

Sapphire DALI Emergency 2W 350mA Driver

Suitable for NiMH Battery Cells



www.dignet.net.au



Range

DGLCEM035CD-AU



Overview

A high quality, DALI Emergency LED driver designed in Australia to provide a constant current output at 350mA and drive a designated emergency lighting LED or array when the normal mains AC power has failed or is unavailable.

The driver can be mounted inside a luminaire, designated control gear housing or be used as a separate emergency driver for connection to a remote LED light engine. When used separately, clips are available to suitably attach and retain the battery pack to the driver. This device incorporates DIGINET Xi which provides additional features, functionality and information when connected to the RAPIX Emergency monitoring system.

(Please refer to the website for more information)

Features

Xi Extended Intelligence

Fully compatible with Dignet's RAPIX Emergency - DALI Emergency monitoring system

Rated to operate in battery mode for 90/120 minutes in accordance with the relevant Australian Standard for emergency escape lighting and exit signs for buildings

Can be wired to operate in Non Maintained or Maintained modes

Test switch and bi-colour LED status indicator supplied with the driver

Automatically self-test and report the device status via the bi-coloured LED status indicator when the device is not connected to a DALI line

350mA, 700mA and 1000mA are designed to drive one LED in series or multiple 'single' LED's in parallel

Cable strain relief for Mains and DALI wiring

350mA version can be configured to drive two LED's in series or multiples of, in parallel

Designed to correctly charge a Dignet Nickel Metal Hydride battery pack DGLCEM21 00/4CNMH and DGLCEM21 00/6CNMH

Fully tested to and complies with DALI standards IEC 62386-101, IEC 62386-102 and IEC 62386-202 (using a DALI-AG approved tester)

Note: Battery packs and battery retaining clips are available for separate purchase

Typical Connections

LED Configuration

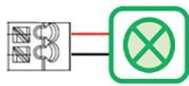


Figure 1 – Single LED - 350mA, 700mA or 1000mA

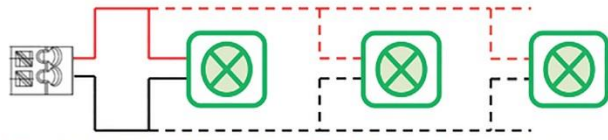


Figure 2 – Multiple Single LED in PARALLEL - 350mA, 700mA or 1000mA



Figure 3 – Two LED in SERIES - 350mA ONLY

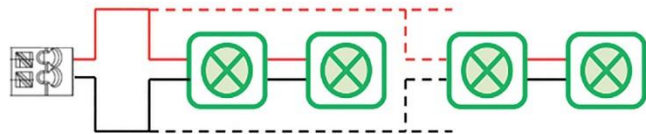


Figure 4 – Multiple Two LED in PARALLEL - 350mA ONLY

Operating Mode - Non Maintained and Maintained

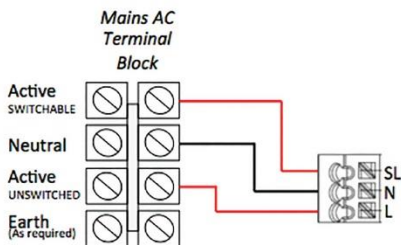
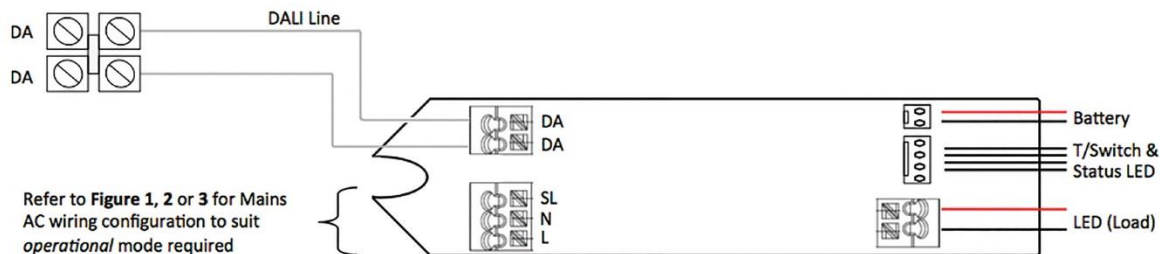


Figure 1 – Wiring to permit switching of 'Maintained' lamp via Mains AC

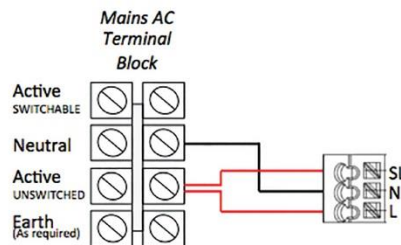


Figure 2 – Wiring for permanently 'Maintained' operation such as Exit Signs

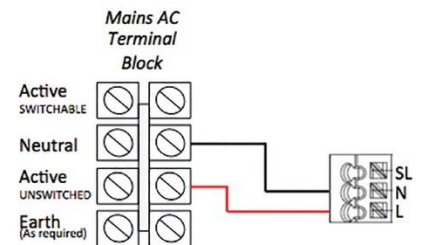


Figure 3 – Wiring for 'Non Maintained' operation such as Emergency luminaires

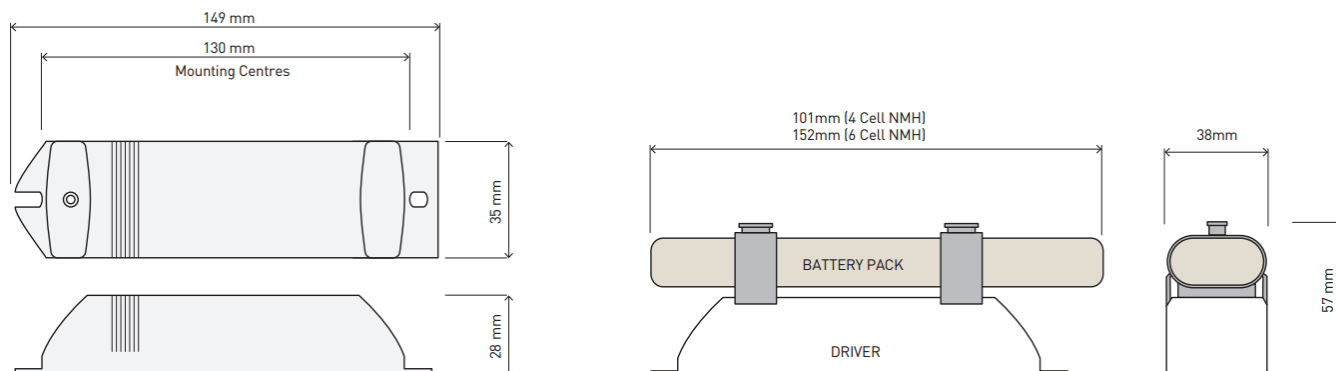
Specifications

Electrical	
Input Current	10mA @ 240V Idle 20mA @ 240V (Charging) 26mA @ 240V (1 LED Maint) 32mA @ 240V (2 LED Maint)
Maximum Input Power	0.8W @ 240V (Idle) 2.8W @ 240V (Charging) 3.9W @ 240V (1 LED Maint) 5.0W @ 240V (2 LED Maint)
Input Voltage/Frequency	220-240V ac / 50-60Hz
Input PF	≥0.6
Nominal Output Voltage	1.0V-8.0V
Nominal Output Current	350mA (±7%)
Maximum Load Power	2.8W (2 LED)
Battery Cell Count	4 Cell (1 LED) 6 Cell (1-2 LED)
Battery Type (not included)	Nickel Metal Hydride (NiMH)
Battery Cell Capacity	2100mA
Battery Charger	Dual Rate
Battery Detection	Auto Detection
DALI Line Current Draw	≤2mA
DALI Dimming	NOT DIMMABLE on Mains ac or Emergency
Operational Modes (Wiring)	Non Maintained/Maintained-Switchable/Maintained-Permanent
Isolation	≥3.75kV ac Line to SELV terminals ≥1.5kV ac Line to DALI terminals
Load Protection	Open Circuit/Short Circuit/Overload/Thermal
Short Circuit	Auto recovery

Mechanical	
Ingress protection	IP20
DALI Line terminals	1 x 1.5mm ² solid/stranded per tunnel (2 tunnels)
Mains ac Supply terminals	1 x 1.5mm ² solid/stranded per tunnel (3 tunnels)
Emergency LED terminals	1 x 1.5mm ² solid/stranded per tunnel (2 tunnels)
Material (Driver Housing)	Flame Retardant Polycarbonate
Weight (Driver)	90 grams
Mounting Centres (Driver)	130mm
Dimensions (Drivers)	(L)149mm x (W)35mm x (H)28mm
Dimensions (4 Cell Battery Pack)	(L)101 mm x (W)38mm x (H)18mm (4 Cell)
Dimensions (6 cell Battery pack)	(L)152mm x (W)38mm x (H)18mm (6 Cell)
Lead Length (Battery Pack)	230mm (both 4 and 6 Cell)
Lead Length (Remote Head)	Maximum 2 metres between the driver & the remote LED head
Lead Length (T/Switch-LED)	300mm

Environmental	
System Rated Life (Driver)	50000 Hours
Ambient Operating Temp	0°C to 50°C
Ambient Storage Temp	85°C (@ TA = 50°C)
Operating Humidity	0% to 95% RH non condensing

Dimensions



Part Numbers

Package Version	Control Module/Part	LED's	Applicable Battery (not included)
DGLCEM035CD-AU	DALI LED EM Driver 350mA Constant Current 2hr	1 LED 2 LED	DGLCEM2100/4nmh DGLCEM2100/6nmh
DGLCEM070CD-AU	DALI LED EM Driver 700mA Constant Current 2hr	1 LED	DGLCEM2100/6NMH
DGLCEM100CD-AU	DALI LED EM Driver 1000mA Constant Current 2 hr	1 LED	
DGLCEMCLIP-40PK	Battery retaining clips (Pack of 40 pieces)		
DGLCEM2100/4NMH	4 Cell 2100 mAH Nickel Metal Hydride Battery		
DGLCEM2100/6NMH	6 Cell 2100 mAH Nickel Metal Hydride Battery		

Approvals & Compliance



CONTACT INFORMATION

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A MEMBER OF THE GERARD LIGHTING GROUP

The product includes a **FIVE-YEAR WARRANTY** against manufacturing defects. Fully warranty terms can be found here www.dignet.net.au

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