# 200cd Standalone Obstruction Light - Photocell, Flasher, Fault Monitoring CAA UK - CAP168 - Group B Low Intensity Aircraft Warning Light

## CEL-LI-200-DCW-A  - Low-Intensity SAL Series

CEL low-intensity stand-alone series is designed for marking tall structures such as wind turbines, chimneys, masts, and towers. The product offers unique features such as fault monitoring, photocell and switcher incorporated in the light.

## Key Features
- Based on LED technology
- 200cd red fixed and flashing light
- Incorporated photocell and fault monitoring
- Extremely low power consumption
- More than 10 years of maintenance free operating time
- 5 year warranty - the longest in the industry
- 10 year warranty for the optics

## Optical characteristics
- 200cd fixed or flashing
- Colour aviation red
- Horizontal beam 360°
- Vertical beam
  >200cd +5°...+8°
  >50cd 0°...+15°

## Specifications met
- CAP 168 CAP 437 Civil Aviation Authority, London, UK
  February 2001, Flight obstacle (low intensity)

## Electrical Characteristics
- ACW- models, wide AC voltage range:
  Nominal 115...240$V_{AC}$, Nominal 50 ... 60Hz
- DCW- models, wide DC voltage range:
  Nominal 10...60$V_{DC}$
- Overvoltage protection
- Constant power input by active PFC
- Day/Night switch (400/ 800/ 1600 lux)
- Flash rates: 20/ 40/ 60fpm
- Power consumption 12W

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

### Low-Intensity 200cd Stand-alone Series
LED Aviation Obstruction Lights

www.contarnex.com

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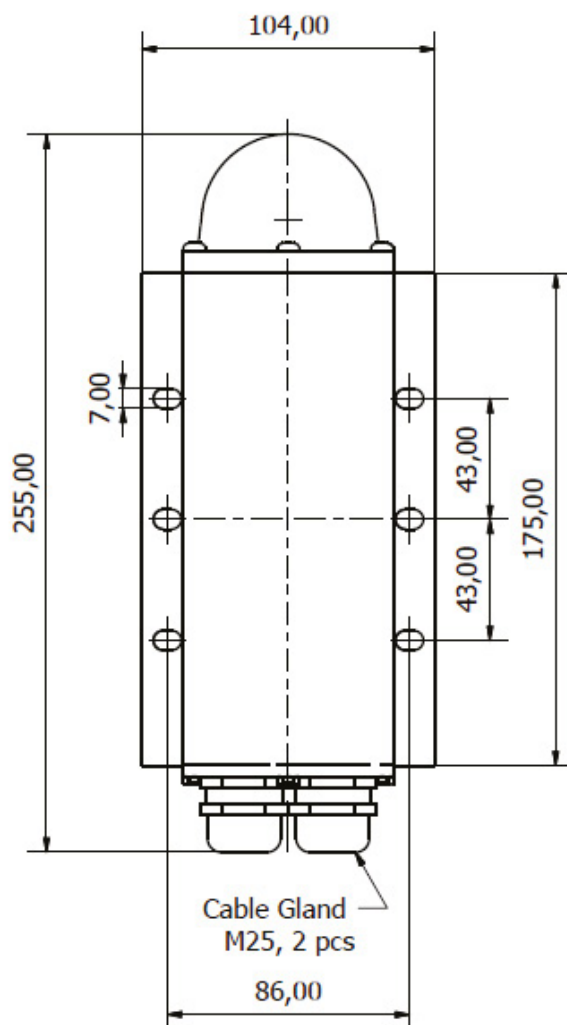
## Mechanical Characteristics

- Andoised, marine grade aluminium body and end parts
- AISI 316 acid-proof stainless steel screws
- Glass cover, degree of protection IP65
- Operating temperature range -40...+55°C
- Height 255mm, diameter 104mm
- Weight 1,3kg (without mounting set)
- Terminal block for 1.5 ... 4mm2 wires

| Order code | ICAO / FAA | Output | Op. volt. | Power cons. | Fault monitoring | Built-in photocell | Packing dimensions |
|---|---|---|---|---|---|---|---|
| CEL-LI-200-DCW-A | | 200cd | 10-60VDC | 10W | Yes | Yes | 280x130x100, 1,5kg |
| CEL-LI-200-ACW-A | | 200cd | 115-240VAC | 12VA | 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 |

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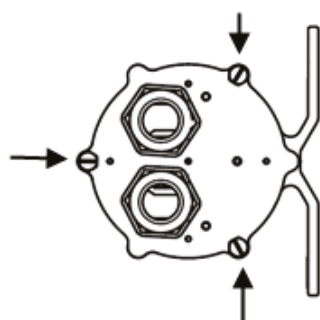## CEL-LI-200-DCW-A  - Low-Intensity SAL Series



Cable Gland
M25, 2 pcs

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## CEL-LI-200-DCW-A  - Low-Intensity SAL Series

## 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).
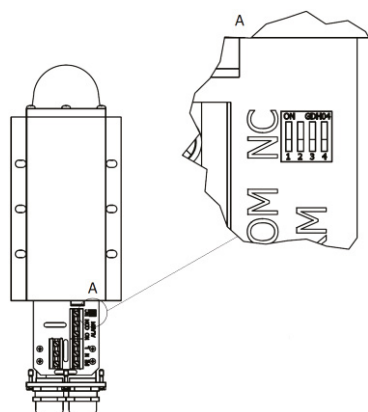
## Configuring CEL LI SAL Series

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.
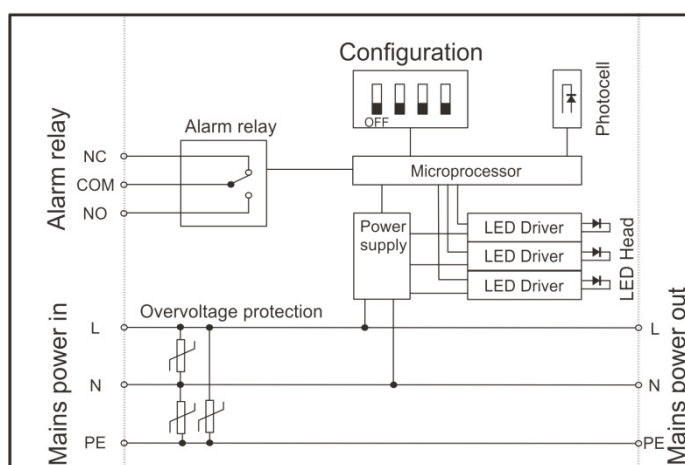
## Installation specifications

- Cable gland M25
- Cable diameter 11 to 17mm
- Wire diameter max. 6mm$^2$
- Recommended cable
- 3x1.5 mm$^2$ or 3x2.5mm$^2$

## Options

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

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



1. Bottom plate screws



2. Location of DIP switches



3. Block diagram of CEL LI stand-alone light

| 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 |

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## CEL-LI-200-DCW-A  - Low-Intensity SAL Series

## CEL-MS-HV80
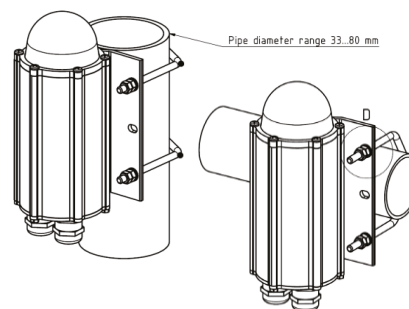Mounting set for 33-80mm vertical or horizontal pipe

This mounting set includes:
- 2 pcs M6 U-bolt
- 8 pcs M6 hex nut
- 4 pcs 6/12 mm washer

All parts AISI 316 acid-proof stainless steel

More detailed mechanical data: see CEL-MS-HV80 datasheet

Order Code: **CEL-MS-HV80**


Pipe diameter range 33..80 mm

## CEL-MS-EV60
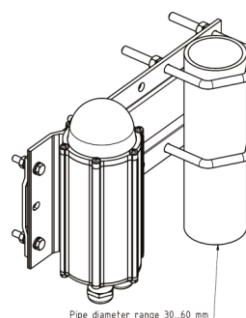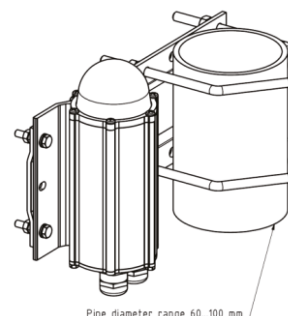Mounting set with extension plate for 30-60mm vertical pipe installation

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 AISI 316 acid-proof stainless steel.

More detailed mechanical data: see CEL-MS-EV60 datasheet

Order Code: **CEL-MS-EV60**


Pipe diameter range 30..60 mm

## CEL-MS-EV100:
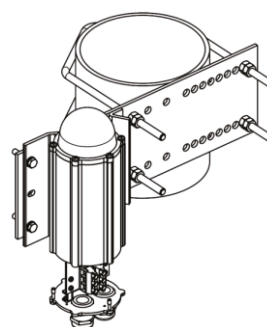Mounting set with extension plate for 60-100mm vertical pipe installation

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 AISI 316 acid proof steel

More detailed mechanical data: see CEL-MS-EV100 datasheet

Order Code: **CEL-MS-EV100**


Pipe diameter range 60..100 mm

## CEL-MS-EV150:
Mounting set with extension plate for 100-150mm 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 AISI 316 acid-proof stainless steel

More detailed mechanical data: see CEL-MS-EV150 datasheet

Order Code: **CEL-MS-EV150**

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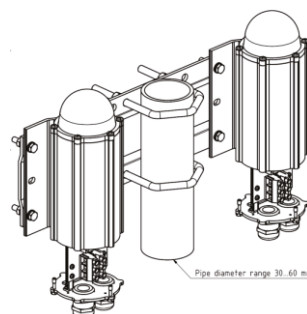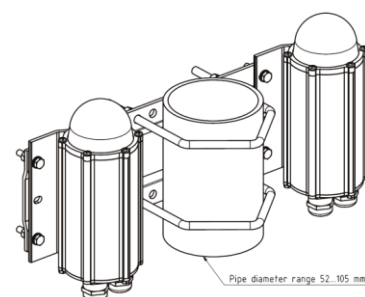
### CEL-MS-DEV60:

Double mounting set with extension plate for 30-60mm vertical pipe installation. Mounting set includes:
- 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 marine grade anodised aluminium, other parts AISI 316 acid-proof stainless steel

More detailed mechanical data: see CEL-MS-DEV60 datasheet

Order Code: **CEL-MS-DEV60**

### CEL-MS-DEV100:

Double mounting set with extension plate for 60-100mm vertical pipe installation. Mounting set includes:
- 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 marine grade anodised aluminium, other parts AISI 316 acid-proof stainless steel

More detailed mechanical data: see CEL-MS-DEV1 00 data sheet

Order Code: **CEL-MS-DEV100**

### CEL-MS-RW

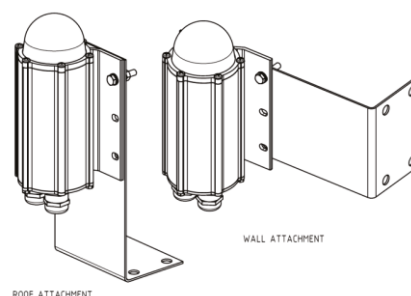Mounting set for horizontal plate or wall installation
Mounting set includes:
- 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- 1 pcs L -shape 2 mm plate
All parts AISI 316 acid-proof stainless steel

More detailed mechanical data: see CEL-MS-RW datasheet

Order Code: **CEL-MS-RW**

### CEL-MS-LVU

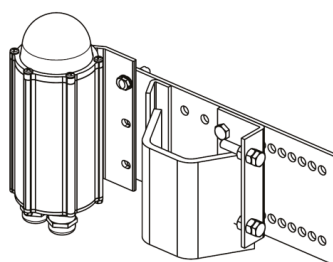Mounting set for L and V -shape profiles
Mounting set includes
- 1 set accessories for light unit fitting to plate
- 1 pcs extension plate with adjusting plate and accessories
Extension plate hot dip galvanised steel, other parts
AISI 316 acid-proof stainsteel

More detailed mechanical data: see CEL-MS-LVU datasheets

Order Code: **CEL-MS-LVU** (with galvanized extension plate)
           **CEL-MS-LVA** (with AISI 316 extension plate)

### CEL-MS-N1B

Mounting set for 1" NPT at bottom
More detailed mechanical dimensions: see CEL-MS-N1 B dataheet

Order Code: **CEL-MS-N1 B**

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