

Universal 5-60W LED Emergency Lighting Power Pack 2000mAh with Self Test

FAT-LED-F1E(B)

The product package contains the following:

- Emergency Light Unit
- 2000mAh 11.1V Li-Ion Battery
- Pre-wired output connection plugs
- Pre-wired Status LED/Self-test Button
- Instruction Manual

Please read this Manual prior to the installation and commissioning of the FAT-LED-F1E(B)
The FAT-LED-F1E(B) emergency pack is suitable for 5-60W LED lamps with external drivers.

The FAT-LED-F1E(B) emergency pack includes housing, PCB, output connection plugs, battery and self-check test button with 3 colour LED indicator. The battery is a Li-ion battery with a long lifespan; the PCB uses IC control design in charging/discharging and power supply. The PCB circuit has built in protection for over-charging/discharging, output short-circuit, open circuit or input/output reverse connection.

Operating Principle

The FAT-LED-F1E(B) emergency pack charges when AC power is present. When fully charged, the circuit will protect the battery from over-charging and the emergency pack will enter stand-by mode. As soon as the AC power fails the battery will supply power to the LED lights.

Technical Specifications:

Working Voltage	AC176-265V	Battery Type	18650-Li-ion 11.1V 2000mAh	Dimensions	L158*W42*H25mm
Emergency Output Voltage/Current	DC 10-120V 0.1A-1A	Battery Cycle Use Times	≥500 times	Battery Dimensions	L240*H24mm
Emergency Switching Time	≤5sec.	Emergency Time	≥180 minutes	Working Temperature	-5°C - +45°C
Suitable for Lamps Power (W)	5-60W	IP Rating	IP30	Storage Temperature	-5°C - +45°C
Lamp Type	LED Lamps	Luminous Flux	up to 1000 lumens	Warranty	3 years
Charging Time	24h	Weight	0.39kg	Body Material	Fire Resistant PC

Installation Standards:

- The installation of the FAT-LED-F1E(B) must be done by a certified electrician according to the EN60598 part 1 and 2-22 as well as additional local standards (see basic wiring instructions on Page 2).
- The FAT-LED-F1E(B) has no internal adjustments or serviceable parts and therefore the main cover should never be removed.
- For installation in combination with a LED Driver, the wiring instructions in this manual must be followed or the FAT-LED-F1E(B) may no function as expected.
- The Status LED/Test Button should be positioned in such a way as to be easily visible under all circumstances to ensure quick and convenient functionality check.
- The FAT-LED-F1E(B) should be installed indoors (stairs, corridor, ceiling, etc.) and it is not for outdoor use.

Self-check function:

- **Monthly inspection:** The system simulates a power outage every 30 days for 35 seconds. It will quit and return to the mains power state automatically if there is no fault.
- **Annual inspection:** The system simulates a power outage every 365 days and for 3 hours or until the battery power is dissipated. It will quit and return to the mains power state automatically if there is no fault.

Battery Maintenance:

- Initial battery charge must be for a minimum of 24 hours before testing.
- To achieve best performance the FAT-LED-F1E(B) must be properly maintained. The FAT-LED-F1E(B) should be tested fully by switching into emergency mode regularly in accordance with local testing regulations to check emergency operation time (according to battery capacity). Any warranty claim must be accompanied by documentation which records the dates of this maintenance procedure and signed by maintenance personnel.

Dimensions:

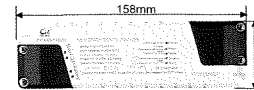


Fig. 1 Inverter Dimensions



Fig. 2 Battery Dimensions

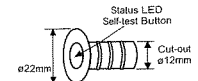
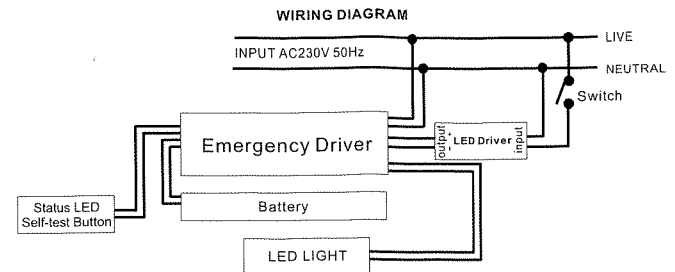


Fig. 3 Status LED/Self-test Button Dimensions

Installation and Wiring Instructions:

1. The FAT-LED-F1E(B) emergency pack can be mounted on surfaces using the two installation holes. First mark the hole positions and then use 4mm tapping screws to mount it on the surface. The product is safe to fit on materials combustible above 200°C.
2. Connect according to the wiring diagrams below observing the correct polarity where applicable.



3. When first connecting to AC power check if the LED lights work normally - the RED indicator light is ON until the battery is fully charged.
4. Once the battery is charged the Green indicator light will be ON.
5. Turn the switch to the LED lights ON and OFF to check the correct function of the lights (if a switch is present).
6. Test the emergency mode:
 - a. Press the test button (status LED acts as the test button also) for 1 second and the emergency pack will switch into power failure simulation mode (emergency mode). The indicator light for main power (Green) or for charging (Red) will be OFF. Once the button is released it will return to normal AC power mode.
 - b. Cut off the emergency pack AC power - the LED lamp will be in emergency mode and the Green/Red indicator light will be OFF.

After testing all the above steps the installation is finished.

Keep a record of maintenance and maintain the emergency pack and LED lamp regularly. Check regularly to ensure its lifespan and usage.

Indicator Light and Test Button Functions:

[illegible]

Troubleshooting: Most failures experienced are not due to the FAT-LED-F1E(B) itself and are caused by improper installation or connection of

- Wires are properly clamped into terminals.
- Installation is done according to the wiring diagram.
- Proper polarity is observed.
- Proper LED load maximums are observed.

- Do not cross-wire the power input line and the light connection output line.
- When parallel wiring, a distance between 5 and 10 cm should be observed.
- Shorten the distance between the power supply input line and the device.
- When running in parallel, the connection between the power input line and the lamp should be as short as possible.

[illegible]