

LiFePO4 Deep Cycle Battery

LAF12200 (LFP 12.8V 200Ah)

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.

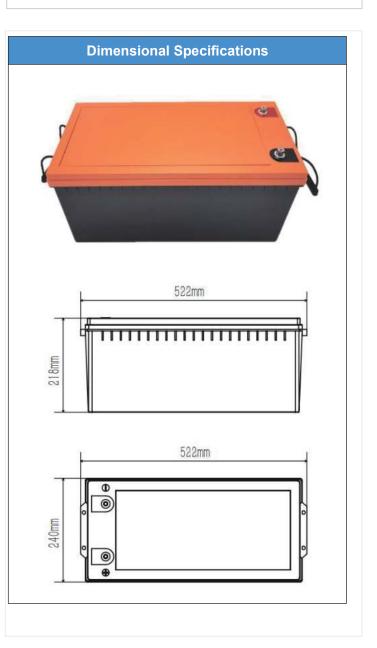
Cell		
Туре	LiFePO4 Battery	
Cell Model	LF48174133-100AH	
Nominal Capacity	100Ah @0.5C 100%DOD	
Nominal Voltage	3.2V	
Approx. Dimensions	L174xT48.5xH133mm	
Approx. Weight	2.2kgs	

Electrical Characteristics		
Nominal Voltage	12.8V	
Nominal Capacity	200Ah	
Minimum Capacity	200Ah	
Energy	2560Wh	
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	40A	
Max. Charge Current	200A	
Max Continuous Discharge Current	200A	
Peak Discharge Current	800A±160A 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 ℃ to 45 ℃ (32F to 113F) @60± 25% Relative Humidity	
IP Class	IP65	

Mechanical		
Plastic Case	ABS	
Approx. Dimensions	L522xW240xH218mm	
Approx. Weight	22kgs	
Terminal Type	M8	



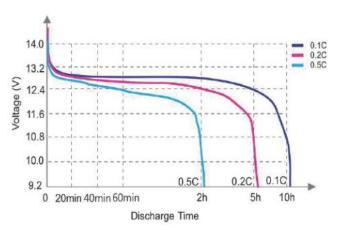


LAF12100 (LFP 12.8V 200Ah)

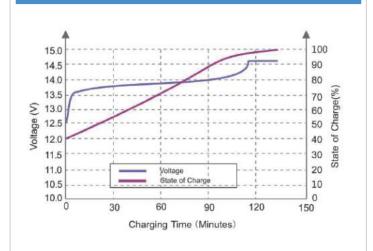
Different Rate Discharge Curve (25°C)

ACOP

INNOVATIONS



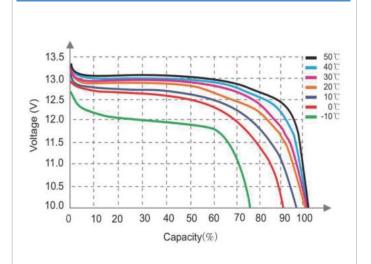
State of Charge Curve (0.5C, 25°C)



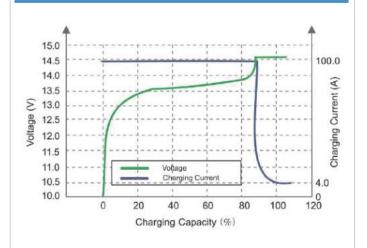
100 30% 50% Remaining Capacity (%) 80% 100% 90 80 70 60 1000 2000 3000 4000 5000 6000 7000 8000 0 Number of Cycles

Different DOD Discharge Cycle Life Curve (0.5C)

Different Temperature Discharge Curve (0.5C)



Charging Characteristics (0.5C, 25°C)



Different Temperature Self Discharge Curve

