

# 10cd Low-intensity Obstruction Light - Photocell & Flasher

# 10-60V<sub>DC -</sub> ICAO Type A

CEL-LI-10-DCW-PCFL - LED Aircraft Warning Light

# **Key Features**

- Based on LED technology
- Extremely reliable long lifetime
- Suitable for off-shore use
- Very low power consumption
- Wide 10 to 60VDC input voltage
- Stabilised light output
- Lightweight and small low wind load factor
- Easy to install, several mounting sets available
- Two cable glands, easy to chain without terminal boxes
- No RF-radiations
- Five (5) years warrantyPatented

# Benefits

- Long maintenance intervals
- Low energy cost
- Supply power voltage variations do not affect light output
- Very low total lifetime costs
- Low wind load

### **Specifications met**

- ICAO International Standards and Recommended Practices: Aerodromes- Annex 14 Volume 1, 5th Edition, July 2009, Chapter 6: Low-intensity, Type A Fixed Obstacle Light

# **Optical characteristics**

- Intensity better than 10cd
- Colour aviation red
- Horizontal radiation pattern 360°
- Vertical radiation pattern 15°
- LED supply current stabilised by constant current generator
- Light output degradation less than 30% after 100,000hrs of operation

## Electrical characteristics

- Nominal operating voltage 10-60V<sub>DC</sub>
   Power consumption less than 1W@ 12VDC, 1.1W@24 VDC
   12W@48VDC
- Current consumption when light is OFF: 2mA
- Over voltage protection

### **Mechanical characteristics**

- Anodised marine grade aluminium body and end parts
- AISI 316 acid proof steel screws
- Colourless (clear) glass cover
- Terminal box for 1.5-6 mm<sup>2</sup> wires
- Degree of protection IP 65
- Operating temperature range -55°C to +55°C
- Height 210mm, diameter 104mm, weight 1.1 kg
- Wind load with MS-EV60 mounting kit @ 200km/h less than 40N

# Options

- Mounting kits
- Without Photocell & flasher: Ref CEL-LI-10-DCW-F datasheet

# Order Code: CEL-LI-10-DCW-PCFL

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# Flash controller characteristics I parts - User selectable flashing rate (bold = factory default) Steady burning/20 fpm/40 fpm/ 60 fpm - 250ms flash duration



**Photocell characteristics** 

OFF/200 lux/400 lux/ 800 lux

- Turn on delay 1 s

- Turn off delay 200s

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- User selectable photocell sensitivity (bold = factory default)

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# 10cd Low-intensity Obstruction Light - Photocell & Flasherge 2 of 6 10-60V<sub>DC</sub> - ICAO Type A

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## **ELECTRICAL INSTALLATION INSTRUCTIONS**

## CEL-LI-10-DCW-PCFL have two cable glands for easy chaining without external distribution boxes

CEL-LI-10-DCW-PCFL is an obstacle light utilising LED technology. The cabling and installation principles are similar to those of conventional obstacle lights.

Connection can be protected with a 6A or 10A fuse or with a circuit breaker (C curve).

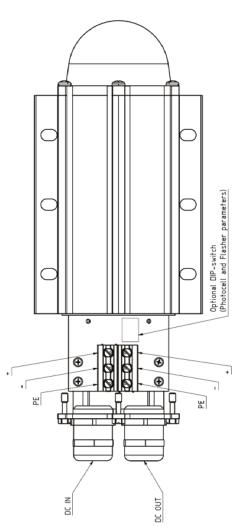
# Installation specifications

- 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 include 2 pcs M20 gable glands with M25-M20 adapters for 7-13mm cables



#### PCFL DIP switches

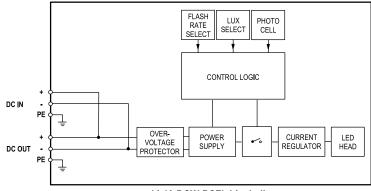
PHOTOCELL
OFF (light always ON)
200 lux
400 lux
800 lux



**Default DIP settings:** 800 lux, steady burning

DIP3	DIP4	FLASH RATE
OFF	OFF	STEADY BURNING
ON	OFF	20 fpm
OFF	ON	40 fpm
ON	ON	60 fpm

Flash duration: 250 ms



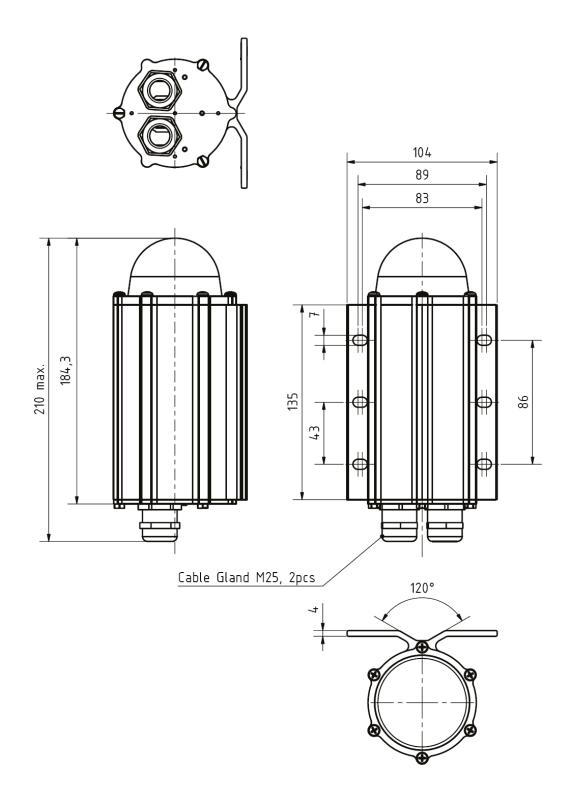
LI-10-DCW-PCFL block diagram



# 10cd Low-intensity Obstruction Light - Photocell & Flasher 10-60V $_{\mbox{\scriptsize DC}}$ . ICAO Type A

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**Mechanical dimensions** 





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There are several types of mounting sets available as option:

## CEL-MS-HV8O

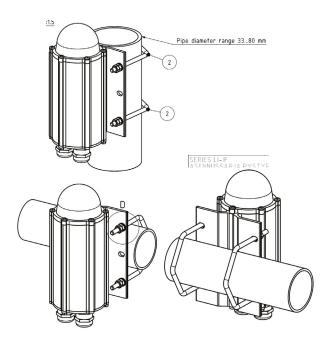
Mounting set for 33-80mm vertical or horizontal pipe

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

Order Code: CEL-MS-HV80



## CEL-MS-EV60

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

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: CEL-MS-EV60 datasheet

Order Code: CEL-MS-EV60

### CEL-MS-EV100

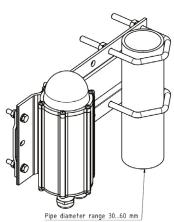
Mounting set with extension plate for 60-100mm vertical pipe installation

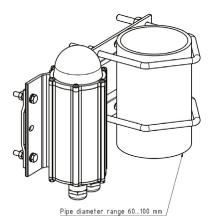
Mounting set includes:

- 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: CEL-MS-EV100 datasheet

Order Code: CEL-MS-EV100







# 10cd Low-intensity Obstruction Light - Photocell & Flasher 10-60V<sub>DC -</sub> ICAO Type A

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#### CEL-MS-EV150:

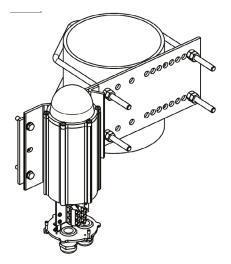
Mounting set with extension plate for 100-150mm vertical pipe installation

- 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 steel

More detailed mechanical data: MS-EV150 datasheet

Order Code: CEL-MS-EV150



#### 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 steel

More detailed mechanical data: MS-DEV60 datasheet

Order Code: CEL-MS-DEV60



Double mounting set with extension plate for 60-100mm vertical pipe installation

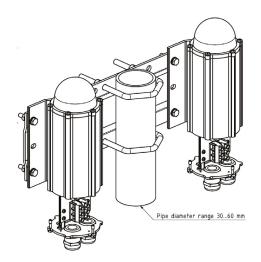
Mounting set includes:

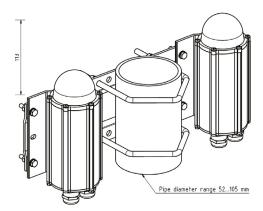
- 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- 1 pcs extension plate

Extension marine grade anodised aluminium, other parts AISI 316 acid proof steel

More detailed mechanical data: CEL-MS-DEV100 data sheet

Order Code: CEL-MS-DEV100







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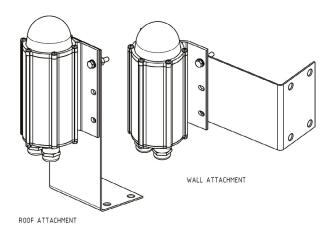
# CEL-MS-RW

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

Order Code: CEL-MS-RW



CEL-MS-LVU

Mounting set for L and V -shape profiles

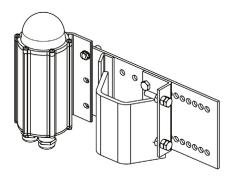
Mounting set includes

- 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 steel

More detailed mechanical data: CEL-MS-LVU datasheet

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: CEL-MS-N1 B dataheet

Order Code: CEL-MS-N1 B

