

Features of LiFePO4 battery

- **Longer Cycle Life:** Up to 20 times more cycle life and five times the float /calendar life than lead acid batteries, minimizing replacement cost and reducing total cost of ownership.
- **Light Weight:** About 40% of the weight of a comparable lead acid battery. Footprints offer a 'drop in' replacement for lead acid batteries.
- **Higher Power:** Delivers up to twice the power of lead acid battery at high discharge rates while maintaining high energy capacity.
- **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.

BMS Specification

- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Short detection function
- Balance function

Application

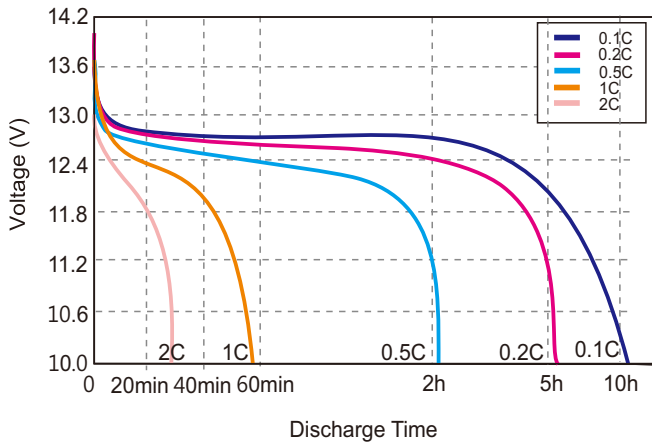
- Electric Vehicles,
- Electric Mobility
- Solar/Wind System
- Fish Finders/Trolling Motors
- UPS, Backup Power Telecommunication
- Medical equipment

Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	50Ah
	Energy	640Wh
	Internal Resistance	≤100mΩ
	Cycle Life	>2000cycles 100%DOD, >3000cycles 80%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100%@0.2C
	Efficiency of Discharge	96~99%@0.5C
Standard Charge	Charge Voltage	14.6±0.1V
	Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C (CC/CV)
	Charge Current	8A
	Max. Charge Current	12.5A
	Charge Cut-off Voltage	15.0V±0.2
Standard Discharge	Continuous Current	25A
	Max continuous discharge current	50A
	Discharge Cut-off Voltage	10.0V
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	IP21
Mechanical	Cell & Method	3.2V25Ah 4S2P
	Plastic Case	Plastic
	Dimensions (in./mm.)	223*150*177mm (8.78" x 5.91" x 6.97")
	Weight (lbs./kg.)	Approx: 6.5Kg
	Gravimetric specific energy	98WH/KG
	Protocol (optional)	
	SOC (optional)	

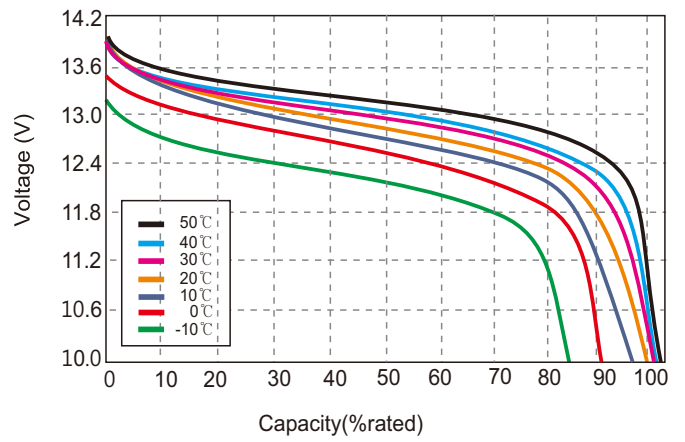
Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



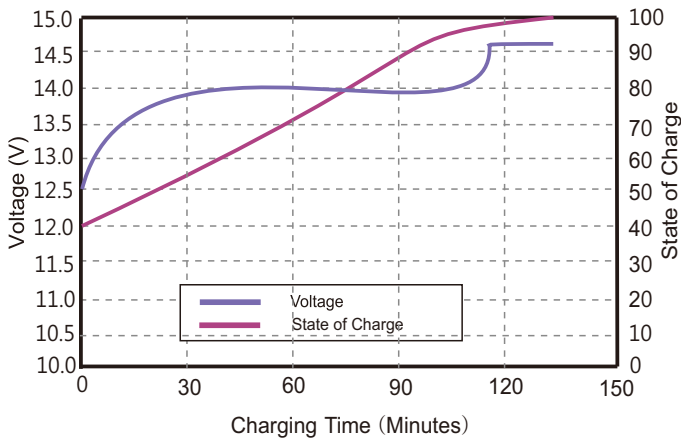
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



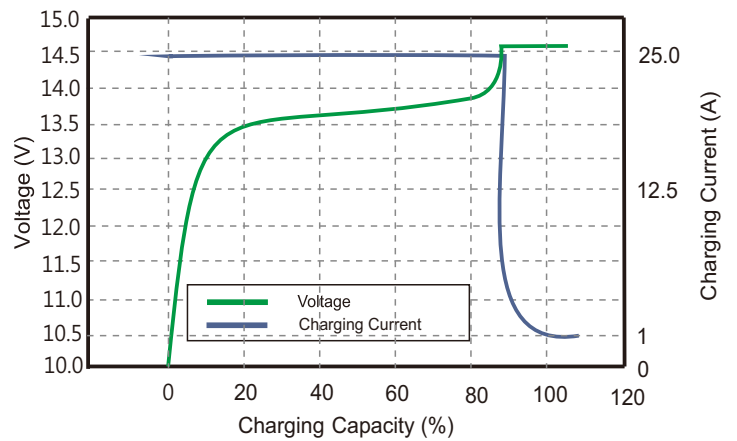
State of Charge Curve

State of Charge Curve @0.5C 25°C



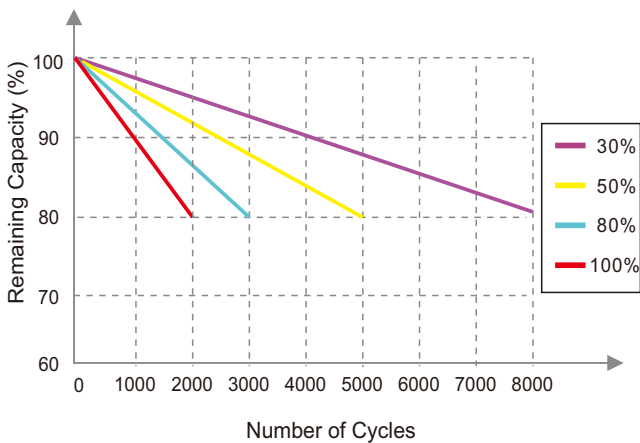
Charging Characteristics

Charging Characteristics @0.5C 25°C



Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve

