

Li 50-100/12.8 (12.8V 50-100Ah)

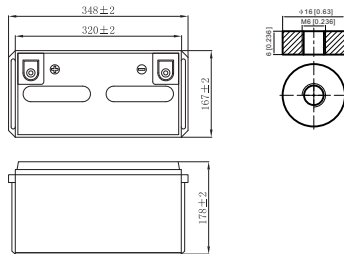
Lithium Iron Phosphate (LiFePO4) Battery



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.
- Increased Flexibility: Modular design enables deployment of up to four batteries in series and up to ten batteries in parallel.

Physical Dimension



Application

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

Specification

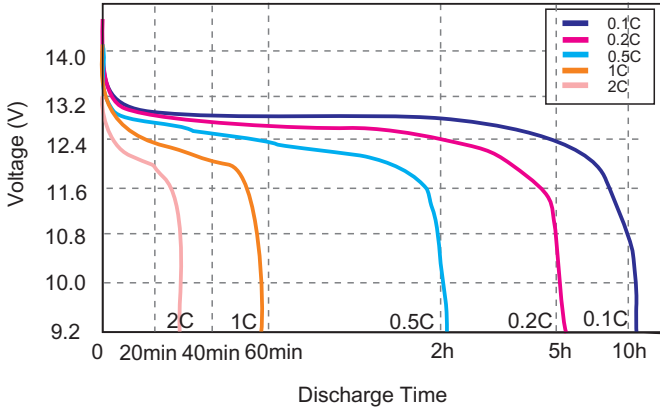
Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	50-100 Ah
	Energy	640 Wh - 1280Wh
	Internal Resistance	≤30mΩ
	Cycle Life	>2000 cycles @1C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	14.6±0.2V
	Charge Mode	0.2C to 14.6V, then 14.6V,charge current to 0.02C (CC/CV)
	Charger Current	40A
	Max. Charge Current	40A
	Charge Cut-off Voltage	15.6V±0.2V
Standard Discharge	Continuous Current	40A
	Max. Pulse Current	90A(<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	IP56
Mechanical	Cell & Method	1665130 4S7P
	Plastic Case	ABS
	Dimensions (in./mm.)	348 *167*178mm (13.70"*6.57"*7.00")
	Weight (lbs./kg.)	10.2 kg (22.48lbs)
	Terminal	T6
	Protocol (optional)	SMBus/RS485/RS232
	SOC (optional)	LED

Li -12.8 (12.8V)

Lithium Iron Phosphate (LiFePO4) Battery

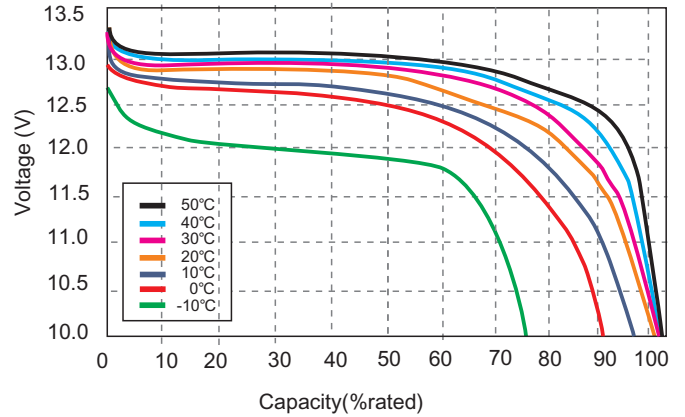
Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



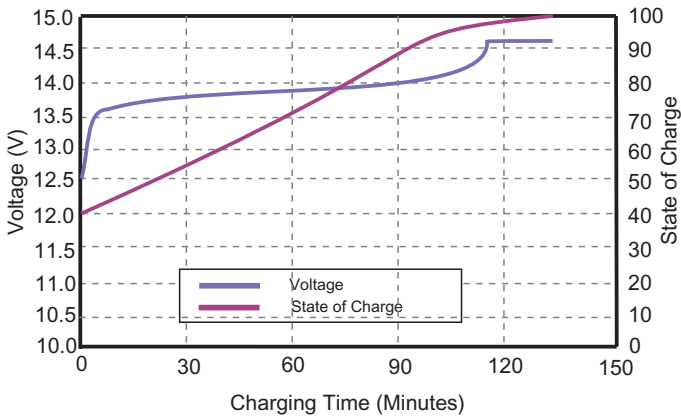
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



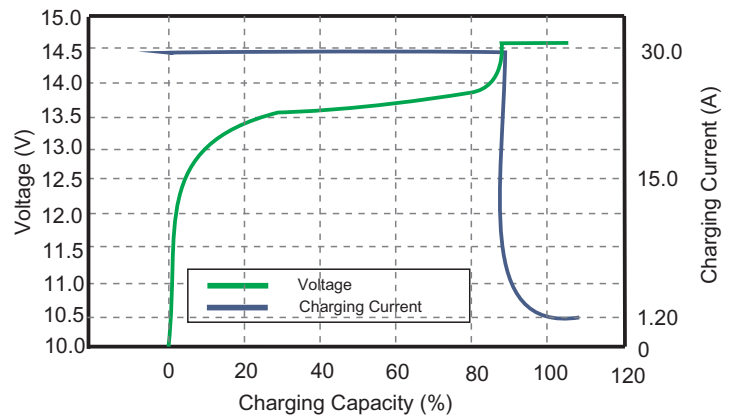
State of Charge Curve

State of Charge Curve @0.5C 25°C



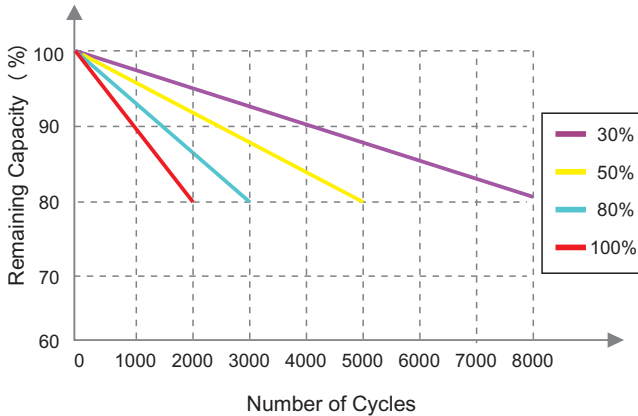
Charging Characteristics

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

