

Product Description

Omni-LED Compact™ is a non-maintained emergency lighting conversion module for the emergency operation of 3V LEDs or arrays. Its compact, low-profile enclosure provides a simple, cost effective solution for use in self-contained applications.

The short circuit protected Switched Mode Power Supply provides constant current charging of a 3.6V 1.8Ah High Temperature Sub C Nickel Cadmium battery

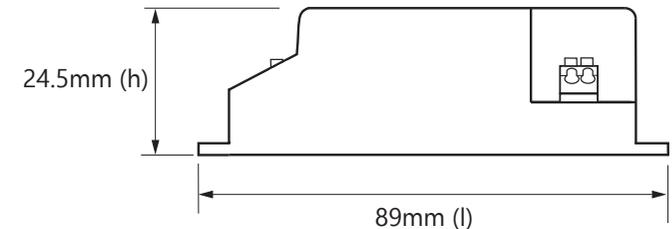
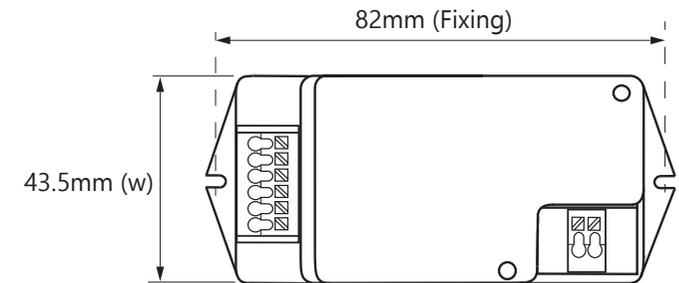
Properties

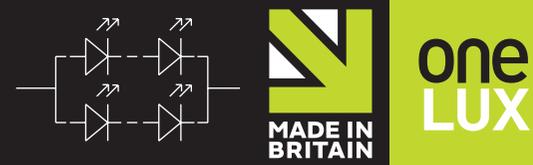
- > Emergency output power (Typical): 1.3W
- > Constant-current LED emergency output
- > Push-wire terminals for simple wiring and installation
- > No earth connection required
- > Operates high-brightness green charge LEDs (150mm supplied as standard. Other lengths available upon request)
- > Designed and manufactured in Great Britain
- > Driver complies with: EN61347-1, EN61347-2-7, EN61347-2-13, EN55015, EN61000-3-2, EN61547
- > Suitable for luminaires conforming to EN60598-2-22

OLC/3/NM3 Technical Data	
Input Supply Voltage	230V +/- 10%
Supply Frequency	50/60 Hz
LED Voltage Range	2.8V - 3.0V
Output Current	460mA +/- 5%
Maximum TC Point	70°C
Battery Type	3.6V 1.8Ah NiCd Sub C
Charge Current	90mA +/- 2%
Battery Charge Time	24 Hours
IP Rating	IP20
Weight	45g

Model Number	Standard Pack Quantities	Weight
OLC/3/NM3	100	5.0kg

See page 2 for battery and accessory order codes





ACCESSORIES

BATTERY

Product description

- > High temperature Nickel Cadmium battery for Emergency Lighting use
- > 1-year warranty

Properties

- > Rated for continuous operation at 55°C and meets the 4 year design life as per Annex A of EN60598-2-22
- > Complies with IEC61951-1
- > Supplied with suitable connectors

Battery - Ordering Information	
Product Code	NCD318SS
Absolute Maximum Temperature	70°C
Maximum Continuous Temperature	55°C
Minimum Ambient Temperature	5°C
Charge Requirements	90mA Constant Current (CC)
Storage	0-25°C for 12 months
Length (L)	131mm
Width (W)	23mm
Height (H)	23mm
IEC Cell Size	'Sub-C' (SC/Cs)
Disposal at registered treatment facility only	



BATTERY END CAPS

Product description

- > End cap suitable for use with 'stick' Sub-C batteries

Properties

- > Provides a convenient and secure mounting option for cylindrical batteries
- > Moulded in UL94-V0 rated plastic
- > Slotted for tag connection or outlet for pre-soldered connections

Battery End Caps. - Ordering Information	
Product Code	E/SubC
Fixing Centres when fitted	Battery Length (L) + 19mm
Maximum Length when fitted	Battery Length (L) + 40mm



INDICATOR LEDs

Product description

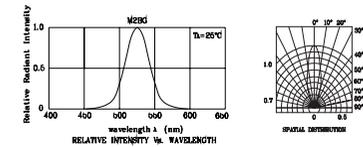
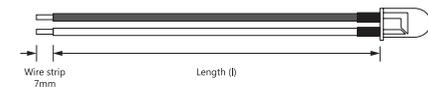
- > High intensity 30° beam green LED
- > Available with 250mm, 500mm and 750mm length leads
- > Used in conjunction with emergency control gear to indicate that the battery is charging

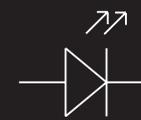
Properties

- > Narrow beam, high intensity – ideal for use behind diffusers even with the mains lamp on
- > Suitable for push wire connectors
- > Suitable for standard T1 ¾ (5mm) LED mounts (not supplied)
- > 150mm LED indicator supplied. Other sizes are available to be ordered separately.

LED Indicator - Technical Data	
Forward Voltage (Vf)	3.2V nominal
Forward Current (If)	30mA maximum
Dominant Wavelength	535nm
Grey Wire	LED Cathode (-)
White wire	LED Anode (+)

LED Assembly - Ordering Information			
Product Code	CAS003	CAS003/500	CAS003/750
Lead Length (l)	250mm	500mm	750mm





INSTALLATION

Disclaimers

This product and its associated accessory products have been manufactured and designed to comply with the requirements of EN60598-2-22 in addition to the standards detailed on page 1 of this document. Operation beyond the parameters specified in this document and the associated standards may result in reduced performance and ultimate premature failure, with the warranty made void. It is the users responsibility to ensure full compatibility of this product for the intended application and for compliance of the emergency conversion to relevant Standards. The user should be aware of the environment to which the luminaire and these components are used and follow the luminaire manufacturer's specifications. Omni-LED Compact™ are not intended for use in high-risk task area luminaires. Installation should be in line with the following guides. Please contact our Technical department if you are in any doubt.

Precautions

This product should be installed as per the following guidelines, electric shock or damage to the product may result if incorrectly installed. The luminaire should be installed by a qualified and competent electrician. If the luminaire is to be mounted in an external location, consider the battery as temperatures below 0°C may be frequent in cold months. In this case, the design life of 4 years will be compromised and more frequent battery replacements may be needed. Likewise, if the luminaire is situated in a hot environment where the temperature is maintained at 25°C or above, or sited next to large panes of glass in which case it may be exposed to thermal magnification.

It is recommended that IP65 luminaires are avoided for use in internal applications as undue thermal stress may result.

Installation notes

Best effort should be made to keep the Omni-LED Compact™ and battery away from direct sources of heat, i.e. mains LED drivers and LED lamps. Avoid obstructing airflow around the sides of the Omni-LED and other electronic products. Allow a clearance of 10mm or more wherever possible.

Ensure battery wiring is correct **before** connection as reverse polarity will cause permanent damage to the module.

Lamp Connections should be kept as short as possible and under no circumstances exceed 1m for self-contained luminaires.

The Omni-LED Compact™ should be secured using both fixing points and the use of M4x 6mm screws are recommended for most applications.

EMC considerations: Mains input connections should be as far from the lamp leads as possible and no ideally less than 10cm. Mains input wires should be as short as possible and run direct from input terminations to the Omni-LED product; they should not run alongside the case.

Other EMC tips:

- > Keep the lamp wires raised off any earthed metalwork
- > Twist mains leads together when 'looping' or 'through wiring'

The switched and un-switched lives may be joined together for continuous operation (un-switched) applications.

The Omni-LED Compact™ lamp output, battery connections and indicator are SELV and double/ reinforced insulated from live parts,

The unit employs self-resetting protection against short-circuit of battery terminals. Normal charging will resume automatically once a fault is removed. The mains supply should always be disconnected when servicing the luminaire.

If other devices are connected to the un-switched supply, please be aware that to maintain compliance with EN60598-2-22 that in event of its failure it will not affect other devices on the same circuit. In this case we recommend the use of separate fused terminal blocks to each device.

Internal fuses used within the Omni-LED Compact™ are not user serviceable.

Compatible NiCd or NiMH batteries other than those supplied by One-LUX may be used, but in all cases, refer to the battery specification on page 1. Please contact our Technical department for full specification & requirements or if you are in any doubt.

The Omni-LED Compact™ is not suitable for use with battery supplies having 'trickle' or 'intermittent' re-charging circuits.

Installation particulars for end user

Commissioning: Once the luminaire has been installed in line with the manufacturer's recommendations, **the battery should be allowed to charge for a minimum period of 24 hours before testing for its rated duration.**

If it is anticipated that the un-switched supply may be interrupted, it is imperative that the battery is left disconnected and commissioning is delayed until the supply is stable.

If the luminaire has been stored for a number of months, it may be necessary to repeat the charge/discharge process several times to re-condition the battery.

After successful commissioning, the battery should be marked with the date of commission.

Routine test and inspection should be performed in accordance with EN50172 or otherwise local legislation. Short discharge periods of around 5–10 minutes each month for the purposes of inspection will not adversely affect One-LUX batteries and should be considered as a maintenance exercise for the battery. Regular full discharge cycles will adversely affect the design life of the battery.