

# 51.2V-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 (68°F~140°F).

**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: L520XW269xH220mm Color: Black/ Green

Terminal Specifications: M8mm Terminal





## **Typical Applications**

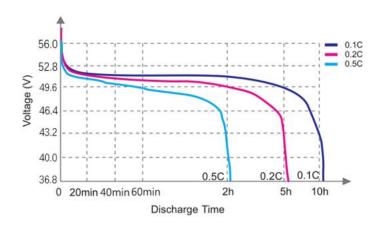
- Solar/Wind Energy Storage
- Back-up Power for UPS/ EPS
- Telecommunication
- Low Speed Electric Vehicles
- Marine Boats
- DC Power Supply
- Auto Control System
- Power Tools
- Electric Toys

## **Specification**

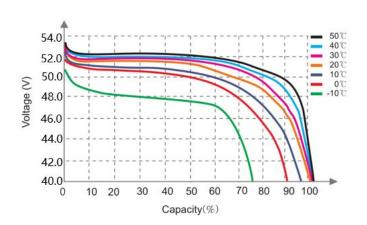
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Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	100Ah
	Minimum Capacity	100Ah
	Energy	5120Wh
	Cycle Life	>2000 cycles @0.2C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @0.2C
	BMS Functions	Over charge, over discharge, over current, short circuit and temperature protection
Standard Charge	Charge Voltage	56.8-58.4V
	Charge Mode	0.2C to 58.4V, then 58.4V,charge current to 0.02C (CC/CV)
	Charge Current	20A
	Max. Charge Current	50A
Standard Discharge	Standard Discharge Current	20A
	Max Continuous Discharge Current	100A
	Discharge Cut-off Voltage	40V±0.5V
Environmental	Charge Temperature	0 °C to 55 °C (32°F to 131°F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4°F to 140°F) @60±25% Relative Humidity
	Storage Temperature	-20 °C to 45 °C (-4°F to 113°F) @60±25% Relative Humidity
	IP Class	IP65
Mechanical	Plastic Case	ABS
	Approx. Dimensions	L520xW269xH220mm (20.4*10.5*8.7 in)
	Approx. Weight	39.5kG (87 lb)



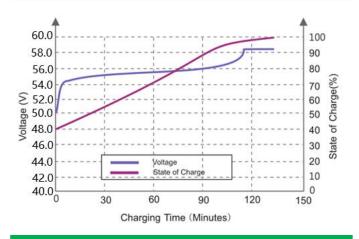
## Different Rate Discharge Curve (25°C)



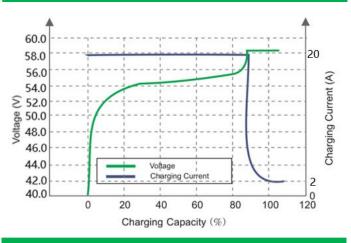
## **Different Temperature Discharge Curve (0.2C)**



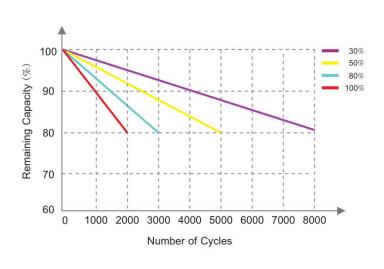
## State of Charge Curve (0.2C, 25°C)



#### Charging Characteristics (0.2C, 25°C)



## Different DOD Discharge Cycle Life Curve (0.2C)



## **Different Temperature Self Discharge Curve**

