

Lithium Iron Phosphate (LiFePO4) Battery

LFP12.8-50(12.8V50Ah)

Features of LiFePO4 Battery

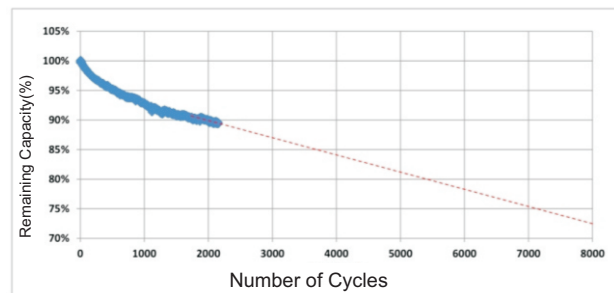
- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement 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.



Application

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

Cycle Life Curve



Specification

| | | |
|----------------------------|---------------------------|---|
| Electrical Characteristics | Nominal Voltage | 12.8V |
| | Nominal Capacity | 50Ah (C ₅ ,25°C) |
| | Energy | 640Wh |
| | Internal Resistance | ≤150mΩ |
| | Cycle Life | >3000 cycles @1C 100%DOD |
| | Months Self Discharge | <3% |
| | Efficiency of Charge | 100% @0.2C |
| | Efficiency of Discharge | 96~99% @1C |
| Standard Charge | Charge Voltage | 14.6±0.2V |
| | Charge Mode | 0.2C to 14.6V, then 14.6,charge current 0.02C(CC/CV) |
| | Charger Current | 20A |
| | Max. Charge Current | 50A |
| | Charge Cut-off Voltage | 14.8V±0.2V |
| Standard Discharge | Continuous Current | 50A |
| | Max. Pulse Current | 150A(<3s) |
| | Discharge Cut-off Voltage | 10V |
| 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 | |
| Mechanical | Cell & Method | 3.2V25AH-4S2P |
| | Plastic Case | ABS |
| | Dimensions (in./mm.) | 229*138*205 mm |
| | Weight (lbs./kg.) | 6.5Kg |
| | Terminal | M6 |
| | Protocol (optional) | NO |
| | BMS | 4S50A |