

Lithium Iron Phosphate (LiFePO4) Battery

MBL12-100DIN-BP

12.8V100AH 1280Wh

Features of LiFePO4 Battery

Longer Cycle Life

LiFePO4 batteries would be is five times than SLA batteries on cycle life

High Power & Light weight

LiFePO4 batteries performance twice power of SLA batteries, while half weight helpful for transport and installation

Intelligent management control

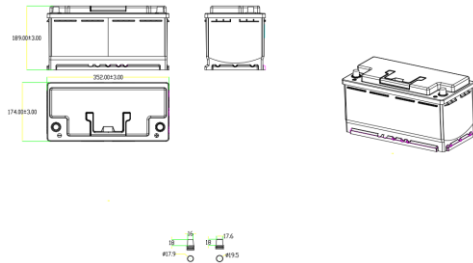
Intelligent BMS system covered by LFP batteries to ensure that batteries work on safety and perfect condition

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	100Ah (C5,25°C)
Energy	1280Wh
Internal Resistance	≤10 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	50A
Max. Charge Current	100A
Charge Cut-off Voltage	14.6V±0.2V

Standard Discharge

Rated Discharge Current	50A
Max Discharge Current	100A
Max. Pulse Current	300A(<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 SMART Bluetooth / Pre-heat
Plastic Case	ABS (DIN case)
Dimensions (in./mm.)	353x175x190 mm
Weight (lbs./kg.)	10kg(22.05lbs)
Terminal	SAE

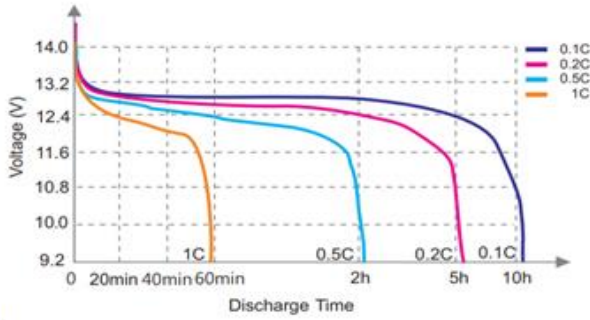
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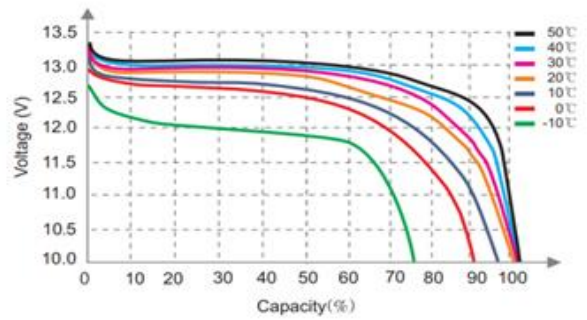
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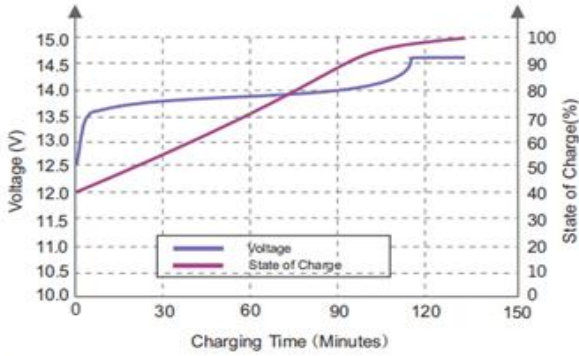
Different Rate Discharge Curve (25°C)



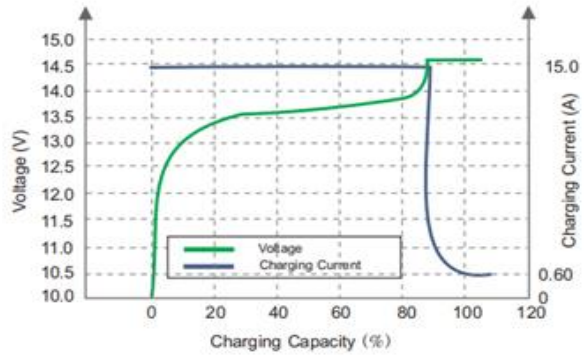
Different Temperature Discharge Curve(0.5C)



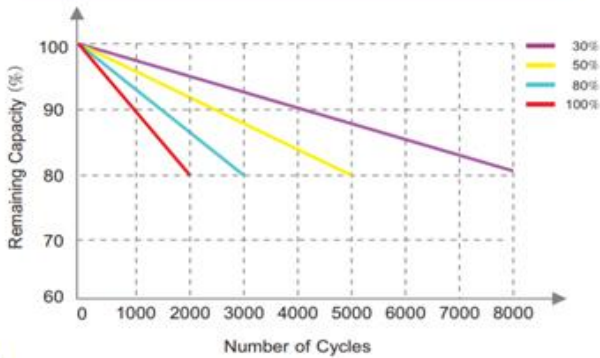
State of Charge Curve (0.5C, 25°C)



Charging Characteristics(0.5C, 25°C)



Different DOD Discharge Cycle Life Curve(1C)



Different Temperature Self Discharge Curve

