Low-Intensity 10cd and 32cd Stand-alone Series

LED Aviation Obstruction Lights

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

Key Features
- Based on LED-technology
- 10cd and 32cd red fixed and flashing light
- Incorporated photocell and fault monitoring
- Extremely low-power consumption
- More than 10yrs of maintenance free operating time
- 5 year warranty the longest in the industry
- 10 year warranty for the optics

Optical characteristics
- 10cd fixed or flashing
- 32cd fixed or flashing
- Colour aviation Red
- Horizontal beam 360°
- Vertical beam 0°…+10°

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

Electrical Characteristics
- ACW- models, wide AC voltage range:
  - Nominal 100...240VAC, Nominal 50 ... 60Hz
- DCW- models, wide DC voltage range:
  - Nominal 10...60VDC
- Overvoltage protection
- Constant power input by active PFC
- Day/Night switch (400/800/1600lux)
- Flash rates: 20/40/60fpm
- Power consumption 4-7W
10cd Low-intensity Obstruction Light

115-230VAC - ICAO Type A

CEL-LI-10-ACW-A - LED Aircraft Warning Light Stand-Alone Series

**Electrical Characteristics**

- ACW- models, wide AC voltage range:
  - Nominal 100...240VAC, Nominal 50 ... 60Hz
- DCW- models, wide DC voltage range:
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**Mechanical Characteristics**

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

**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

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CEL-LI-10-DCW-A</td>
<td>Type A</td>
<td>10cd</td>
<td>10-60VDC</td>
<td>2,5 W</td>
<td>Yes</td>
<td>Yes</td>
<td>280x130x100, 1,5kg</td>
</tr>
<tr>
<td>CEL-LI-10-ACW-A</td>
<td>Type A</td>
<td>10cd</td>
<td>100-240VAC</td>
<td>7 VA</td>
<td>Yes</td>
<td>Yes</td>
<td>280x130x100, 1,5kg</td>
</tr>
<tr>
<td>CEL-LI-32-DCW-A</td>
<td>Type B / L-810</td>
<td>32cd</td>
<td>10-60VDC</td>
<td>3,7 W</td>
<td>Yes</td>
<td>Yes</td>
<td>280x130x100, 1,5kg</td>
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<tr>
<td>CEL-LI-32-ACW-A</td>
<td>Type B / L-810</td>
<td>32cd</td>
<td>100-240VAC</td>
<td>9 VA</td>
<td>Yes</td>
<td>Yes</td>
<td>280x130x100, 1,5kg</td>
</tr>
</tbody>
</table>

**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
10cd Low-intensity Obstruction Light
115-230VAC - ICAO Type A
CEL-LI-10-ACW-A - LED Aircraft Warning Light Stand-Alone Series

Electrical installation instructions
Stand-alone series has 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).

Photocell Configuration
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. 6mm²
- Recommended cable
  - 3x1.5 mm² or 3x2.5mm²

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

<table>
<thead>
<tr>
<th>DIP Switch Settings-Photocell mode</th>
<th>1</th>
<th>2</th>
<th>Operating mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>Photocell disabled</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>400 lx</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>800 lx</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>1600 lx</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIP Switch Settings-Flash mode</th>
<th>3</th>
<th>4</th>
<th>Operating mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>Steady-burning i.e.fixed</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>20 flashes per minute</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>40 flashes per minute</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>60 flashes per minute</td>
<td></td>
</tr>
</tbody>
</table>

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.
10cd Low-intensity Obstruction Light
115-230VAC - ICAO Type A

CEL-LI-10-ACW-A - LED Aircraft Warning Light Stand-Alone 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 are AISI 316 acid-proof stainless steel.

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

**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

**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 stainless steel.

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

**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
10cd Low-intensity Obstruction Light
115-230VAC - ICAO Type A

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**CEL-MS-DEV60**
Double mounting set with extension plate for 30-60mm 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 AISI 316 acid-proof stainless steel.

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

**CEL-MS-DEV100**
Double mounting set with extension plate for 60-100mm 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 AISI 316 acid-proof stainless steel.

More detailed mechanical data: see CEL-MS-DEV100 datasheet

**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 2mm plate

All parts AISI 316 acid-proof stainless steel.

More detailed mechanical data: see CEL-MS-RW datasheet
10 cd Low-intensity Obstruction Light
115-230 VAC - ICAO Type A
CEL-LI-10-ACW-A - LED Aircraft Warning Light Stand-Alone Series

**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 AISI 316 acid-proof stainless steel.

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

**CEL-MS-N1B**
Mounting set for 1” NPT at bottom

More detailed mechanical dimensions: see CEL-MS-N1B datasheet.