

### Features of LiFePO4 Battery

**Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

**Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.

**Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

**Wider Temperature Range:** -20 C~60 C.

**Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



### Physical Dimension-mm



Dimension:  
L151Xw99xH96mm  
Color: Black/ Orange

Terminal Specifications:  
6.3mm Terminal



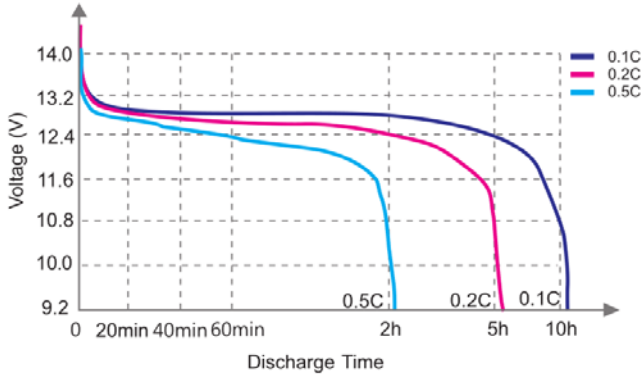
### Typical Applications

- Solar/Wind Energy Storage
- Back-up Power for UPS/ EPS
- Telecommunication
- Low Speed Electric Vehicles
- Marine Boats
- DC Power Supply
- Auto Control System
- Power Tools
- Electric Toys

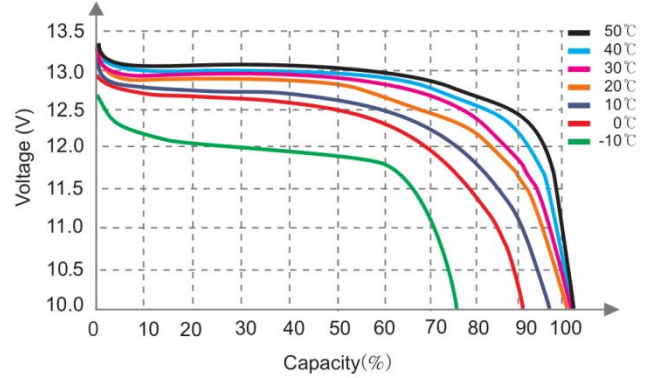
### Specification

|                            |                                  |   |
|----------------------------|----------------------------------|---|
| Electrical Characteristics | Nominal Voltage                  | 12.8V   |
|                            | Nominal Capacity                 | 12Ah  |
|                            | Minimum Capacity                 | 12Ah  |
|                            | Energy                           | 153.6Wh   |
|                            | Cycle Life                       | >2000 cycles @0.5C 100%DOD  |
|                            | Months Self Discharge            | <3%   |
|                            | Efficiency of Charge             | 100% @0.5C  |
|                            | Efficiency of Discharge          | 96~99% @0.5C  |
|                            | BMS Functions                    | Over charge, over discharge, over current, short circuit and temperature protection |
| Standard Charge            | Charge Voltage                   | 14.6±0.2V   |
|                            | Charge Mode                      | 0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC/CV)                           |
|                            | Charge Current                   | 3A (can be customized)  |
|                            | Max. Charge Current              | 12A   |
|                            | Charge Cut-off Voltage           | 14.6V±0.2V  |
| Standard Discharge         | Max Continuous Discharge Current | 12A (can be customized)   |
|                            | Peak Discharge Current           | 36A 1-3S  |
|                            | Discharge Cut-off Voltage        | 10V±0.5V  |
| Environmental              | Charge Temperature               | 0 °C to 55 °C (32F to 131F) @60±25% Relative Humidity                               |
|                            | Discharge Temperature            | -20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity                             |
|                            | Storage Temperature              | -20 °C to 45 °C (-4F to 113F) @60±25% Relative Humidity                             |
|                            | IP Class                         | IP65  |
| Mechanical                 | Plastic Case                     | ABS   |
|                            | Approx. Dimensions               | L151Xw99xH96mm  |
|                            | Approx. Weight                   | 1.4kgs  |

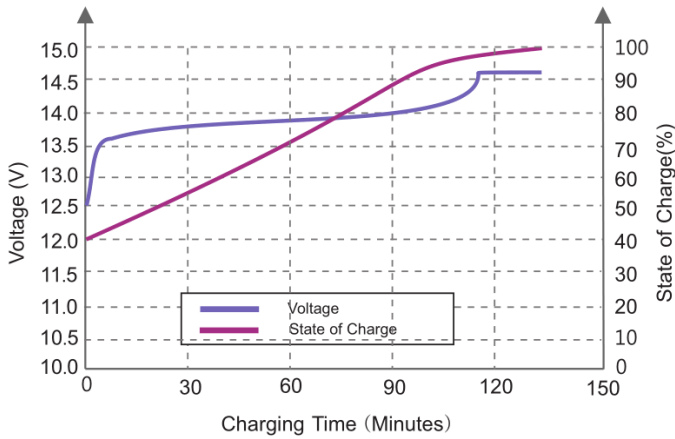
**Different Rate Discharge Curve (25°C)**



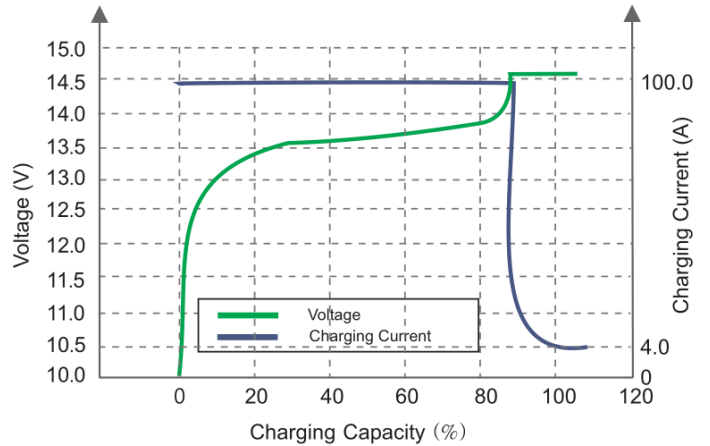
**Different Temperature Discharge Curve (0.5C)**



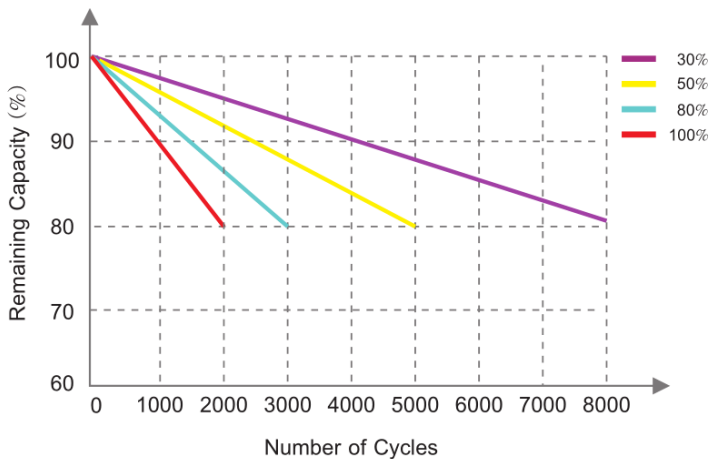
**State of Charge Curve (0.5C, 25°C)**



**Charging Characteristics (0.5C, 25°C)**



**Different DOD Discharge Cycle Life Curve (0.5C)**



**Different Temperature Self Discharge Curve**

