

# ICAO Low-intensity Type A (10cd) + Infrared 850nm ICAO Low-intensity Type B (32cd) + Infrared 850nm Low-Intensity Infrared - LED Aircraft Warning Light

## Low-Intensity 10cd and 32cd with Infrared 850nm Stand-alone

### LED Aviation Obstruction Lights

Low-intensity red aviation warning light incorporates an element of infrared creating a Night Vision Goggle (NVG) compatible obstruction light. The light is designed for marking tall structures such as wind turbines, chimneys, masts, and towers. Including functionality such as volt free fault monitoring, photocell and flash controller incorporated in the light.

### Key Features

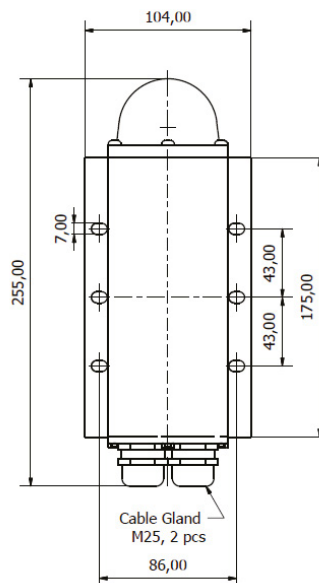
- Based on LED-technology
- 10cd and 32cd RED fixed and flashing light
- Incorporated infrared 850nm light
- Incorporated photocell and fault monitoring
- Extremely low-power consumption
- More than 10 years of maintenance free operating time
- 5 year warranty

### Optical characteristics

- 10cd fixed or flashing
- 32cd fixed or flashing
- Colour aviation RED
- Horizontal beam 360°
- Vertical beam +6°...+10°
- Infrared 850nm

### Specifications met

- ICAO International Standards and Recommended Practices:
- Aerodromes Annex 14 Volume 1,
- 5th Edition, July 2009, Chapter 6:
  - Low-intensity Type A
  - Low-intensity Type B
- FAA Advisory Circular  
AC 150/5345-43G: L-810
- Finnish Civil Aviation Authority, TraFi



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# ICAO Low-intensity Type A (10cd) + Infrared 850nm

## ICAO Low-intensity Type B (32cd) + Infrared 850nm

### Low-Intensity Infrared - LED Aircraft Warning Light

#### Electrical Characteristics

- ACW- models, wide AC voltage range:  
Nominal 100...240V<sub>AC</sub>, Nominal 50 ... 60Hz
- DCW- models, wide DC voltage range:  
Nominal 10...60V<sub>DC</sub>
- Overvoltage protection
- Constant power input by active PFC
- Day/Night switch (400/800/1600lux)
- Flash rates: 20/40/60fpm
- Power consumption 4-7W

#### Mounting Set Options

- CEL-MS-HV80
- CEL-MS-EV60
- CEL-MS-EV100
- CEL-MS-EV150
- CEL-MS-DEV60
- CEL-MS-DEV100
- CEL-MS-RW
- CEL-MS-LVU
- CEL-MS-N1B

#### Mechanical Characteristics

- Anodised, marine grade aluminium body and end parts
- AISI316 acid-proof stainless steel screws
- Glass cover, degree of protection IP65
- Operating temperature range -40...+55 °C
- Height 255 mm, diameter 104 mm
- Weight 1,3 kg (without mounting set)
- Terminal block for 1.5 ...4mm<sup>2</sup> wires



Order code	ICAO / FAA	Output	Op. volt.	Power cons.	Fault monitoring	Built-in photocell	Packing dimensions
CEL-LI-10+IR-DCW-A	Type A	10cd	10-60VDC	4 W	Yes	Yes	280x130x100, 1,5kg
CEL-LI-10+IR-ACW-A	Type A	10cd	100-240VAC	7 VA	Yes	Yes	280x130x100, 1,5kg
CEL-LI-32+IR-DCW-A	Type B / L-810	32cd	10-60VDC	7 W	Yes	Yes	280x130x100, 1,5kg
CEL-LI-32+IR-ACW-A	Type B / L-810	32cd	100-240VAC	9 VA	Yes	Yes	280x130x100, 1,5kg
Mounting sets							
CEL-MS-HV80	Mounting set, basic model for 33 to 80 mm pipes						
CEL-MS-EV60	Mounting set with extension plate for 30 to 60 mm pipes						
CEL-MS-EV100	Mounting set with extension plate for 60 to 100 mm pipes						
CEL-MS-EV150	Mounting set with extension plate for 100 to 150 mm pipes						
CEL-MS-DEV60	Mounting set for double lights with extension plate for 30 to 60 mm pipes						
CEL-MS-DEV100	Mounting set for double lights with extension plate for 60 to 100 mm pipes						
CEL-MS-RW	Mounting set with extension plate for roof or wall mounting						
CEL-MS-LVU	Mounting set with extension plate for L, V, and U-profiles, galvanized						
CEL-MS-N1B	Mounting set with 1" NPT at bottom						

# ICAO Low-intensity Type A (10cd) + Infrared 850nm ICAO Low-intensity Type B (32cd) + Infrared 850nm Low-Intensity Infrared - LED Aircraft Warning Light

## Electrical installation instructions

CEL LI SAL Series have two cable glands for easy chaining without external distribution boxes. Connection can be protected with a 6A or 10A fuse or with a circuit breaker (C curve: C6A or C10A).

## Configuring CEL LI SAL Series

Photocell mode (enabled/disabled) and threshold (400 lux, 800 lux or 1600 lux) can be selected by the user using DIP configuration switches.

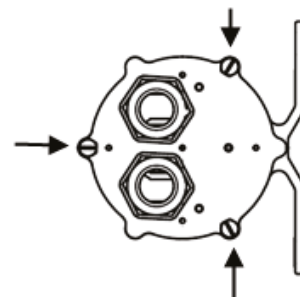
Open three screws on the bottom of CEL light to gain access to DIP switches. We recommend using a socket wrench but the screws can also be opened with a suitable flat-head screwdriver. Holding the aviation obstacle light glass dome pointing upwards, the individual DIP switches are numbered 1-4 from left to right.

## Installation specifications

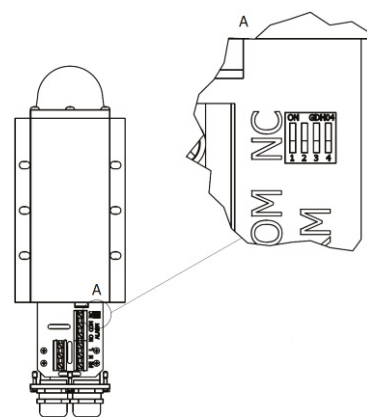
- Cable gland M25
- Cable diameter 11 to 17mm
- Wire diameter max. 6mm<sup>2</sup>
- Recommended cable  
3x1.5mm<sup>2</sup> or 3x2.5mm<sup>2</sup>

## Options

- CGS-20 Smaller cable glands  
Set includes 2 pcs M20 cable glands with M25-M20 adapters for 7-13 mm cables



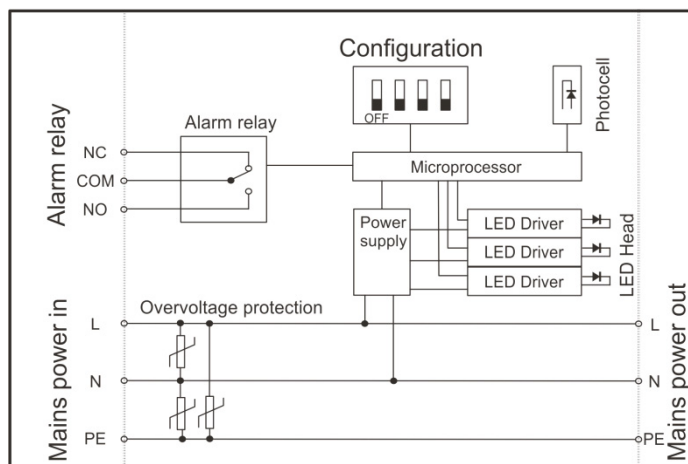
1. Bottom plate screws



2. Location of DIP switches

DIP Switch Settings-Photocell mode		
1	2	Operating mode
OFF	OFF	Photocell disabled
ON	OFF	400 lx
OFF	ON	800 lx
ON	ON	1600 lx

DIP Switch Settings-Flash mode		
3	4	Operating mode
OFF	OFF	Steady-burning i.e.fixed
ON	OFF	20 flashes per minute
OFF	ON	40 flashes per minute
ON	ON	60 flashes per minute



3. Block diagram of CEL LI+IR stand-alone light.

Factory default setting is all switches in OFF (steady-burning mode without photocell control). Turn-off time in 3 min, turn-on time is 10 sec. When the photocell operation is enabled, the obstruction light turns on when the ambient light level has dropped below selected level for ten seconds. Light turns off when the ambient light level has exceeded the selected value for more than three minutes.

# ICAO Low-intensity Type A (10cd) + Infrared 850nm ICAO Low-intensity Type B (32cd) + Infrared 850nm Low-Intensity Infrared - LED Aircraft Warning Light

## CEL MS-HV80

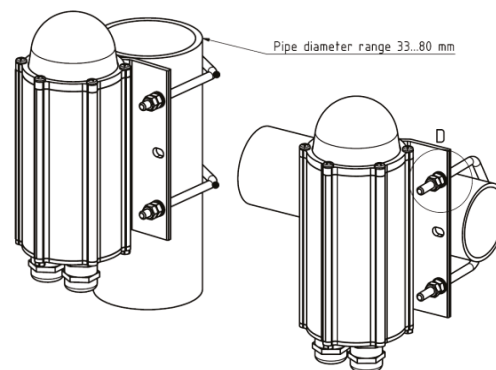
Mounting set for 33-80 mm vertical or horizontal pipe.

This mounting set includes:

- 2 pcs M6 U-bolt
- 8 pcs M6 hex nut
- 4 pcs 6/12 mm washer

All parts are AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-HV80 datasheet



**Order Code MS-HV80**

## CEL MS-EV60

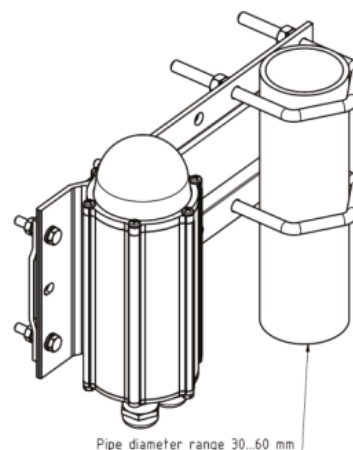
Mounting set with extension plate for 30-60 mm vertical pipe installation.

This mounting set includes:

- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV60 datasheet



**Order Code: MS-EV60**

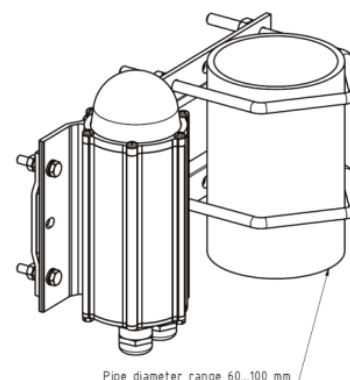
## CEL MS-EV100

Mounting set with extension plate for 60-100 mm vertical pipe installation. This mounting set includes:

- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV100 datasheet



**Order Code: MS-EV100**

# ICAO Low-intensity Type A (10cd) + Infrared 850nm

## ICAO Low-intensity Type B (32cd) + Infrared 850nm

### Low-Intensity Infrared - LED Aircraft Warning Light

#### CEL MS-EV150

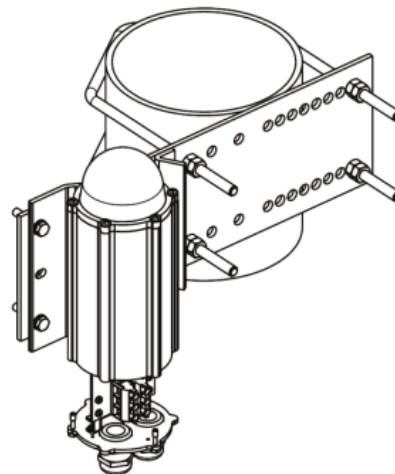
Mounting set with extension plate for 100-150 mm vertical pipe installation.

This mounting set includes:

- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs extension plate

Extension plate hot dipped galvanised steel, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV150 datasheet



Order Code: MS-EV150

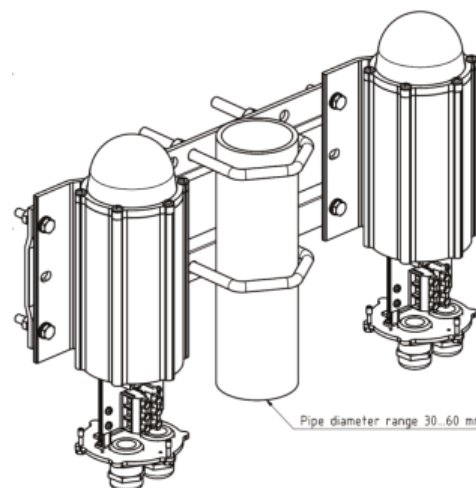
#### CEL MS-DEV60

Double mounting set with extension plate for 30-60 mm vertical pipe installation. Mounting set include:

- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-DEV60 datasheet



Order Code: MS-DEV60

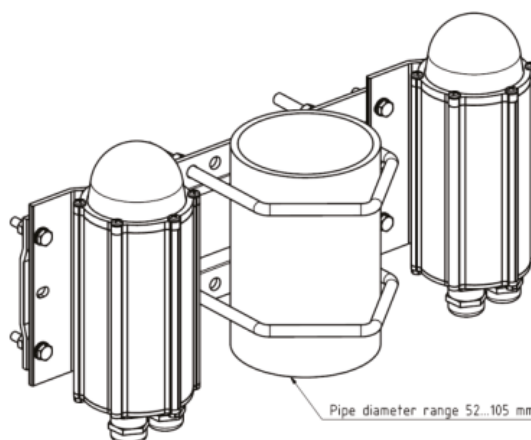
#### CEL MS-DEV100

Double mounting set with extension plate for 60-100 mm vertical pipe installation. Mounting set include:

- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-DEV100 datasheet



Order Code: MS-DEV100

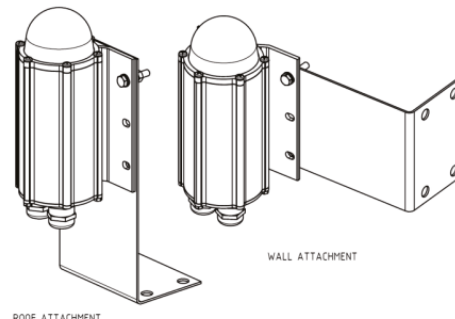
# ICAO Low-intensity Type A (10cd) + Infrared 850nm ICAO Low-intensity Type B (32cd) + Infrared 850nm Low-Intensity Infrared - LED Aircraft Warning Light

## CEL MS-RW

Mounting set for horizontal plate or wall installation.  
Mounting set includes:  
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer  
- 1 pcs L-shape 2 mm plate

All parts AISI 316 acid-proof stainless steel.

More detailed mechanical data: see MS-RW datasheet



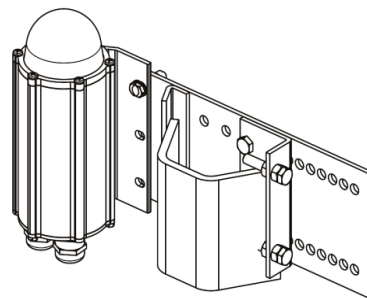
**Order Code: MS-RW**

## CEL MS-LVU

Mounting set for L and V-shape profiles  
Mounting set includes:  
- 1 set accessories for light unit fitting to plate  
- 1 pcs extension plate with adjusting plate and accessories

Extension plate hot dip galvanized steel, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-LVU datasheet

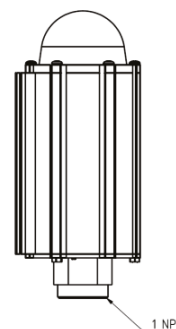


**Order Code: MS-LVU**  
(with galvanized extension plate)  
**Order Code: MS-LVA**  
(with AISI316 extension plate)

## CEL MS-N1B :

Mounting set for 1" NPT at bottom

More detailed mechanical dimensions: see MS-N1B datasheet.



**Order Code: MS-N1B**