

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 ℃~60 ℃.
- 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.

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 energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

Specification

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	150Ah
	Energy	1920Wh
	Internal Resistance	≤20m Ω
	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	14.4±0.1V
	Charge mode	0.2C to 14.4V, then 14.4V charge current to 0. 02C (CC/CV)
	Charger Current	75A
	Max_charge_current	150A
	Charge Cut-off Voltage	14.6V±0.1V
Standard Discharge	Continuous Current	150A
	Max. Pulse Current	450A(<3S)
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	0 ℃ to 45 ℃ (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 ℃ to 60 ℃ (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	0 ℃ to 40 ℃ (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
	Cell & Method	3.2V 50Ah 4S3P
	Plastic Case	ABS
	Dimensions (mm./in.)	355x175x188mm (13.97"*6.88"*7.4")
Mechanical	Weight (kg,/jbs.)	17,0kg
	Terminal	Standard poles
	Communication	Blueto0oth APP
	Heating function	With

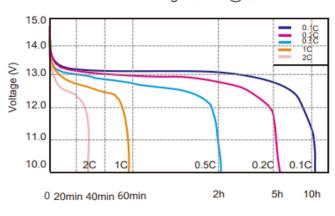


PolarPlus±

Lithium Iron Phosphate (LiFePO4) Battery 12V-150Ah (12,8V)

Different Rate Discharge Curve

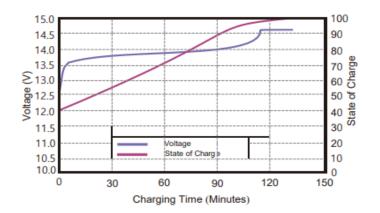
Different Rate Discharge Curve @25℃



Discharge Time

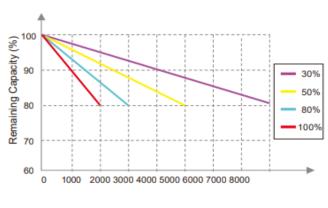
State of Charge Curve

State of Charge Curve @0.5C 25°C



Cycle Life Curve

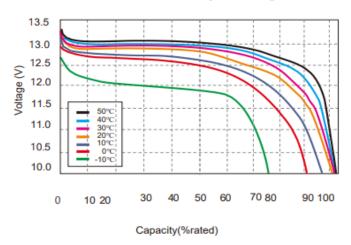
Different DOD Discharge Cycle Life Curve @1C



Number of Cycles

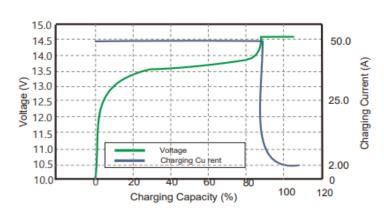
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



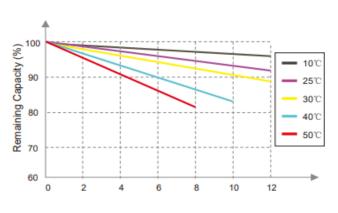
Charging Characteristics

Charging Characteristics @0.5C 25°C



Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



Storage Time(Months)

