

# 12.8V 100Ah

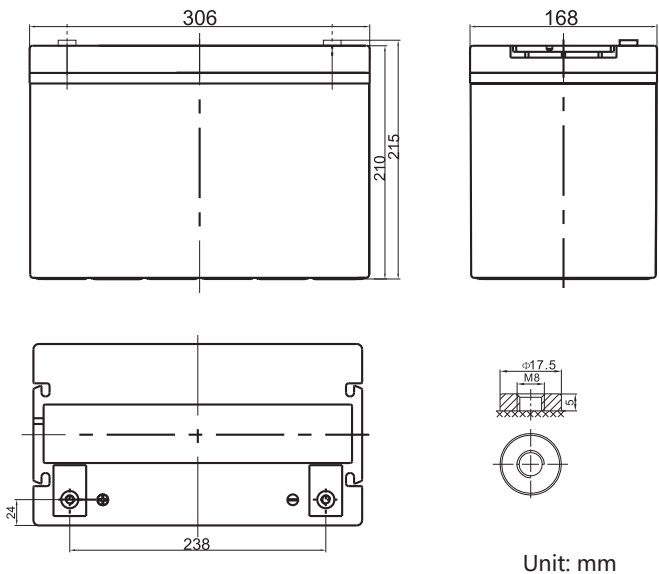
Bluetooth Battery



## NPL12-100/BT



**Dimension:**



**FEATURES**

- + Prismatic LiFePO4 cells, High consistency, long cycle life and much safer.
- + UN38.3, CE certification for system.
- + The cycle life over 3500 times @80%DOD

**DESIGN**

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

**BATTERY MANAGEMENT SYSTEM (BMS)**

- + Integrated hardware BMS inside.
- + Independent protection for charge and discharge.
- + Over voltage, low voltage, Over Current, Over temperature, Low temperature and short circuit protection.
- + Bluetooth communication, APP for Android and iPhone.

## Neutron Power (12.8V) LFP - Bluetooth (BT) Series

# 12.8V 100Ah

### Specification

Model	NPL12-100/BT
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	100
Total Energy [Wh]	1280
Max. Charging Current [A]	100
Recommended Charging Current [A]	50
Charging Voltage [V]	14.0~14.6
Max. Discharging Current [A]	100
End of Discharge Voltage [V]	11.2
Pulse Discharge Current	300A @ 1s
Dimension [W*D*H, mm]	306*168*215
Weight [Kg]	13.2
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 current, Over temperature, Low temperature, Short circuit.
Parallel Support	Yes, Max 2 pcs
Series Support	Yes, Max 4 pcs
Cycle Life	>3500
Designed Calendar Life	>10 Years
Communication	Bluetooth (APP for Android and iPhone)

Note:

1. 80% DOD and to 80% of initial capacity.
2. To install Bluetooth App, search "**Neutron Power**" at Apple App store or Google play.  
Or scan the QR code.

The datasheet is subject to change without prior notification



## BMS Specification

The battery integrate LiFePO4 type Battery Management System (BMS) inside which can monitor and optimize each single prismatic cell during charge & discharge and protect the battery pack from overcharge, over discharge, high temperature, low temperature and short circuit. Overall, the BMS helps to ensure safe and accurate operation of the battery.

The bluetooth communication is provided to monitor battery information.

<b>Over-Charge Protection</b>	
Over-charge Protection Per Cell	3.70V ± 0.05V
Over-charge Protection Delays	1s
Over-charge Release Per Cell	3.60V ± 0.05V
Over-charge Release Method	Discharge below release voltage
<b>Over-Discharge Protection</b>	
Over-discharge Protection Per Cell	2.50V ± 0.1V
Over-discharge Protection Delays	1s
Over-discharge Release Per Cell	2.60V ± 0.05V
Over-discharge Release Method	Cell voltage above release voltage
<b>Over Current Protection</b>	
Charge Over Current Protection	110± 10A for 1s
Charge Over Current Protection Release Method	Automatic Release
Discharge Over Current Protection	330± 30A for 1s
Discharge Over Current Protection Release Method	Automatic Release
<b>Over Temperature Protection</b>	
Charge Over Temperature Protection	65° C
Charge Over Temperature Protection Release	55° C
Charge Low Temperature Protection	0° C
Charge Low Temperature Protection Release	5° C
Discharge Over Temperature Protection	75° C
Discharge Over Temperature Protection Release	70° C
Discharge Low Temperature Protection	-20° C
Discharge Low Temperature Protection Release	-15° C
Protection Release Method	Reach release temperature and disconnect load
<b>Short Circuit Protection</b>	
Short Circuit Protection	Short circuit of external load
Short Circuit Protection Delays	320 uS
Short Circuit Protection Release Method	Disconnect load
Parallel Connection	Yes
Series Connection	Yes, Max 4 pcs
<b>Communication</b>	
Bluetooth	Yes