

## SLPO12-100N(LiFePO<sub>4</sub> 12.8V100AH Battery Normal)

### General Information

SLPO series is a LiFePO<sub>4</sub>(lithium iron phosphate)battery pack for backup power application. The battery pack adopts the advanced LiFePO<sub>4</sub> battery technology with the advantages of long cycle life, small size, lightweight, safety and environmental protection, and also has a strong environmental adaptability. It also has a Bluetooth function, which checks the detailed status of the battery by downloading the APP.

### Application

- § Camper, Caravan and Boat
- § Marine Transport and Fishing
- § Wind Generator and Solar Power Energy Storage

### Key Features

- ※ **Super long cycle life**  
Over 6000 cycles at 80%DOD can be circularly used.
- ※ **Fast charge capability**  
Very fast charging capability up to 50A.
- ※ **Low self discharge**  
<1% per month at 25°C.
- ※ **Long Life**  
10 years design life at 25°C.
- ※ **Green environmental material**  
Eco-friendly and nonpolluting, no acids or no hazardous and noxious substances (including lead, cadmium, mercury).
- ※ **Can be used Max 4 in series or Max 4 in parallel**



- ※ **Intelligent Integrated Battery Manage System(BMS)**  
Built-in BMS automatically protects internal cells from over-charge, over-discharge, over-temperature, short-circuit, etc. Ensure battery safety and reliability. Equalize and balance each cell. Prolong battery life. SOC-DOD-SOH reporting/setting device events, battery parameters, and storage, intelligent monitor, remote measure, remote communication, remote control.
- ※ **In compliance with standard**  
UN/NOT 38.3, CE.
- ※ **High safety & stable performance**  
No explosion and no fire under collision. No risk of leakage.
- ※ **Completely maintenance-free**  
Completely Maintenance-free throughout battery lifetime saves OPEX for the users.

### Specification

|                        |   |
|------------------------|---|
| Weight                 | Approx.11.5Kg   |
| Dimensions             | 320(L)*172(W)*230(H) mm   |
| Nominal voltage        | 12.8V   |
| Nominal capacity       | 100Ah   |
| Nominal energy         | 1.28Kwh   |
| Service life           | ≥6000 cycles, more than 80% at 0.5C charge and 0.5C discharge at 80% DOD 25°C.                                    |
| Self-discharge         | <1%/M   |
| Charging               | 100A Max  |
| Discharging            | 100A Max  |
| Charging voltage       | 14.4±0.2V   |
| Charging mode          | Step 1: 0.5C charge to 14.4V;<br>Step 2: CV (constant voltage 14.4V) charge till charge current decline to 0.05C. |
| Peak discharge current | 100A  |
| DOD discharge rate     | 100%  |

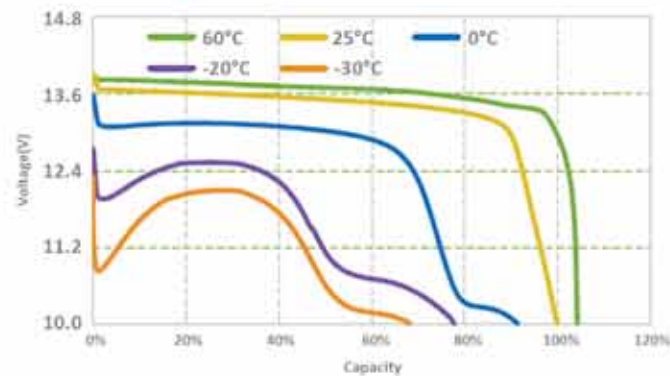
## Specification

|  |   |
|--|---|
| Charging operating temperature         | 0~45°C  |
| Discharge operating temperature        | -20~55°C  |
| Storage temperature and humidity range | 1 month: -20~45°C; 3 months: -10~45°C; 6 months: 0~25°C; Humidity: 45%~90% RH<br>The battery should cycle once in three months. Recommended storage temperature is 25±5°C of SOC 50%~60%. |
| Degree of protection                   | IP54 or above   |
| Installation                           | Battery compartments  |
| Constant current discharge             | 100A  |
| Constant power discharge               | 1000W   |
| Constant power discharge (Cell)        | 320W  |
| Pack initial internal impedance        | ≤100mΩ (50% SOC, Measure the AC impedance at 1kHz)  |

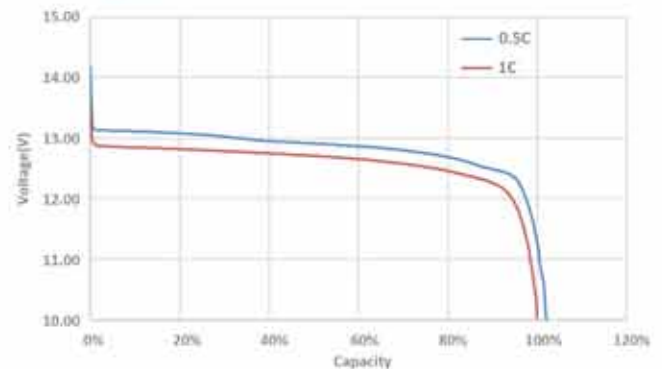
## Dimension



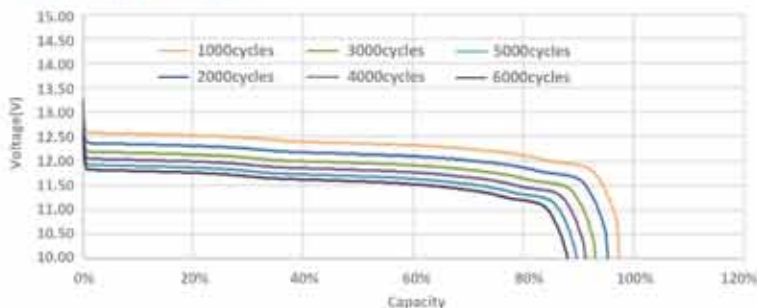
### 0.5C discharge curve at different temperatures (0.5C standard charge)



### Discharge curve at different rates (0.5C standard charge)



### 80% DOD discharge curve after different cycles (0.5C standard charge)



### 0.5C charge and discharge cycle curve

