

**12V_{DC} Combo: NVG compatible Infra-Red and Red Obstacle Light
UK Onshore Windfarms****Application**

Night vision goggles (NVG) compatible 850nm infra-red and visible red combo obstruction lighting approved for UK wind turbines and similar vertical assemblies when such structures are built within MOD Low Flying and Tactical Training Airspace.

Key features

- Based on LED technology
- Combo IR and Red led light
- Extremely reliable
- Very long life time
- Low power consumption
- 12V_{DC} 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

Optical characteristics IR

- Typical intensity 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% >100,000hrs

Electrical characteristics

- One power input supply both IR and Red sections
- Nominal operating voltage 12V_{DC}
- Operating voltage range 11.5...18V_{DC}
- Power consumption <21W (< 1.7A constant current)
- Average power consumption with 60fpm, 250ms flashing mode <5.5W



Made in EU

**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-024-CST**Options**

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

| | |
|---|--|
|  | OPERATING VOLTAGE 12 VDC |
|  | CAUTION ! LED RADIATION DO NOT STARE INTO LED BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. CLASS 2A LED PRODUCT |

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CEL aviation 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.

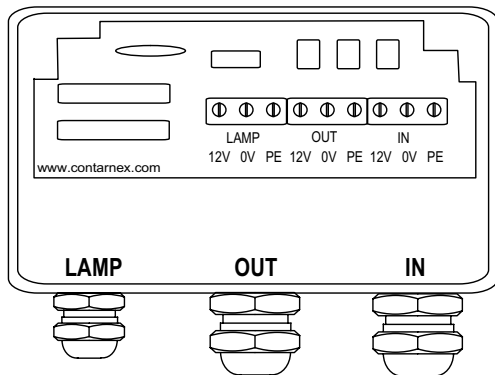
All connection alternatives can be protected with a 6A or 10A fuse or with a circuit breaker (C curve).

Installation specifications

- Cable gland for lamp: M20, 8-13 mm cable
- Cable gland for IN and OUT: M25, 11-17 mm cable
- Wire diameter: max. 6 mm²
- Recommended cable: 3 x 1.5 or 3 x 2.5 mm²

The polarity is:

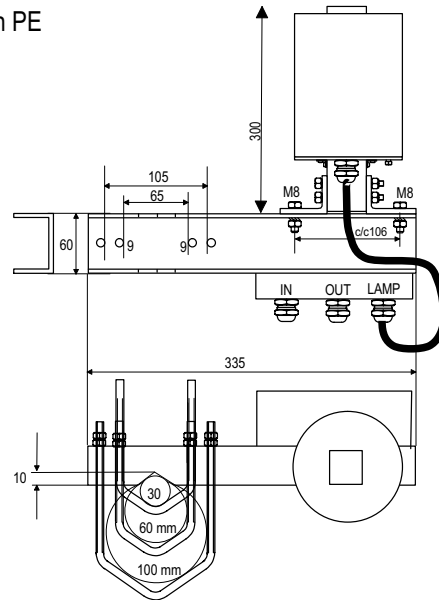
- Blue -
- Black +
- Yellow-Green PE



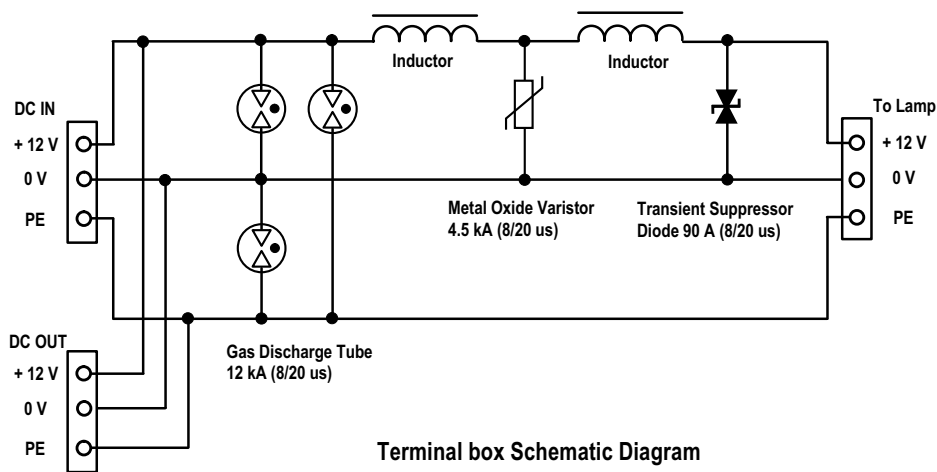
Cable Gland
M20 for 8-13mm
cable

Cable Gland
M25 for 11-17mm
cable

Cable Gland
M25 for 11-17mm
cable



Light unit with mounting set



Terminal box Schematic Diagram

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