

# Lithium Iron Phosphate (LiFePO4) Battery

## LFP12.8-300(12.8V,300AH)

### 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.



### Application

- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

### Specification

|                            |                           |   |
|----------------------------|---------------------------|---|
| Electrical Characteristics | Nominal Voltage           | 12.8V   |
|                            | Nominal Capacity          | 300Ah (C <sub>5</sub> ,25°C)                              |
|                            | Energy                    | 3840Wh  |
|                            | Internal Resistance       | ≤200mΩ  |
|                            | Cycle Life                | >2500 cycles @100% DOD; >3500 cycles @80% DOD             |
|                            | Months Self Discharge     | <3%   |
|                            | Efficiency of Charge      | 100% @0.5C  |
|                            | Efficiency of Discharge   | 96~99% @1C  |
| 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) |
|                            | Charger Current           | 100A(Suggested)   |
|                            | Max. Charge Current       | 300A  |
|                            | Charge Cut-off Voltage    | 15.6V±0.2V  |
| Standard Discharge         | Continuous Current        | 300A  |
|                            | Max. Pulse Current        | 600A(<3s)   |
|                            | Discharge Cut-off Voltage | 9.6V  |
| Environmental              | 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 Temperature       | 0 °C to 40 °C (32F to 104F) @60±25% Relative Humidity     |
|                            | Water Dust Resistance     | IP56  |
| Mechanical                 | Cell & Method             |   |
|                            | Plastic Case              | ABS   |
|                            | Dimensions (in./mm.)      | 522*240*218mm   |
|                            | Weight (lbs./kg.)         | 30Kg  |
|                            | Terminal                  | M8  |
|                            | Protocol (optional)       | NO  |
| SOC (optional)             | NO                        |   |

CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)

