

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.

Cell

Type	LiFePO4 Battery
Cell Model	LF48174133-100Ah
Nominal Capacity	100Ah @0.5C 100%DOD
Nominal Voltage	3.2V
Approx. Dimensions	L174xT48.5xH133mm
Approx. Weight	2.2kgs

Electrical Characteristics

Nominal Voltage	12.8V
Nominal Capacity	100Ah
Minimum Capacity	100Ah
Energy	1280Wh
Cycle Life	>2000 cycles @0.5C 100%DOD
Months Self Discharge	<3%
Efficiency of Charge	100% @0.5C
Efficiency of Discharge	96~99% @0.5C
BMS Functions	Over charge, over discharge, over current, short circuit and temperature protection
Maximum Modules in Series	4 pcs

Standard Charge and Discharge

Charge Voltage	14.2-14.6V
Charge Mode	0.2C to 14.6V, then 14.6V, charge current to 0.02C (CC/CV)
Charge Current	20A
Max. Charge Current	100A
Max Continuous Discharge Current	100A
Peak Discharge Current	400A±80A 0.5-1.5S
Discharge Cut-off Voltage	10V±0.5V
BMS Charge Voltage Cut-Off	15.0 V (3.75 ±0.025 vpc) 0.5-1.5S)
BMS Discharge Voltage Cut-Off	8.8 V (2.2 ±0.05 vpc) (0.5-1.5 S)

Environmental

Charge Temperature	0 °C to 55 °C (32F to 131F) @60±25% Relative Humidity
Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
Storage Temperature	0 °C to 45 °C (32F to 113F) @60±25% Relative Humidity
IP Class	IP67

Mechanical

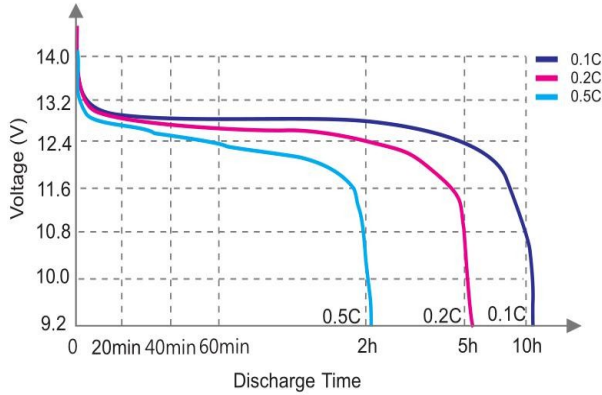
Plastic Case	ABS
Approx. Dimensions	L307xW169xH208mm
Approx. Weight	11.5kgs
Terminal Type	M8

Dimensional Specifications

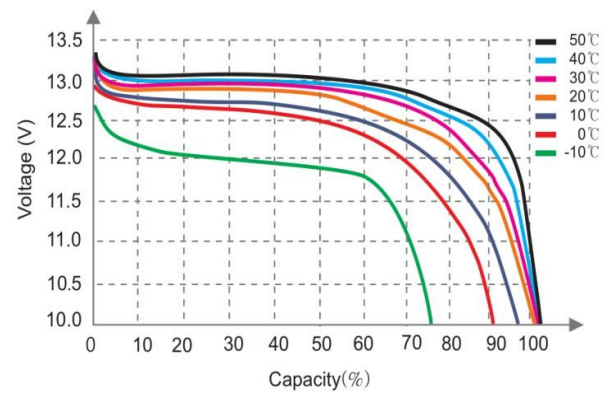
L307XW169XH208mm



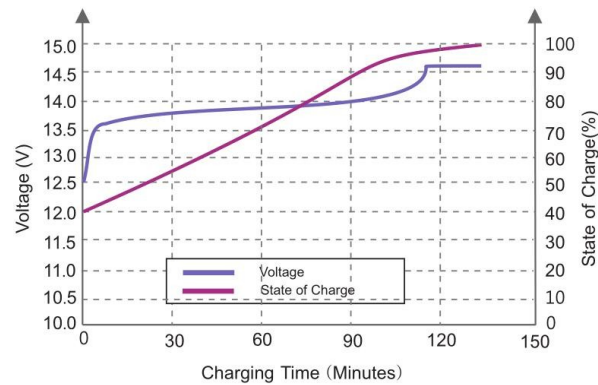
Different Rate Discharge Curve (25°C)



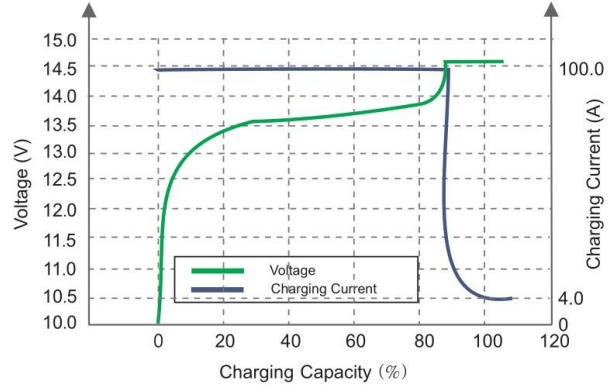
Different Temperature Discharge Curve (0.5C)



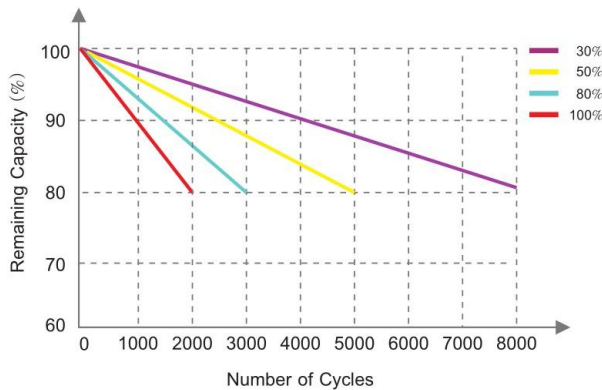
State of Charge Curve (0.5C, 25°C)



Charging Characteristics (0.5C, 25°C)



Different DOD Discharge Cycle Life Curve (0.5C)



Different Temperature Self Discharge Curve

