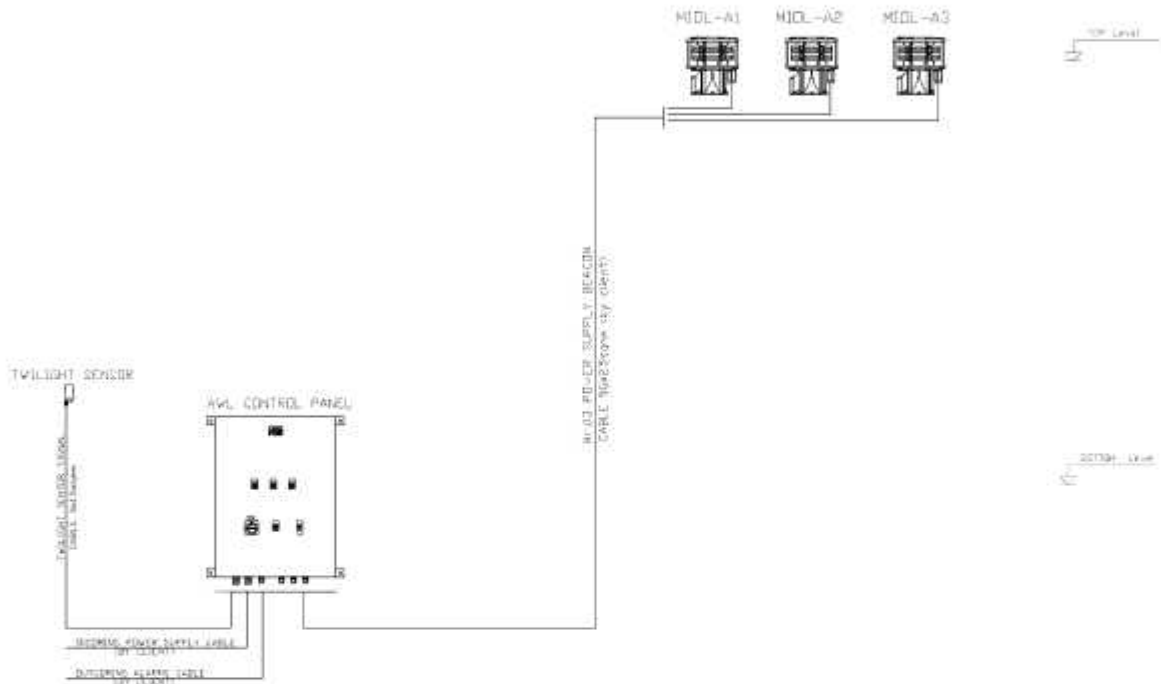
AWL SYSTEM 4 MIOL-AB + 4 LIOL-B



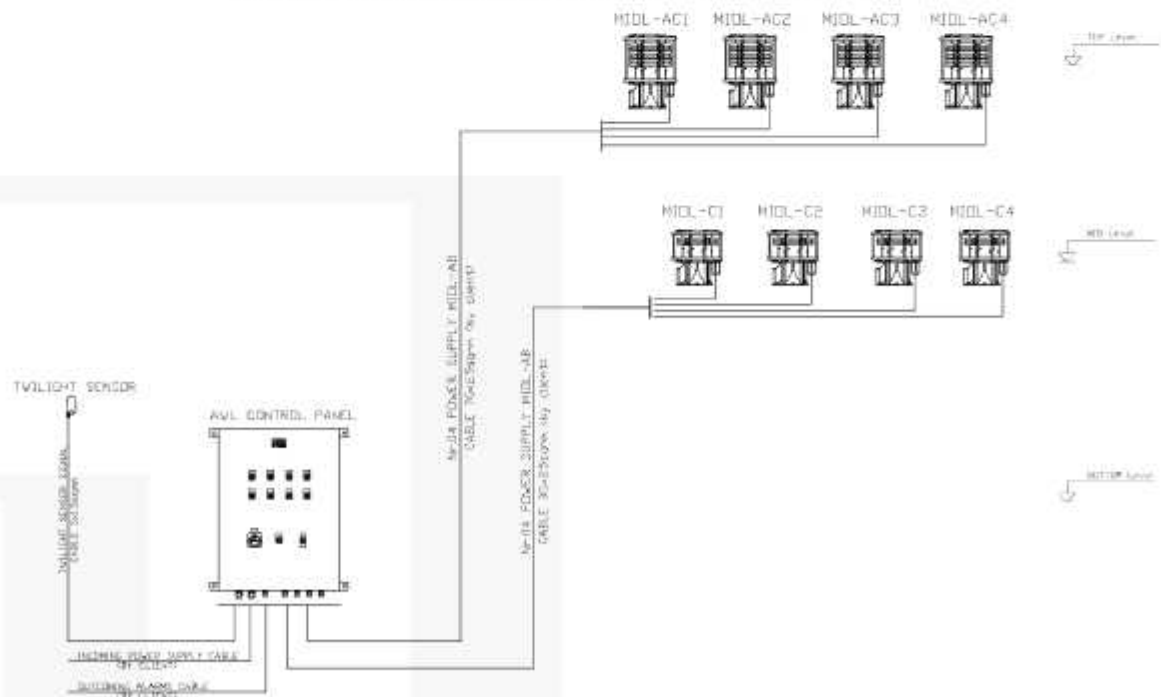
CONTROL PANEL

CONTROL PANEL FOR AWL SYSTEM TECHNICAL SPECIFICATIONS

TIPYCAL DRAWING: AWL SYSTEM 3 MIOL-A



AWL SYSTEM 4 MIOL-AC + 4 MIOL-C



SYSTEMS CONFIGURATION

LIGHT POSITIONING

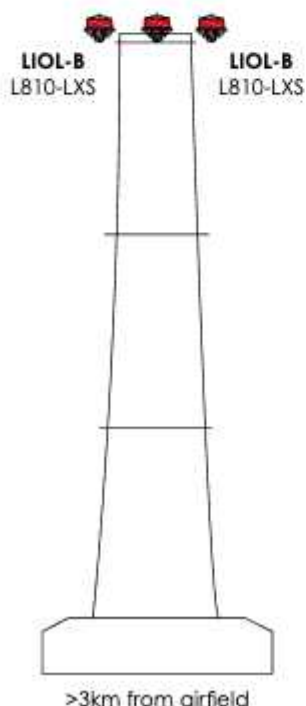
ICAO regulation Annex 14, Vol. 1 and Annex 6, specifies that – on the basis of their height and kind of marking, obstacles may require beacons installed on several levels (top, middle, etc.). The number of beacons required for each level depends on the external diameter of the structure and is suggested in the following chart:



ELEVATED STRUCTURES <45m

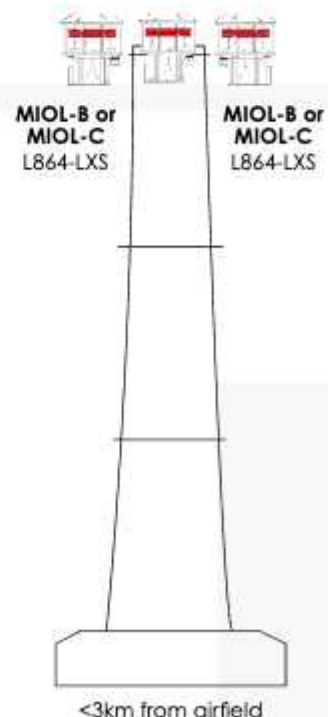
LOW INTENSITY

Red steady burning (Night)



MEDIUM INTENSITY

Red flashing or steady burning (Night)

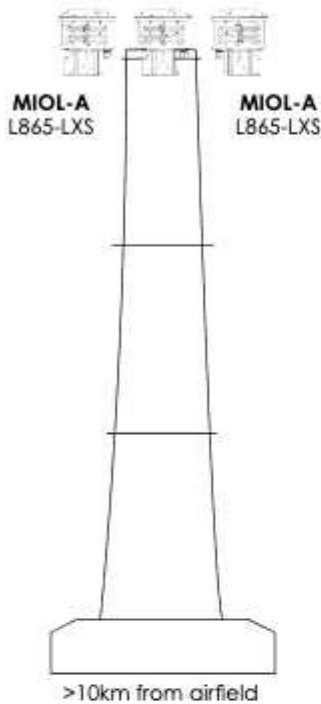


NOT MARKED

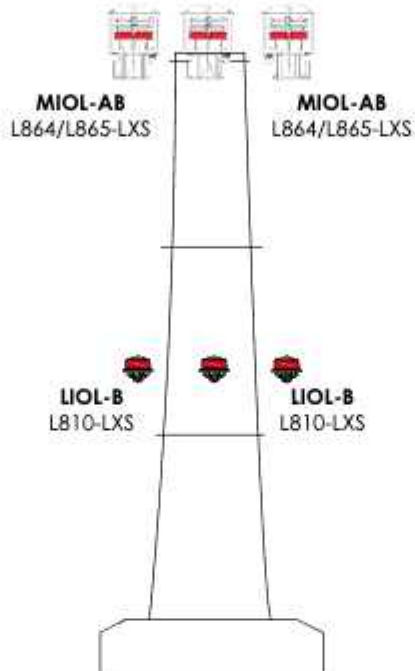
SYSTEMS CONFIGURATION

ELEVATED STRUCTURES FROM 45m TO 105m

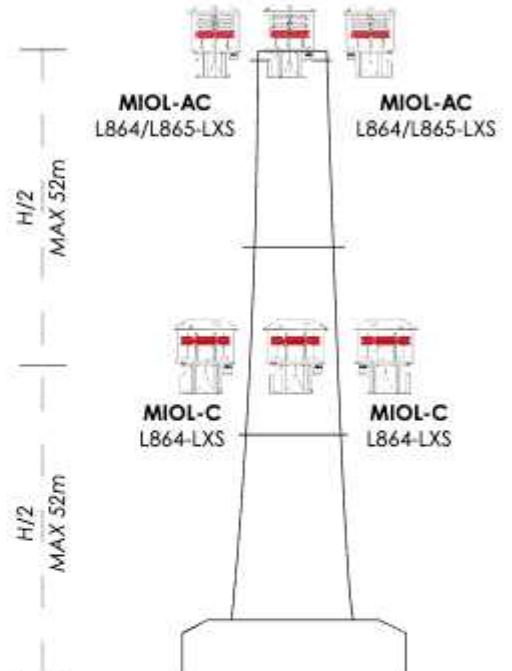
MEDIUM INTENSITY
White flashing
(Day and Night)



DUAL MEDIUM INTENSITY
White flashing (Day)
Red flashing (Night)

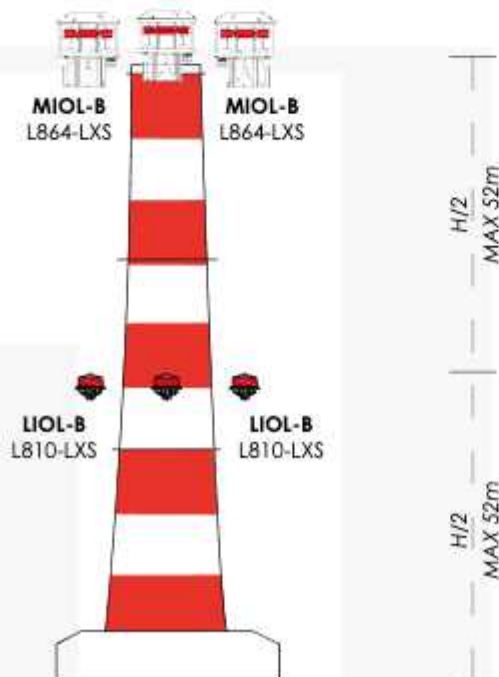


DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

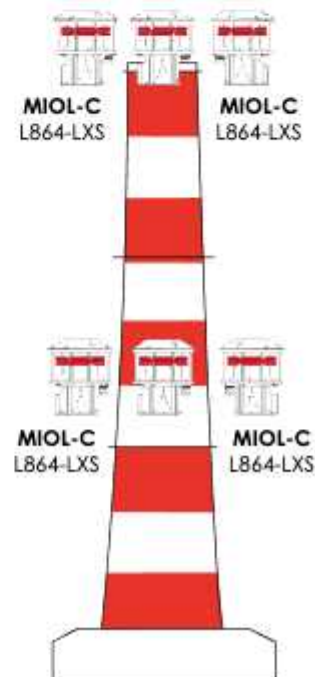


NOT MARKED

MEDIUM INTENSITY
Red flashing (Night)
Red steady burning (Night)



MEDIUM INTENSITY
Red steady burning (Night)



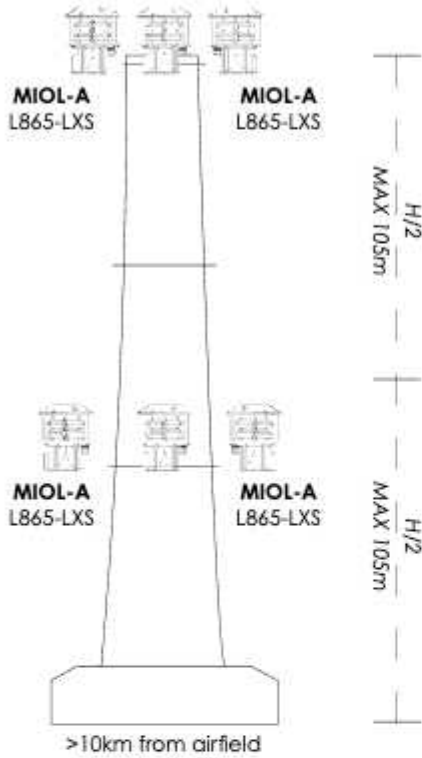
MARKED

SYSTEMS CONFIGURATION

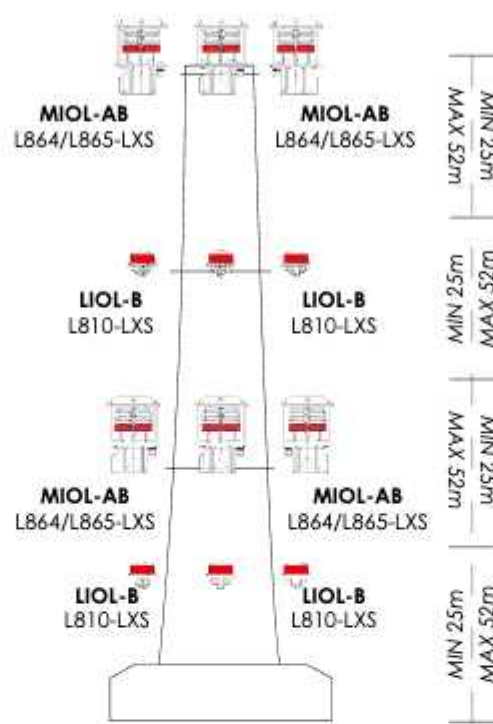
ELEVATED STRUCTURES FROM 105m TO 150m

NOT MARKED

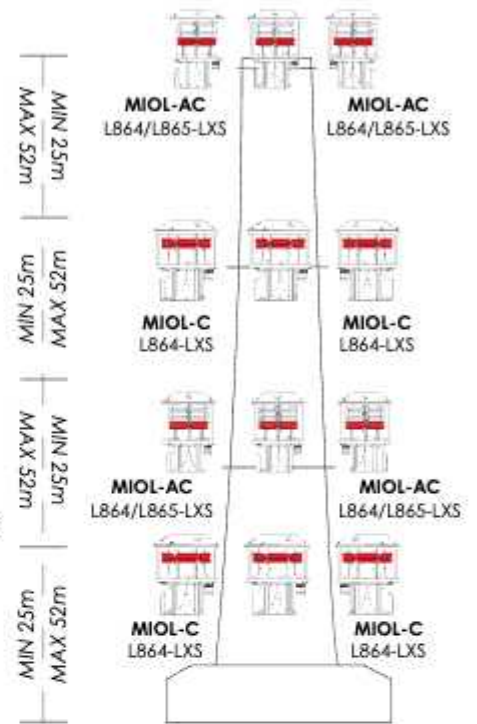
MEDIUM INTENSITY
White flashing
(Day and Night)



DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

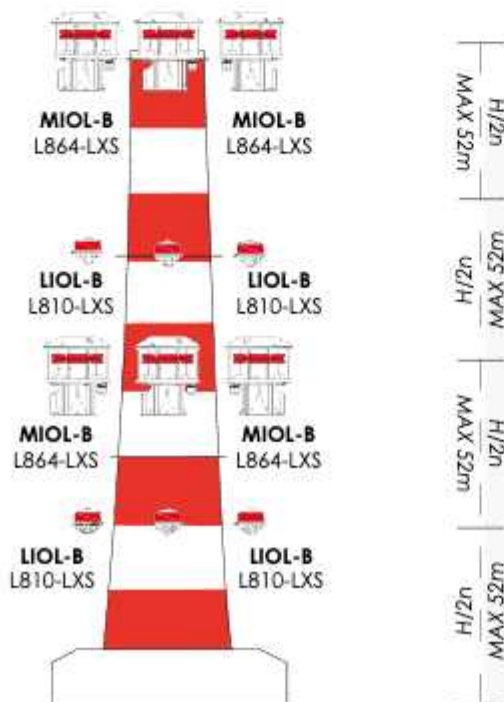


DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

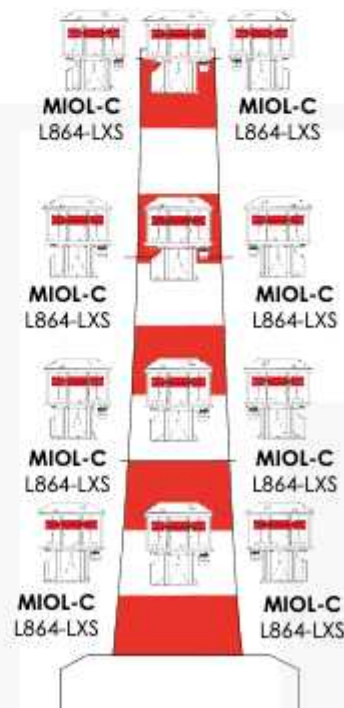


MARKED

MEDIUM INTENSITY
Red flashing (Night)
Red steady burning (night)

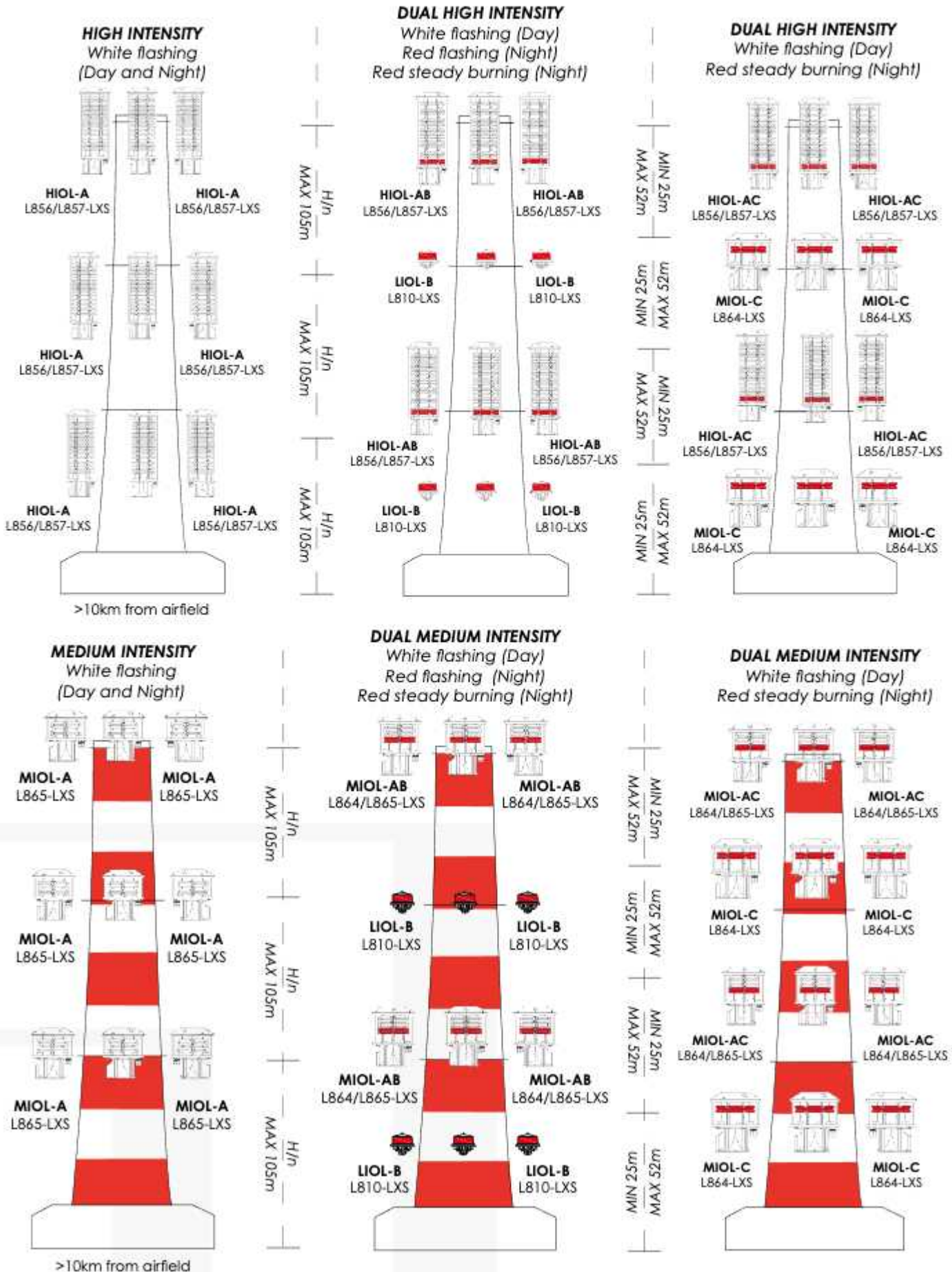


MEDIUM INTENSITY
Red steady burning (Night)



SYSTEMS CONFIGURATION

ELEVATED STRUCTURES >150m



BRIDGES



La Pepa bridge (Spain) - Luxsolar 2015
MIOL C (Red light night mode)



Calatrava bridge (Italy) - Luxsolar 2013
MIOL AB (White light day/twilight mode - Red light night mode)



San Giorgio bridge (Italy) - Luxsolar 2020
MIOL A (White light day - White light night)

BUILDINGS



Porto Arabia (Qatar) - Luxsolar 2021
MIOL C ALL-IN-ONE (Red light night mode)



Diamond Tower, Solea, Solaria and Aria Towers - Luxsolar 2013
MIOL AB (White light day/twilight mode - Red light night mode) and
LIOL-B (Red light night mode)

BUILDINGS



Palazzo Regione Piemonte (Italy) - Luxsolar 2014
HIOL A (White light day/twilight/night mode) and
MIOL A (White light day/night mode)



Intesa San Paolo Torino (Italy) - Luxsolar 2013
HIOL A (White light day/twilight/night mode) and
MIOL A (White light day/night mode)

CONTACTS

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Web sites: www.ce2k.com - www.luxsolar.com

- **LinkedIn:** Luxsolar Italia



- **YouTube:** Luxsolar





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www.luxsolar.com