# 12.8V100AH Battery Specification

## 1. Overview

Model: NM12.8-100L

Category: Lithium ion phosphate Battery

Application: Residential Energy Storage System, Telecom Base Backup, Motive.

## 2. Features

This battery consists of LiFePO4 cells, BMS, wire and plastic container.

- High performance LFP cell, long life, safety and wide temperature range.
- High energy density, small size, light weight, no pollution.
- Packing with single cell container, fire retardant wire and copper connecting bar, stable and safe.
- Smart BMS protect battery from abnormal temperature, voltage, current, SOC, SOH.
- Use Lead Acid Battery case, simple installation and expand capacity by parallel or series connect.
- Flexible customization of dimensions, capacity, voltage.
- 15 years design life, Stable performance, maintenance free.

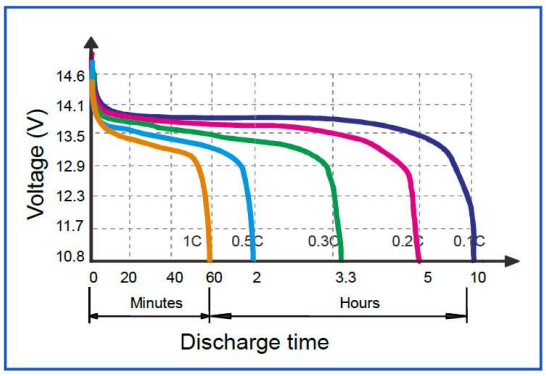
## 3. Picture

## 4. Specification

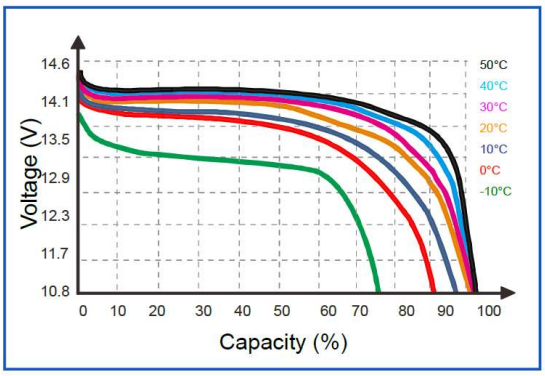
| SPECIFICATION | BASIC PARAMETERS | NM12.8-100L |
|---|---|---|
| **Nominal** | Rated Voltage (V) | 12.8 |
| | Rated Capacity (Ah) | 100 |
| | Rated Energy (Wh) | 1280 |
| | Cell Type | LiFePO4 Cell |
| **Physical** | Dimension (mm) | 339(L)*185(W)*218(H) |
| | Weight (kg) | ≈10.5 |
| **Electrical** | Charge Instruction | CC/CV |
| | Charge Voltage (Vdc) | 14.4 |
| | Over Discharge Final Voltage (Vdc) | 10.8 |
| | Max. Charge current | 100A |
| | Max. Discharge Current | 100A |
| | Recommended Charge current | 40A |
| | Internal Resistance | ≤10mΩ |
| **Others** | Series Connect Quantity (pcs) | Max to 4 |
| | Parallel Connect Quantity (pcs) | Max to 4 |
| | Working Temperature (℃) | 0 to 45 charge |
| | | -20 to 60 discharge |
| | Shelf Temperature (℃) | -20 to 45 |
| | Altitude (m) | ＜2000 |
| | IP Rating | IP65 |
| | Humidity (RH) | 5%～95% RH |
| | Design Life | 15 years |
| | Cycle Life | 80%DOD>6000 cycles，@0.5C (25℃) |
| | Bluetooth (App) | Optional |
| | Heating Function | Optional |
| | Case and Cover | ABS Plastic |

## 5. Curves

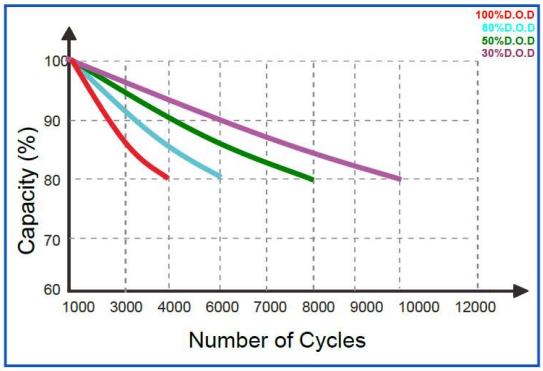
Discharge characteristics (25℃)



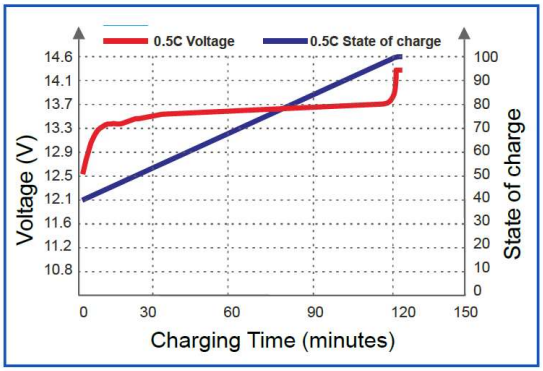

Different Temperature Discharge Curve (0.5C)




Different DOD Discharge cycle life Curve 0.2C 25℃




State of Charge Curve (0.5C, 25℃)




## 6. Caution

1. Keep it away from Children.

2. Don’t short-circuit battery.

3. Don’t disassemble or modify the battery.

4. Don’t use or leave battery nearby fire, stove or heated place.

5. Don’t immerse battery in water, or make it wet.

6. Don’t drive a nail into battery, strike it by hammer or tread it.

7. Please strictly use the battery according to above charge and discharge conditions.

8. Do not rap or throws, steps on the battery.

9. When battery is long-term storage, suggest to take one time charge and discharge and recharge it to half-charge state every 3 months.