

Lithium Iron Phosphate (LiFePO4) Battery

MBL48-100CP	51.2V100AH 5120Wh
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Features of LiFePO4 Battery

Longer Cycle Life
LiFePO4 batteries have a cycle life five times higher than that of SLA batteries

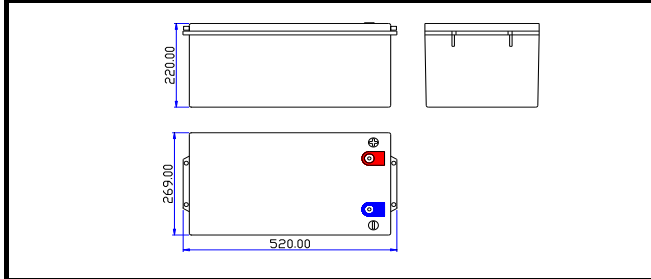
High Power & Light weight
LiFePO4 batteries have twice the power of SLA batteries, while half the weight, helpful for transport and installation

Intelligent management control
Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

Lower Self-discharge rate
Lower Self-discharge rate to guarantee LFP batteries be stored more longer than SLA batteries



Physical Dimension	Applications
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- Caravan, RV, camping
- UPS (replacement of SLA batteries)
- Marine, golf cart
- Solar, wind system
- PV, solar light

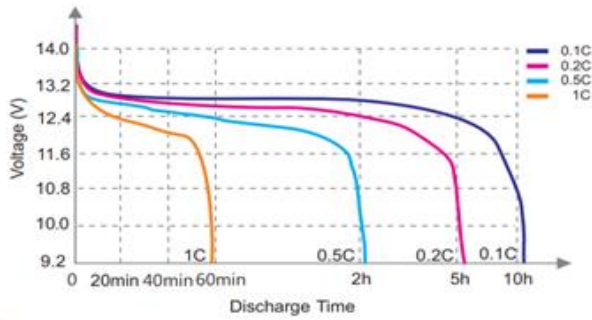
Electrical Characteristics	Chemistry	LiFePO4
	Nominal Voltage	51.2V
	Nominal Capacity	100Ah (C5,25°C)
	Energy	5120Wh
	Internal Resistance	≤10 mΩ
	Cycle Life	>3500 cycles @1C 70%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
Standard Charge	Efficiency of Discharge	96-99% @1C
	Charge Voltage	58.4±0.2V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current to 0.02C (CC/CV)
	Charger Current	50A
	Max. Charge Current	100A
Standard Discharge	Max. Charge Current	100A
	Charge Cut-off Voltage	58.4V±0.2V
	Rated Discharge Current	50A
	Max Discharge Current	100A
	Max. Pulse Current	300A(<3s)
	Discharge Cut-off Voltage	40V
	Charge Temperature	0 °C to 45 °C (32Fto 113F) @60±25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity
Mechanical	Storage Temperature	0 °C to 40 °C (32Fto 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP65
	BMS	4S/4P / Pre-heat
	Communication function	CAN BUS/NMEA 2000
	Plastic Case	ABS
	Dimensions (in./mm.)	522x267x218 mm
Weight (lbs./kg.)	38.3kg(84.44lbs)	
Terminal	M8	

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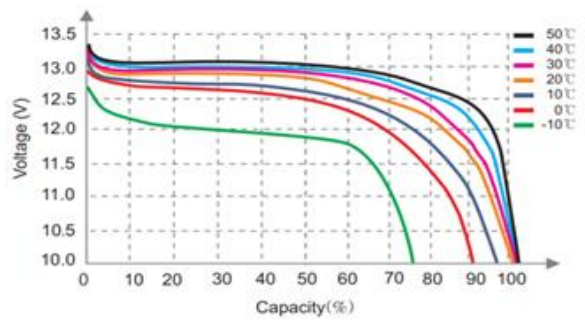
MBL48-100CP

51.2V100AH 5120Wh

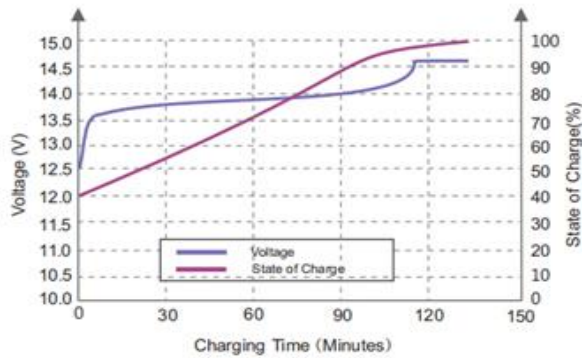
Different Rate Discharge Curve (25°C)



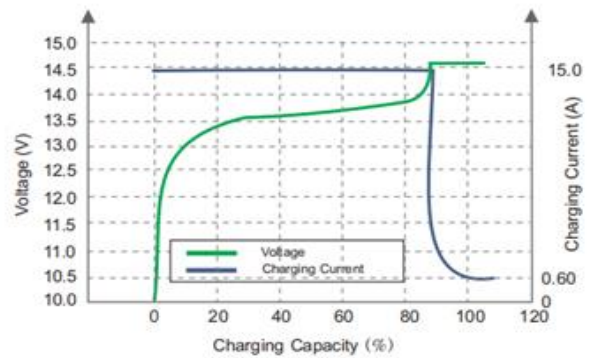
Different Temperature Discharge Curve(0.5C)



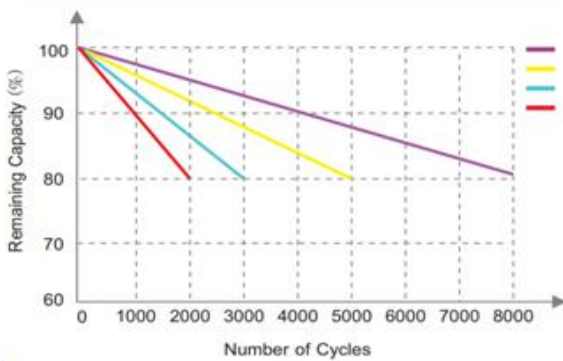
State of Charge Curve (0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve

