Liteplan TLP-1S-K-EM TLP-1S High Voltage Emergency Conversion Kit Instruction Manual

Installation & Wiring Instructions
TLP/1S High Voltage
Emergency Conversion Kit

Contents

TLP-1S-K-EM TLP-1S High Voltage Emergency Conversion Kit

PLEASE READ THESE INSTRUCTIONS BEFORE COMMENCING INSTALLATION & LEAVE WITH END-USER

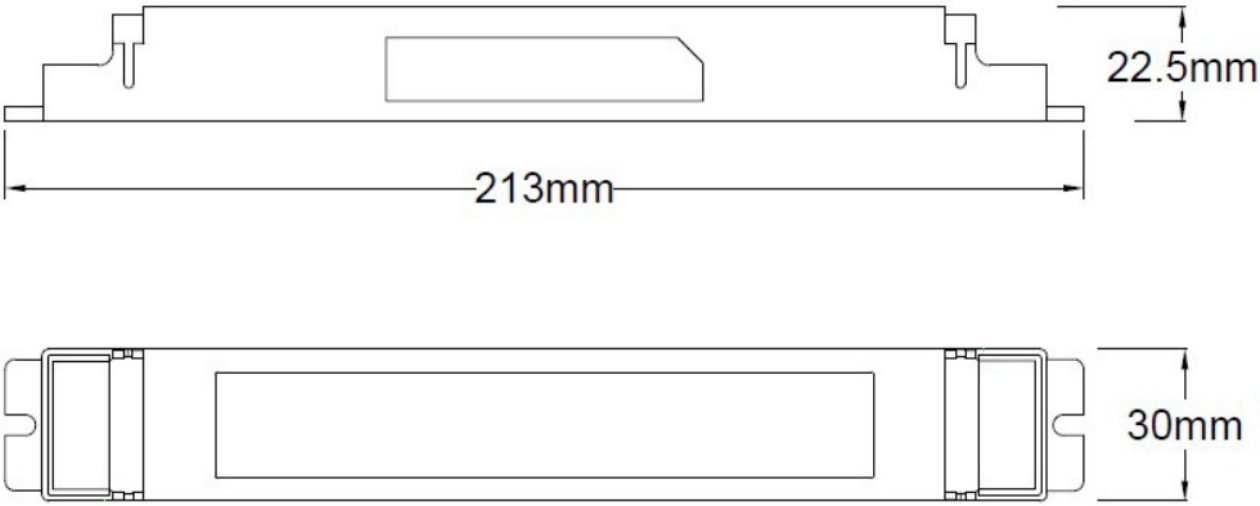
Description:

The Lite plan range of TLP/1S modules is designed to convert a wide range of high-voltage LED types. The TLP/1S will convert most standard LED luminaires and arrays between 55V and 300V. This makes the TLP/1S suitable for linear luminaires, high voltage boards, and even some mains voltage lamps (subject to testing).
The modules are designed to generally be installed by breaking into the low voltage connection between the mains LED driver and the LEDs and allow the LEDs to be operated as normal under mains healthy conditions and operated at the reduced light output in an emergency.
The module automatically adjusts the output LED current to provide the best match between the battery and the

load, providing maximum illumination whilst ensuring full battery duration and being compatible with a wide range of lighting.
The unit will recharge the batteries after the test of clause 22.3 of BS EN 61347-2-7:2012.
The battery is fitted with a PCM to protect the supply voltage against reverse polarity.

Specification:

Input Voltage	230-240 Volts AC 50/60 Hz
Power Rating (Charging)	2.5W 15mA λ = 0.70
Power Rating (Standby)	1.3W 9mA λ = 0.60
Insulation between supply & battery	Double Reinforced
Duration	3 hours
Ambient Temp. Ta	0°C to + 50°C
Max Case Temp. Tc	70°C
Max Battery Temperature	55°C
Recharge Period	24 Hours
Battery Type	3.2V 4.8Ah LiFePO4
Charge Current	225mA nominal
Discharge Current	1000mA nominal
Charge Voltage Limit	4.0 Volts
Discharge Voltage Limit	2.4 Volts
Ingress Protection	IP20
Recharge Period	24 Hours
Module Size (L x W x H)	213mm x 30mm x 22.5mm
Module Fixing Centers	207mm
Module Weight	0.085Kg
Battery Details (mm) Stick 230mm x 24mm x 22mm FC = 220mm	
Remote 220mm x 32mm x 34mm	
Battery Weight Cable Entry Size	0.14Kg 0.5mm – 1.5mm



Fixing Centres 207mm

TLP/1S
Prated – 3W to 80W
Irated – 38-7mA
Voltage Range 55 – 300 Volts
Open Circuit Voltage (U-OUT) = 340 Volts

Warning
Avoid running the LED mains driver and emergency pack without the load connected. Failure to do so may result in damage to the LED array

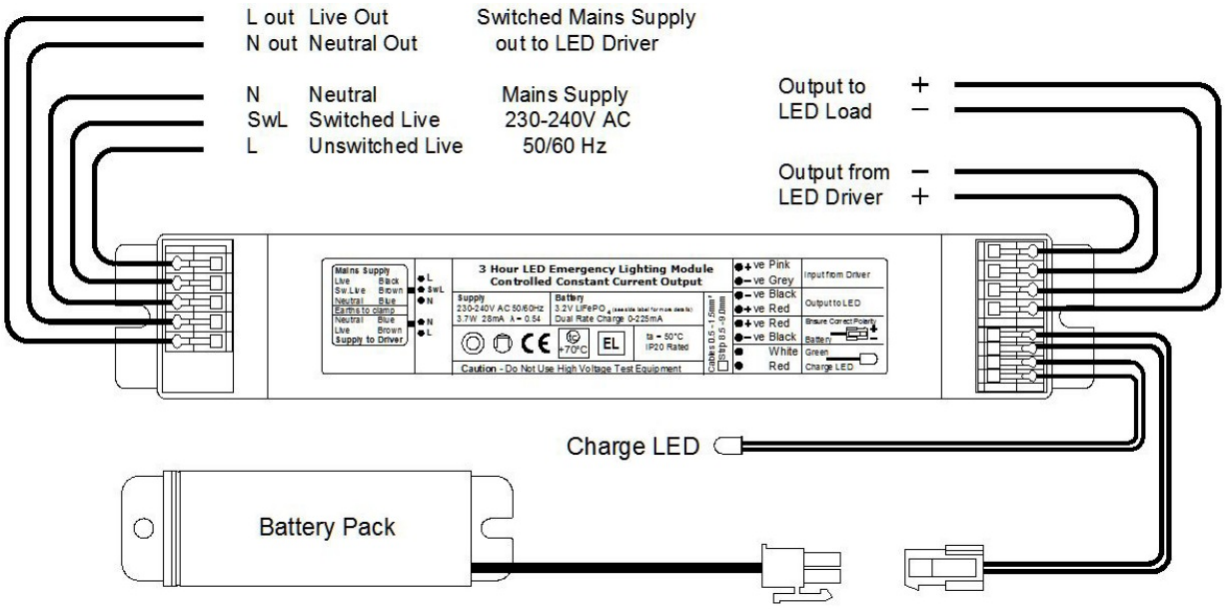
Important
It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Lite plan accepts no responsibility for injury, damage, or loss, which may arise as a result of incorrect installation, operation, or maintenance.
The conversion requires an unswitched supply for charging the battery and a switched supply if the unit is being used for maintained operation.
ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE.

Installation

When converting a luminaire observe the following points:

1. Ensure that the module and battery pack will operate within their temperature ratings at their chosen location.
2. Wire the module & battery into the luminaire as per the wiring diagram on Pg2.
3. Ensure that the Permanent Live & Switched Live feeds are connected correctly.
4. Arrange the wiring to avoid running the 240 Volt AC cables next to the module's output to the LED to obtain the best EMC results.
5. Requirements for 'F' markings must be observed.
6. Identify clearly the NEW Un-switched supply.
7. Ensure the LED Charge Indicator is clearly visible in everyday use.
8. If fitted within a metal enclosure, connect the earth terminal to a metal gear tray for improved EMC.
9. This module is not intended for use in luminaires for high-risk task area lighting.
10. This module is protected against battery polarity reversal.
11. Do not connect the battery until an assured permanent supply is present.

Typical
Conversion
Wiring Diagram



Testing/Commissioning:

- Ensure the load is connected.
- Connect the battery.
- Switch on the Unswitched Supply – Check the Charge LED illuminates.
- Switch on the Maintained Supply – Check the LED illuminates as normal.
- Switch off the Maintained Supply.
- Switch off the Unswitched Supply – Check the Charge LED extinguishes and the load LED illuminates at a reduced output.
- Enter the commissioning date on the Battery Pack. Switch on the Unswitched Supply

Luminaire Ref/Location ……..			In Case of difficulty, contact the Installation Engineers:- Tel: ……							
Full Recharge Time 24 Hours			Duration 3 Hours				I Lamp Type – LED			
ROUTINE TEST RECORD										
	Year 1		Year 2		Year 3		Year 4		Year 5	
Monthly Test	Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date
Functional										
Functional										
Functional										
Functional										
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Functional										
Functional										
Three Hour										

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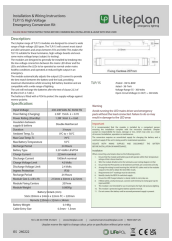
Documents / Resources

	**Liteplan TLP-1S-K-EM TLP-1S High Voltage Emergency Conversion Kit** [pdf] Instruction Manual TLP-1S-K-EM TLP-1S High Voltage Emergency Conversion Kit, TLP-1S-K-EM, TLP-1S High Voltage Emergency Conversion Kit, Emergency Conversion Kit, Conversion Kit

References

- **Home - Liteplan - Emergency Lighting Specialists**