

General features & applications for MPLFP Series (LiFePO₄ battery)

- * Safe technology.
Communication of monitored data via inside BMS.
- * Lighter weight.
About less 1/2 of the weight to equivalent lead acid battery.
- * Environmental friendly.
Nether contain any toxic heavy metals (for exmples lead , Cadmium),nor corrosive acids.
- * Maintenance-free operation;lower self-discharge.

- * Longer cycle life;Higher power.
At normal condition,thousands of cycles @ 100% DOD.
- * Excellent cycle performance and lower total cost of ownership.
- * Wide operating temperature range (-20°C~55°C).
- * LiFePO₄ battery is customizable.
- * Main applications:



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MPLFP12.8-250 (12.8V250Ah)

Battery Specifications

Nominal Voltage		12.8V
Rated Capacity		250Ah
Rated Energy		3200Wh
Dimensions	Total Height	225mm (8.82inches)
	Height	220mm (8.62inches)
	Width	269mm (10.54inches)
	Length	520mm (20.37inches)
Weight Approx		25.0Kg (55.2lbs)
Terminal type / Torque		T19(M8)/8.5N.m
Outer case's material		ABS
BMS build-in		Yes
LCD Screen /Bluetooth/heating function		Optional
Max in Parallel		4 PCS
Max in Series		4 PCS

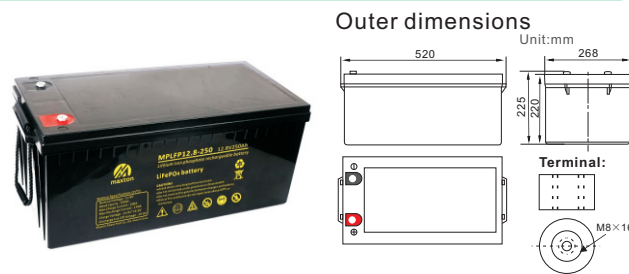
Battery Characteristics

Normal character (at 25°C)	Operation voltage	10.0V~14.6V
	Monthly self-discharge	<3%
	All Efficiency-round trip	>96%
Operating Temperature Range	Cycle life(80%.DOD)	5000 cycles @0.2C
	Charge	0°C~55°C (32°F~131°F)
	Discharge	-20°C~55°C (-4°F~131°F)
Standard Charge (at 25°C)	Storage	-20°C~45°C (-4°F~113°F)
	Recommended Charge voltage	14.4V
	Max Charge voltage	14.6V
Standard Discharge (at 25°C)	Recommended charge current	100A
	Max Charge current	110A
	Max discharge current	110A
Standard Discharge (at 25°C)	Peak discharge current	550A/200ms
	Recommend discharge cut-off voltage	12.8V
	Max discharge cut-off voltage	10.0V

Constant Current & Power discharge table (25°C)

Discharging time	1h	2h	3h	4h	5h	10h	20h
Cut-off voltage (10.0V)	A	250	125	83.3	62.5	50	25
	W	3200	1600	1066	800	640	320

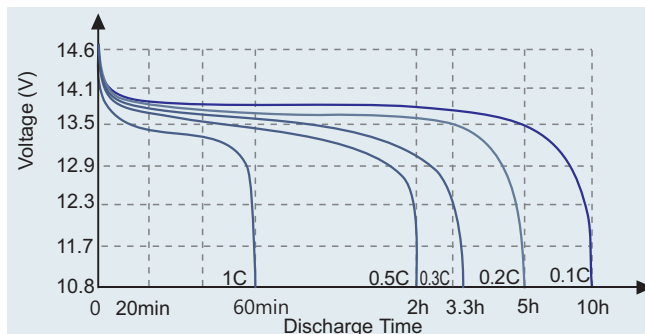
Battery picture & terminal



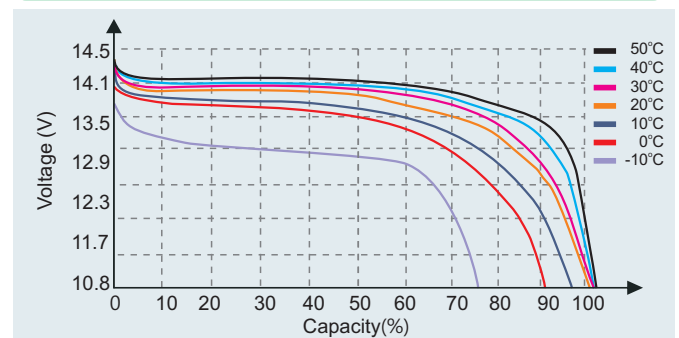
BMS Characteristics

Primary charging current protection	100A	Delay time:1000ms
Second charging current protection	110A	Delay time:500ms
Primary discharging current protection	100A	Delay time:200ms
Second discharging current protection	550A	Delay time:200ms
Over charging voltage protection	15.0V	Delay time:1000ms
Over discharging voltage protection	8.8V	Delay time:1000ms
Temperature protection:(PCB)Temperature ≥ 95°C ; Recover ≤ 85°C.		
Communication port	No	

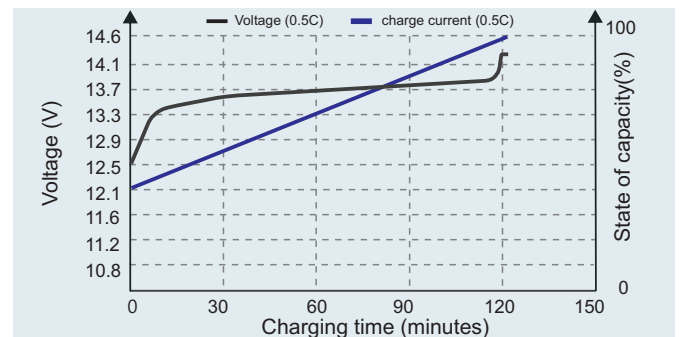
Different Rate Discharge Curve(25°C)



Different Temperature Discharge Curve (0.5C)



Charging Characteristics(0.5C,25°C)



Different DOD discharge cycle life curve(0.2C,25°C)

