

12.8V-18Ah Lithium Iron Phosphate (LiFePO4) Battery

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: L181XW76xH165mm Color: Black/ Green

Terminal Specifications: M6 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

	Nominal Voltage	12.8V
Electrical Characteristics		
	Nominal Capacity	18Ah
	Minimum Capacity	17.1Ah
	Energy	230.4Wh
	Cycle Life	>2000 cycles @0.2C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @0.2C
	BMS Functions	Over charge, over discharge, over current, short circuit and temperature protection
Standard Charge	Charge Voltage	14.2-14.6V
	Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C (CC/CV)
	Charge Current	3.6A
	Max. Charge Current	9A
Standard Discharge	Standard Discharge Current	3.6A
	Max Continuous Discharge Current	20A
	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	L181xW76xH165mm
	Approx. Weight	2.3kG

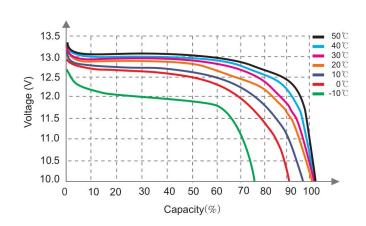




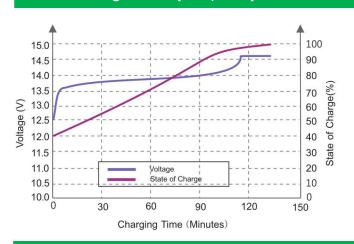
Different Rate Discharge Curve (25°C)

14.0 13.2 12.4 10.0 10.8 10.0 9.2 0 20min 40min 60min 2h 5h 10h Discharge Time

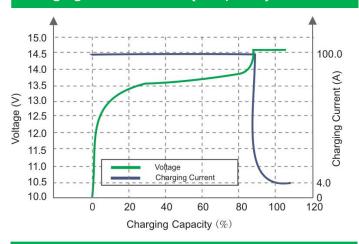
Different Temperature Discharge Curve (0.2C)



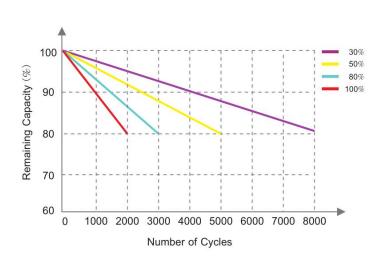
State of Charge Curve (0.2C, 25°C)



Charging Characteristics (0.2C, 25°C)



Different DOD Discharge Cycle Life Curve (0.2C)



Different Temperature Self Discharge Curve

