# MEDIUM INTENSITY OBSTRUCTION LIGHT







According to Annex 14 of ICAO regulation, 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 charactertistics 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.



## MIOL-AB/AC Ex mb or Ex eb mc

Patented heat dissipator for optimum cooling

Stabilised light output:

20.000cd day mode (white) 2.000cd night mode (red)

▶Based on LED technology ►White/Red flashing light (MIOL-AB) ►White flashing/Red steady burning light (MIOL-AC)

Optimized optical lens

Anodised aluminium body

Borosilicate glass cover protection

Anti-condensation valve

Ex eb terminal box (Separate Ex certificate)

**NOTE**: electronic beacon driver in a separate enclosure

\*as option

**IP66** 



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

With a compact body, high quality and ultra-bright LEDs, customised lenses for an optimum beam spread, LUXSOLAR MIOL-AB/AC Ex product is your best choice for an efficient, long life and reliable Aircraft Warning Obstacle Light.

This beacon has been designed for hazardous areas with Ex eb mb IIC and Ex tb IIIC protection. ATEX, IECEx, INMETRO and ECASEx certified, compliant to EN/IEC 60079-0, EN/IEC 60079-7, EN/IEC 60079-18, EN/IEC 60079-31 regulations. It is suitable for hazardous areas Zone 1, Zone 21, Zone 2, Zone 22 where potentially explosive atmosphere due to the presence of flammable and explosive vapours, gas or dust may be present.

#### **CERTIFICATION**











#### COMPLIANCE







#### **FEATURES**























#### TYPICAL APPLICATION









# MIOL-AB/AC Ex eb mb or Ex eb mc TECHNICAL SPECIFICATIONS

#### **OPTICAL FEATURES**

- Based on LED technology
- 20.000cd day mode, WHITE light (20fpm)
- 2.000cd night mode, RED light
- Horizontal beam radiation 360°
- Vertical beam spread 4°
- PMMA lens

#### **EX EXECUTION**

#### **ATEX marking:**

II 2GD Ex eb mb IIC T6 Gb; Ex tb IIIC T80°C Db

T. Amb:

- ► -40°C/+48°C (version 113)
- ► -40°C/+52°C (version 110)

II 3GD

Ex eb mb IIC T6 Gc; Ex tb IIIC T80°C Dc

T. Amb:

- ► -40°C/+58°C (version 215)
- ► -40°C/+64°C (version 210)

#### **IECEx marking:**

Ex eb mb IIC T6 Gb; Ex tb IIIC T80°C Db T. Amb:

- ► -40°C/+48°C (version 113)
- ► -40°C/+52°C (version 110)

Ex eb mc IIC T6 Gc; Ex tb IIIC T80° Dc

- T. Amb:
- ► -40°C/+58°C (version 215)
- ► -40°C/+64°C (version 210)

#### **MECHANICAL FEATURES**

- RAL 2004 painted aluminium body
- Borosilicate glass cover protection
- Degree of protection: IP66
- Internal heat sink for optimum cooling
- Anti-Condensation Valve
- Lamp unit weight: 12kg

#### **ELECTRICAL FEATURES**

- Power supply by Luxsolar Control Panel:
  - 12/24 Vdc
  - 115/230 Vac
- Average power consumption:
  - @20fpm day mode: 45W (MIOL-AB/MIOL-AC)
  - @20fpm night mode: 10W (MIOL-AB)
    @30fpm night mode: 11W (MIOL-AB)
    @40fpm night mode: 12W (MIOL-AB)
  - night mode (steady) Miol-AC: 54W
- LED feeded at constant current
- No RF-radiations

#### **APPLY TO**

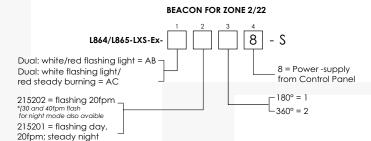
- Stack
- Chimney
- Tower crane
- Offshore Platform
- Chemical and petrochemical plant
- ATEX certificate
- IECEx certificate
- INMETRO certificate
- ECASEx certificate
- CE marking

#### **COMPLIANCE**

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

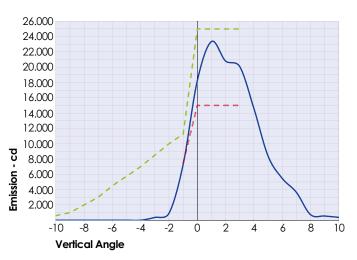
#### **ORDER CODE**

# BEACON FOR ZONE 1/21 L864/L865-LXS-Ex Dual: white/red flashing light = AB Dual: white flashing light/ red steady burning = AC 113102 = Flashing 20fpm \*(30 and 40fpm flash for night mode also avaible) 113101 = Flashing day, 20fpm; steady night

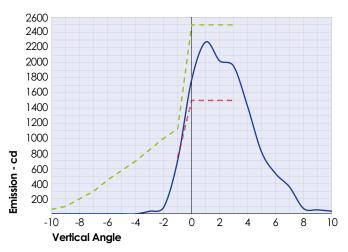


Note: ambient temperatures and light fixture's versions are selected by CE2K according to project specs.

# MIOL-AB/AC Ex eb mb Ex eb mc TECHNICAL SPECIFICATIONS



- L865-LXS-200-Ex-A average emission level at 90°C ambient temp.
- ICAO ANNEX 14 medium intensity type A Min. Required Intensity
- ICAO ANNEX 14 medium intensity A Max. Required Intensity



- L864-LXS-200-Ex-B average emission level at 90°C ambient temp.
- ICAO ANNEX 14 medium intensity type B/C Min. Required Intensity
- ICAO ANNEX 14 medium intensity type B/C Max. Required Intensity

