

# Lithium Iron Phosphate (LiFePO4) Battery

**MBL12-315CP**

**12.8V315AH 4032Wh**

## 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

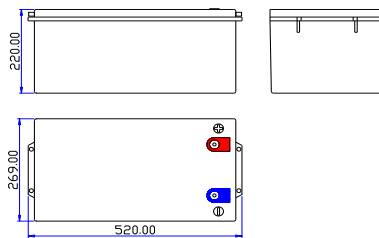
Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

### Lower Self-discharge rate

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



## Physical Dimension



## Applications

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

## Electrical Characteristics

Chemistry	LiFePO4
Nominal Voltage	12.8V
Nominal Capacity	315Ah (C5,25°C)
Energy	4032Wh
Internal Resistance	≤5 mΩ
Cycle Life	>3500 cycles @1C 70%DOD
Months Self Discharge	<3%
Efficiency of Charge	100% @0.5C
Efficiency of Discharge	96-99% @1C

## Standard Charge

Charge Voltage	14.6±0.2V
Charge Mode	0.2C to 14.6V, then 14.6V charge current to 0.02C (CC/CV)
Charger Current	75A
Max. Charge Current	150A
Charge Cut-off Voltage	14.6V±0.2V

## Standard Discharge

Rated Discharge Current	75A
Max Discharge Current	150A
Max. Pulse Current	450A(<3s)
Discharge Cut-off Voltage	10V
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
Storage Temperature	0 °C to 40 °C (32Fto 104F) @60±25% Relative Humidity
Water Dust Resistance	IP65

## Mechanical

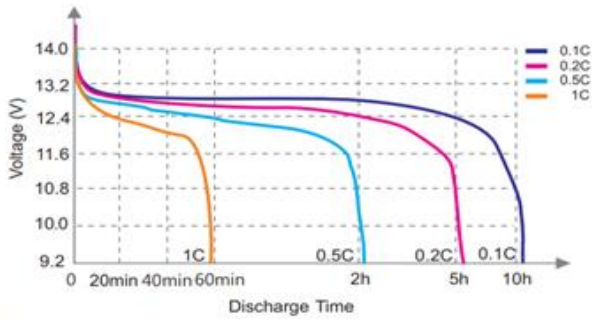
BMS	4S/4P / Pre-heat
Communication function	CAN BUS/NMEA 2000
Plastic Case	ABS
Dimensions (in./mm.)	520x268x227 mm
Weight (lbs./kg.)	30kg(66.14lbs)
Terminal	M8

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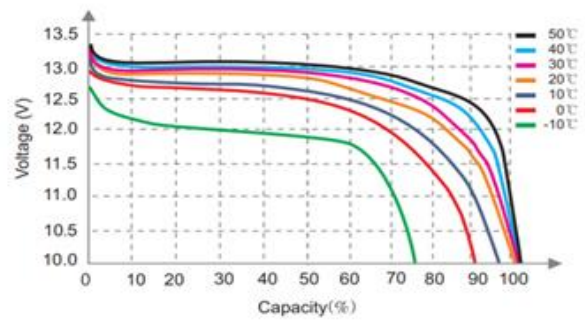
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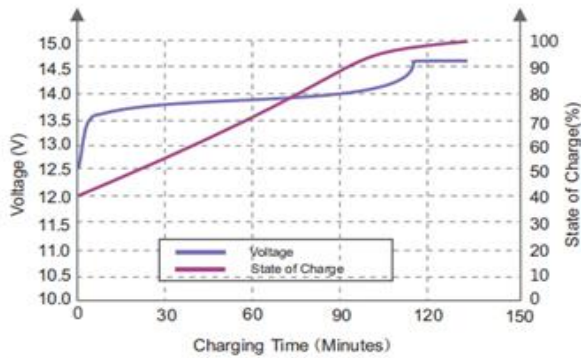
Different Rate Discharge Curve (25°C)



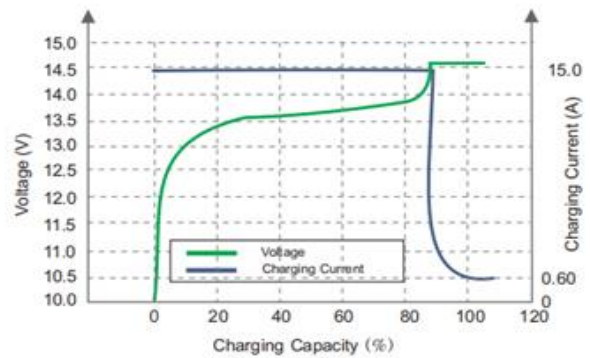
Different Temperature Discharge Curve(0.5C)



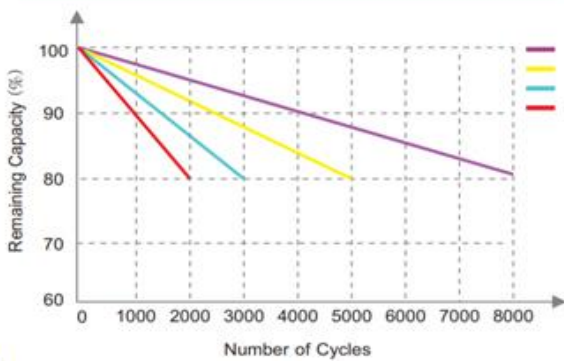
State of Charge Curve (0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve

