

12.8V 100Ah

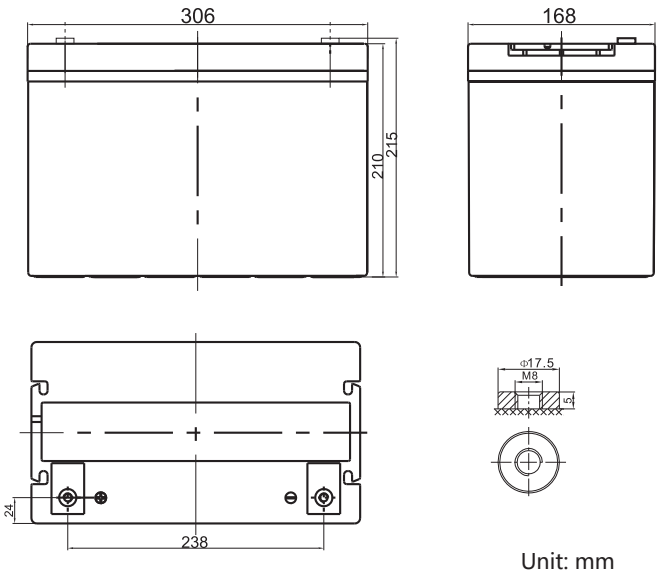
Bluetooth Battery



NPL12-100/BT



Dimension:



FEATURES

- + Prismatic LiFePO4 cells, High consistency, long cycle life and much more safety.
- + 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.

| | |
|--|---|
| Over-Charge Protection | |
| 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 |
| Over-Discharge Protection | |
| 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 |
| Over Current Protection | |
| 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 |
| Over Temperature Protection | |
| 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 |
| Short Circuit Protection | |
| 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 |
| Communication | |
| Bluetooth | Yes |