

## 12V<sub>DC</sub> Combo: MOD compatible Infra-Red and Visual Red Obstruction Light

### CEL-IR850-R-12-CST - LED Aircraft Warning Light

#### Application

Night vision goggles compatible 850nm infrared and visual red obstruction light for wind turbines and other vertical structures that cause aviation safeguarding concerns

#### Key features

- Based on LED technology
- Combo IR and Red led light
- IR and Red light can be Controlled separately
- Extremely reliable
- Very long life time
- Low power consumption
- 12V<sub>DC</sub> operating voltage
- Stabilised light output
- Easy to install
- Mounting set and terminal box included

#### Benefits

- Long maintenance intervals
- Low energy costs
- Input power voltage variations do not affect to light output
- Very low lifetime costs

#### Specification met

MOD Obstruction Lighting Guidance, Low Flying Operations Sqn (MOD CAS-AS LFOS) - 21 Nov 2014

#### Radiometric characteristics IR

- Typical intensity 300mW/sr, Peak 600mW/sr
- Colour Infrared 850nm
- Horizontal radiation pattern 360°
- Vertical radiation pattern -15° ... +30°
- Current for the LEDs is stabilised by constant current generator
- Expected lifetime without light output falling 25% >100,000hrs

#### Optical characteristics Red

- Intensity >40cd
- Colour aviation red
- Horizontal radiation pattern 360°
- Vertical radiation pattern 0° ... +15°
- Current for the LEDs is stabilised by constant current generator
- Expected lifetime without light output falling 25% >100,000 hrs

#### Electrical characteristics

##### IR

- Nominal operating voltage 12V<sub>DC</sub>
- Operating voltage range 11.5 ... 18V<sub>DC</sub>
- Power consumption <15,5W (< 1,3A constant current)
- Average power consumption with 60fpm, 250ms flashing mode <3,8W

##### Red

- Nominal operating voltage 12V<sub>DC</sub>
- Operating voltage range 11.5 ... 1 V<sub>DC</sub>
- Power consumption <5W (<0,4A constant current)



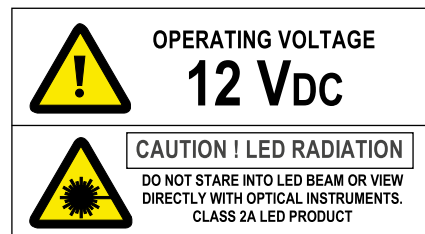
#### Mechanical characteristics

- Black anodised aluminium light unit body
- Galvanised mounting arm
- Acid proof U-bolts and hex nuts
- Uncoloured glass cover
- Degree of protection IP65
- Operating temperature range -55 ... +55°C
- Height 200mm, diameter 140mm
- Total weight with mounting set 3.4kg
- 5 year warranty

#### Order Code: CEL-IR850-R-12-CST

#### Options

- CSW-12-16-GPS, flash controller and fault monitoring unit with GPS-synchronisation



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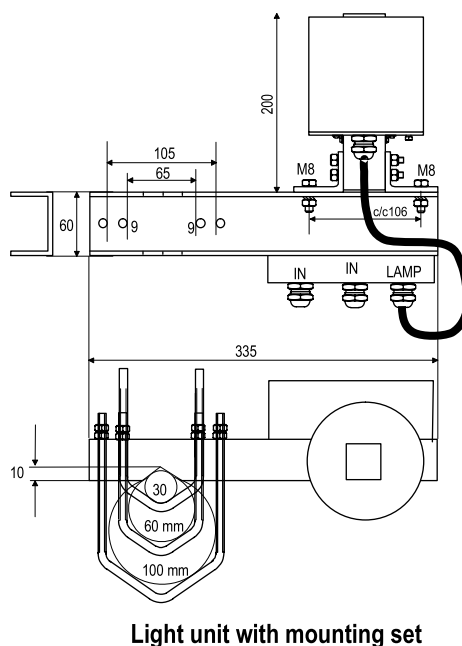
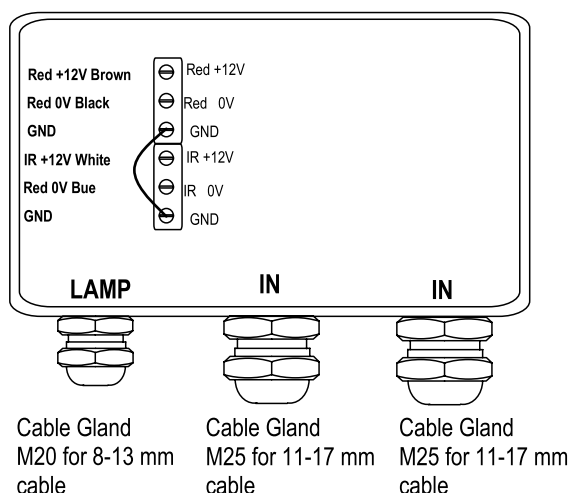
CEL LED obstacle lights cabling and installation principles are similar to those of conventional obstacle lights, the only exception being the correct polarity required by DC feed.

Terminal box include screw terminals and overvoltage protectors.

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

### Installation specifications

- Cable gland for lamp: M20, 8-13mm cable
- Cable gland for IN T: M25, 11-17mm cable
- Wire diameter: max. 6mm<sup>2</sup>
- Recommended cable: 3 x 1.5mm<sup>2</sup>, 3 x 2.5mm<sup>2</sup>  
5 x 1.5mm<sup>2</sup> or 5 x 2.5 29 Mar 2016 mm<sup>2</sup>



Connection Terminal Box Dims 160 x 107 x 56mm

### Over voltage protectors

Metal Oxide Varistor  
4.5 kA (8/20 us)

