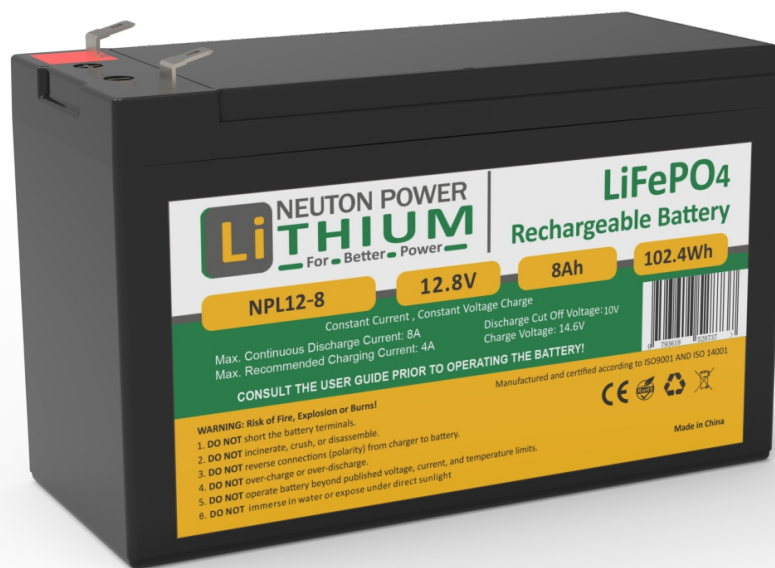


12.8V 8Ah

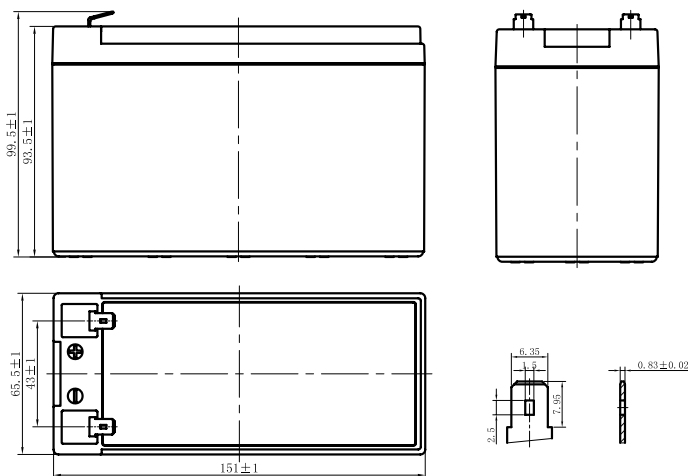
LFP Li-ion Battery



NPL12-8



Dimension:



Unit: mm

FEATURES

- + Cylindrical LiFePO4 cells (4Ah, 2P4S), high consistency, long cycle life and safe.
- + UN38.3, CE certification.
- + The cycle life over 2000 times (@25°C, 0.5C/0.25C, 80%DOD)
- + IP rating: IP65

DESIGN

- + ABS container, replace VRLA battery perfectly.
- + Fast charge performance.
- + -20~+55° C wide temperature range.
- + Maintenance free.

BATTERY MANAGEMENT SYSTEM (BMS)

- + Integrate hardware BMS inside.
- + Independent protection for charge and discharge.
- + Over voltage, low voltage, over current and short circuit protection.

12.8V8Ah

Specification

Model	NPL12-8
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	8
Total Energy [Wh]	102.4
Max. Charging Current [A]	8
Recommended Charging Current [A]	4
Charging Voltage [V]	14.0~14.6
Max. Discharging Current [A]	8
End of Discharge Voltage [V]	11.2
Pulse Discharge Current	20A @ 10s
Dimension [W*D*H, mm]	151*65*93.5
Weight [Kg]	0.97
Operation Humidity	0~95% RH (No condensing)
Operating Temperature Range	Charge: 0 ~ +50°C Discharge: -20 ~ +55°C
BMS Protection	Over charge, over discharge, over temperature, short circuit
Parallel Support	Yes, Max 4 Sets
Series Support	Yes, Max 4 Sets
Bank Connection Limitations	8 pieces Max, 4P2S or 4S2P
Cycle Life	>2000 ¹
Designed Design Life	> 10 Years
Certification	UN38.3, CE, MSDS

Note:

1. 80% DOD and to 80% of initial capacity.

The datasheet is subject to change without prior notification.

12.8V8Ah

The battery includes an integrated LiFePO₄ Battery Management System (BMS) that monitors and optimizes each individual prismatic cell during charging and discharging. It protects the battery pack from overcharge, over-discharge, over temperatures, over current, and short circuits. Overall, the BMS ensures safe, efficient, and reliable operation of the battery.

Over-Charge Protection	
Over-Charge Protection Per Cell	3.70V $\pm$ 0.05V
Over-Charge Protection Delays	500~1000ms
Over-Charge Release Per Cell	3.55V $\pm$ 0.05V
Over-Charge Release Method	Discharge to below release voltage
Over-Discharge Protection	
Over-Discharge Alarm	2.20V $\pm$ 0.1V
Over-Discharge Protection	500~1000ms
Over-Discharge Protection Delay	2.70 $\pm$ 0.1V
Over-Discharge Release	Charge to above release voltage
Over Current Protection	
Charge Over Current Protection	N/A
Charge Over Current Protection Release Method	N/A
Discharge Over Current Protection	60 $\pm$ 10A @ 500~1500ms
Discharge Over Current Protection Release Method	Disconnect load
Over Temperature Protection	
Charge Over Temperature Protection	68 $\pm$ 3°C
Charge Over Temperature Protection Release	55 $\pm$ 3°C
Charge Low Temperature Protection	N/A
Charge Low Temperature Protection Release	N/A
Discharge Over Temperature Protection	68 $\pm$ 3°C
Discharge Over Temperature Protection Release	55 $\pm$ 3°C
Discharge Low Temperature Protection	N/A
Discharge Low Temperature Protection Release	N/A
Discharge Low Temperature Protection Release	N/A
Protection Release Method	N/A
BMS High Temperature Protection	N/A
BMS High Temperature Protection Release	N/A
Protection Release Method	Reach release temperature
Short Circuit Protection	
Short Circuit Current Protection	Short circuit of external load
Short Circuit Current Protection Delays	200~320 μ S
Short Circuit Current Protection Release Method	Disconnect load