

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.

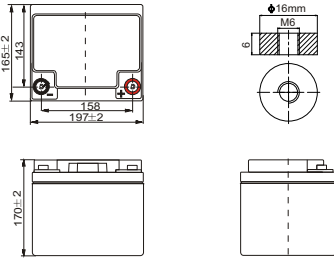
Higher Power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

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



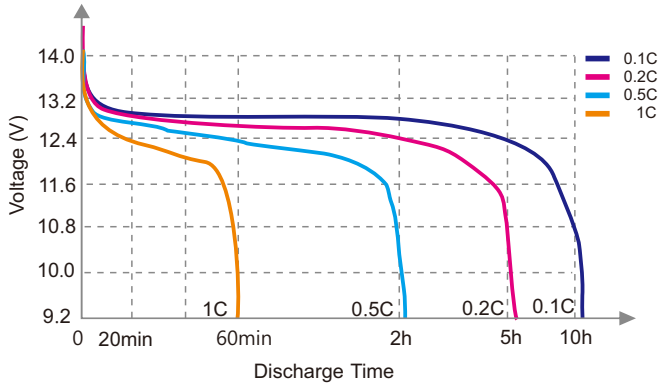
Typical Applications

- Wheelchairs and scooters
- Solar/wind energy storage
- Back-up power for small UPS
- Golf trolleys & buggies
- Electric bikes
- Tools

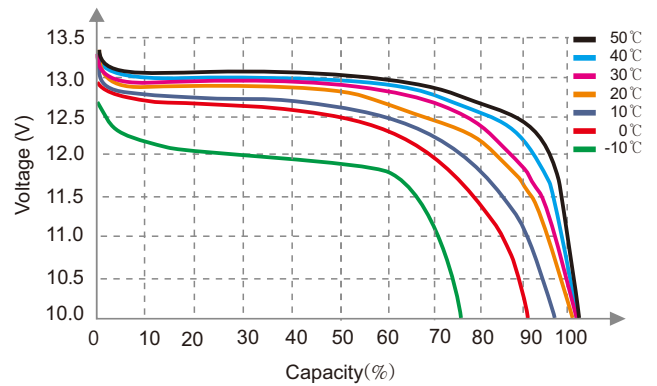
Specification

| | | |
|----------------------------|---------------------------|---|
| Electrical Characteristics | Nominal Voltage | 12.8V |
| | Nominal Capacity | 40Ah |
| | Energy | 512Wh |
| | Internal Resistance(AC) | ≤20mΩ |
| | Cycle Life | >3000 cycles @0.5C 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) |
| | Charge Current | 20A |
| | Max. Charge Current | 40A |
| | Charge Cut-off Voltage | 14.6V±0.2V |
| Standard Discharge | Rated Discharge Current | 20A |
| | Max. Discharge Current | 40A |
| | Discharge Cut-off Voltage | 10V |
| 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 | 197mm*165mm*170mm (7.76in. *6.50in. *6.69in.) |
| | Approx. Weight | 5.20kg (11.46lbs) |
| | Terminal | M6 |

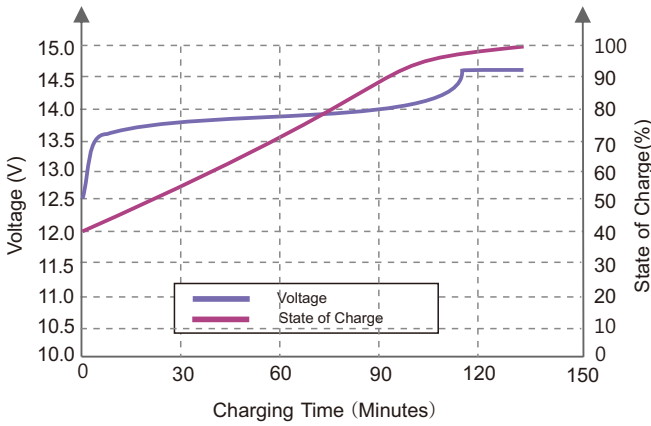
Different Rate Discharge Curve(25°C)



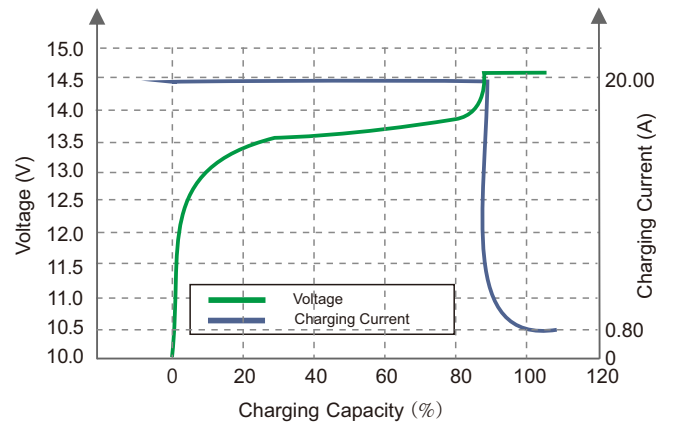
Different Temperature Discharge Curve(0.5C)



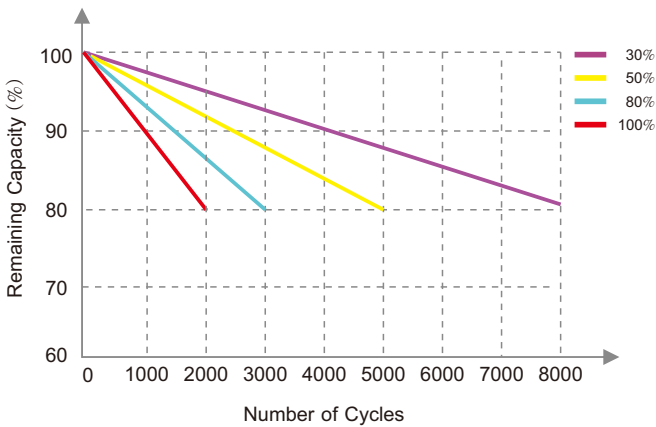
State of Charge Curve(0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(0.5C)



Different Temperature Self Discharge Curve

