

Application

- Emergency lighting LED driver for manual testing
- For LED module with a forward voltage of 10-60Vdc
- SELV for output voltage
- Integral LiFePO4 battery pack
- 4-year guarantee (battery 2-year guarantee)



Properties

- Non-maintained operation
- 1.5h or 3h rated duration
- Emergency power and charge current selectable with dial switch
- Compatible with all dimmable and non-dimmable constant current LED driver
- Automatic shutdown of output if LED load is out of range
- Constant power output, output current self-adjustable
- Electronic charge system
- Deep discharge protection
- Short-circuit-proof battery connection
- Open-circuit-proof
- Polarity reversal protection for battery

Technical Data

Rated supply voltage	220~240VAC/100~240VAC (Adjustable to customized requirement)
Mains frequency	50/60Hz
Mains input current, min	28mA
Mains input current, max	45mA
Input power in mains operation, min	3.8W±10%
Input power in mains operation, max	6.2W±10%
Battery charge time	24h
Ambient temperature t_a	-20°C~55°C
Max. Casing temperature t_c	70°C
Mains voltage changeover threshold	According to EN 61347-2-7,61347-2-13
Type of protection	IP20

- 1.All specifications are typical on the 230VAC unless otherwise stated.
- 2.The emergency function test must be performed when a battery is fully charged for 16 hours.

Battery Discharge & Charge Specification

Parameter	Min.	Typ.	Max.	Note
Battery discharge current	750mA	-	820mA	* When #2 dial switch been selected to "EM 5W"
Output voltage	10Vdc	-	60Vdc	
Output constant current	58mA	-	330mA	* Measured at 6.4V input from batteries
Emergency power	4.8W	-	5.2W	
Parameter	Min.	Typ.	Max.	Note
Battery discharge current	360mA	-	410mA	* When #2 dial switch been selected to "EM 2.5W"
Output voltage	10Vdc	-	60Vdc	
Output constant current	26mA	-	135mA	* Measured at 6.4V input from batteries
Emergency power	2.4W	-	2.6W	

Item Code	Batteries	Emergency Power	Emergency Duration	Charge Current	Charge Time
EEC12-2.5W	6.4V/1500mAhLiFePO4 battery	2.5W	3h	150mA±10%	24h
EEC12-2.5W	6.4V/1500mAhLiFePO4 battery	5W	1.5h	150mA±10%	24h
EEC12-2.5W	6.4V/3000mAhLiFePO4 battery	2.5W	6h	300mA±10%	24h
EEC12-5W	6.4V/3000mAhLiFePO4 battery	5W	3h	300mA±10%	24h

Note: All specifications are typical at 25°C unless otherwise stated.

Service Life

Average life-time 50,000 hours under rated conditions with a failure rate of less than 10% for the emergency converter as rated power. Average failure rate of 0.2% per 1000 operating hours.

Compliance

Safety Category	Countries	Standard
CE	Europe	EN61347-2-7,EN61347-2-13

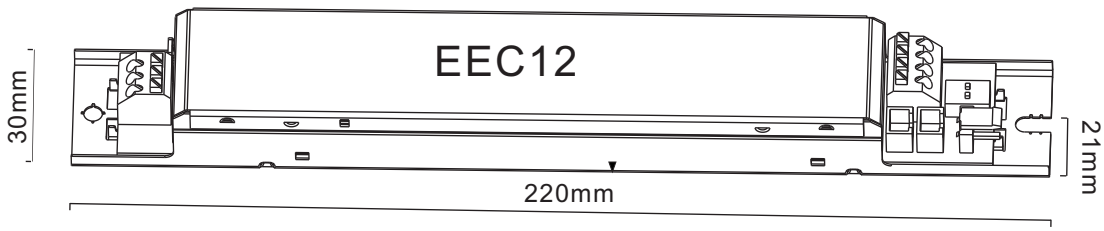
EMC Category	Countries	Standard
EMI	Europe	EN 55015
EMS	Europe	EN 61000-3-2, EN 61000-3-3,EN 61547

Rohs Compliance

Our products comply with the European Directive 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.

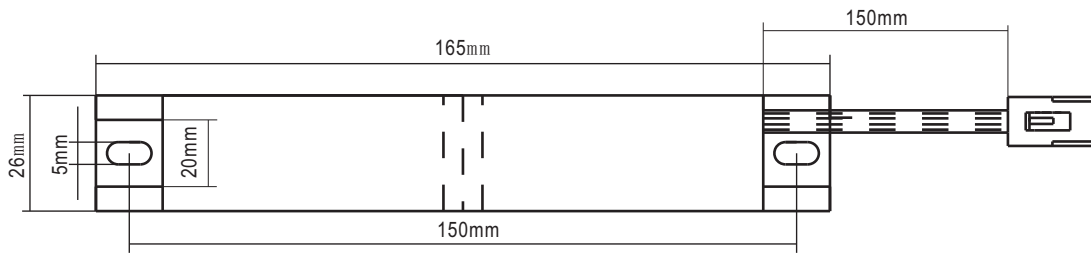
Mechanical Outline

unit:mm

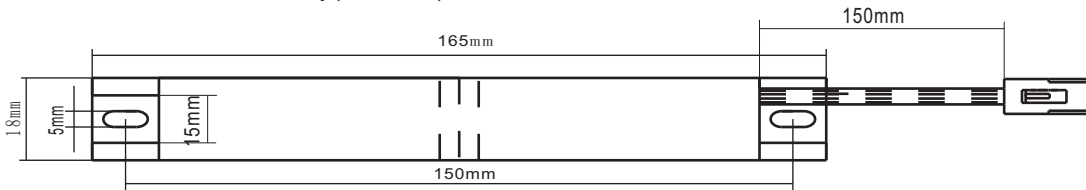


Battery Mechanical Outline

6.4V/3000mAh LiFe battery(unit:mm)

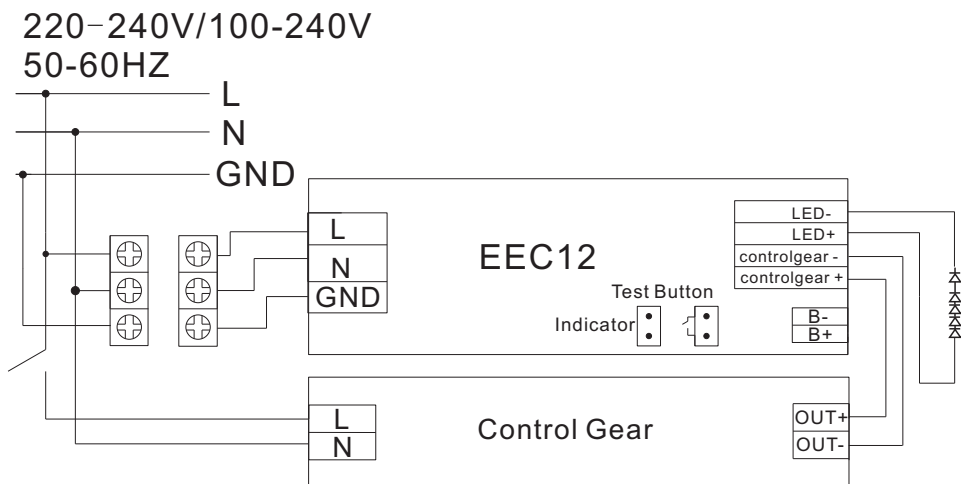


6.4V/1500mAh LiFe battery(unit:mm)



Wiring Diagram

The output current of LED driver is under 1.5A.



Battery

- High-temperature grade battery cells
- 6.4V LiFePO4 battery
- Male/female socket for simple connection

LiFePO4 Battery

Case temperature range to ensure 4 years design life	0°C to +60°C
Battery voltage	3.2V per cell
Capacity 18650 /26650	1500mAh / 3000mAh

Storage

- Batteries should be stored within the specified temperature range in low humidity conditions. Optimal storage conditions are:
 - Temperature: -20°C to +35°C
 - Humidity: 45% - 85%
- Avoid atmosphere with corrosive gas
- It is recommended to disconnect the battery before storage or delivery
- Battery should be charged once in three months in order to keeping it in initial performance

Status Indication Green LED

- A green LED indicates that charging current is flowing into the battery
- Plug connection 1



Status Indication Green LED

- Plug connection 2



Test Switch

- For connection to the emergency lighting unit
- For checking the device function
- Plug connection

