

Lithium Iron Phosphate (LiFePO4) Battery LFP- (51.2V 100AH)

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.

Application

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

Specification

	Nominal Voltage	51.2V
	Nominal Capacity	100Ah (C₅,25°C)
	Energy	5120.00Wh
Electrical	Internal Resistance	≤1000m Ω
Characteristics	Cycle Life	> 6000
	Months Self Discharge	< 3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	58.4V±1.2V
	Charge Mode	0.2C to 58.4V, then 58.4,charge current 0.02C(CC/CV)
	Charge Current	50A
	Max. Charge Current	100A
	Charge Cut Off Voltage	58.4V±1.2V
Standard Discharge	Continuous Current	100A
	Max. Pulse Current	200A(<3s)
	Discharge Cut Off Voltage	40V±1.2V
Environmental	Charge Temperature	0 $^{\circ}\mathrm{C}$ to 55 $^{\circ}\mathrm{C}$ (32F to 131F) @60 \pm 25% Relative Humidity
	Discharge Temperature	-20 $^{\circ}\mathrm{C}$ to 60 $^{\circ}\mathrm{C}$ (-4F to 140F) @60 \pm 25% Relative Humidity
	Storage Temperature	0 $^{\circ}\mathrm{C}$ to 40 $^{\circ}\mathrm{C}$ (32F to 104F) @60 \pm 25% Relative Humidity
Mechanical	Cell & Method	3.2V100AH-16S1P
	Plastic Case	Powerwall type
	Dimensions (in./mm.)	520*175*400mm
	Weight (lbs./kg.)	42Kg
	Terminal	100A through terminal
	Protocol (optional)	RS485/RS232
	SOC (optional)	Yes



Cycle Life Curve

