

# Lithium Iron Phosphate (LiFePO4) Battery

## Specifications

|                            |                            |   |
|----------------------------|----------------------------|---|
| Electrical Characteristics | Nominal Voltage            | 51.2V   |
|                            | Nominal Capacity           | 150Ah (0.2C, 25C)                                     |
|                            | Energy                     | 7680Wh  |
|                            | Internal Resistance        | ≤200m Ω   |
|                            | CycleLife                  | >4000 cycles@0.2C 80%DOD                              |
|                            | Months Self Discharge      | <3%   |
|                            | Efficiency of Charge       | 100% @0.2C  |
|                            | Efficiency of Charge       | 96~99% @100A  |
| Standard Charge            | Limited charge voltage     | 58.4±0.2V (Monomer limited charge voltage: 3.65V)     |
|                            | Standard charge current    | 20A   |
|                            | Maximum charge current     | 100A  |
| Standard Discharge         | Standard discharge current | 20A   |
|                            | Maximum discharge current  | 100A  |
|                            | Discharge cut-off voltage  | 40V   |
| Operating Temperature      | Charge Temperature         | 0 C to 45 C (32F to 113F) @60±25% Relative Humidity   |
|                            | Discharge Temperature      | -20 C to 60 C (-4F to 140F) @60±25% Relative Humidity |
| Storage Environment        | Less than 1 month          | 20C~60C, 85% RHMax                                    |
|                            | Less than 3 months         | 0C~35C, 85% RHMax                                     |
|                            | Storage proposal           | 15C~35C, 75% RHMax                                    |
|                            | Cell & Method              | 3.2V50AH-16S3P  |
|                            | Case                       | Metal case  |
| Mechanical                 | Dimensions (in./mm.)       | 572*480*145mm   |
|                            | Weight (kg.)               | ≤60Kg   |
|                            | Cable                      | cross-sections above 16 mm <sup>2</sup>               |
|                            | Protocol (optional)        | RS485/RS232/CAN                                       |
|                            | BMS                        | 16S100A   |
|                            | Quality Warranty           | 5 years   |



## 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.
- Increased Flexibility:** Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.