Lithium Iron Phosphate (LiFePO4) Battery

RTLB 51.2-100A(51.2V100Ah)

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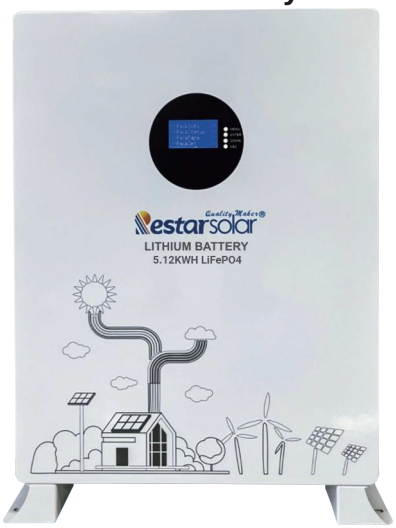
Lithium Battery



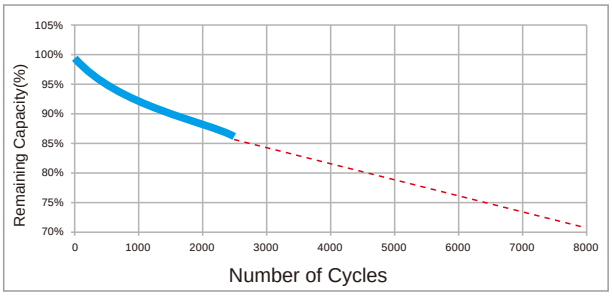
Features of LiFePO4 Battery

- **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℃~60℃.
- **Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

Application

- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

Cycle Life Curve



Specification

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	100Ah (C5,25℃)
	Energy	5120Wh
	Internal Resistance	＜50mΩ
	Cycle Life	>6000 cycles @25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	58.4V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV)
	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	＜59.2V
Standard Discharge	Continuous Current	50A
	Max. Pulse Current	110A(<3s)
	Discharge Cut-off Voltage	44V
Environmental	Charge Temperature	0 ℃ to 45 ℃ (32F to 113F) @60 ± 25% Relative Humidity
	Discharge Temperature	-20 ℃ to 60 ℃ (-4F to 140F) @60 ± 25% Relative Humidity
	Storage Temperature	0 ℃ to 40 ℃ (32F to 104F) @60 ± 25% Relative Humidity
	Water Dust Resistance	
Mechanical	Cell & Method	3.2V50AH-16S2P
	Plastic Case	
	Dimensions (in./mm.)	600*420*210 ±2mm
	Weight (lbs./kg.)	53Kg
	Terminal	180A terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A

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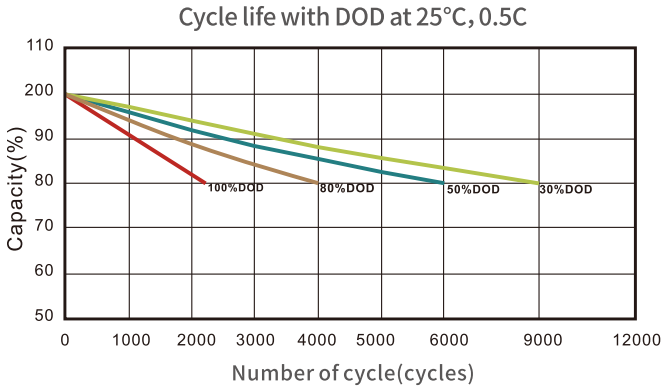
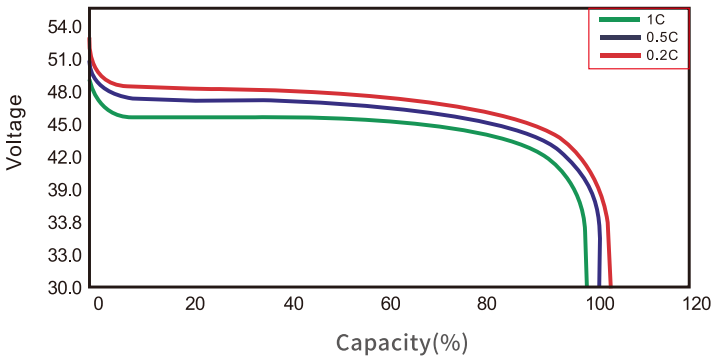
Model Performance Diagrams

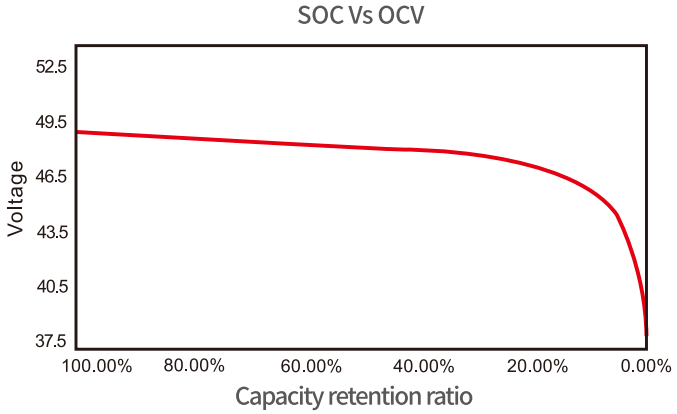
Number of Cycles Vs. DOD



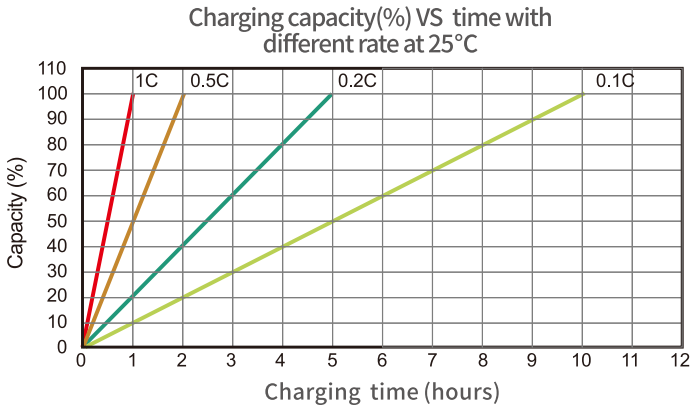
Discharge Performance at R.T.



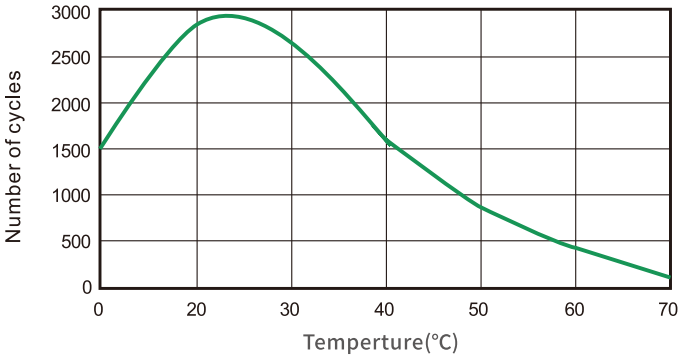
Battery Capacity (C) VS. Open Circuit Voltage (OCV)



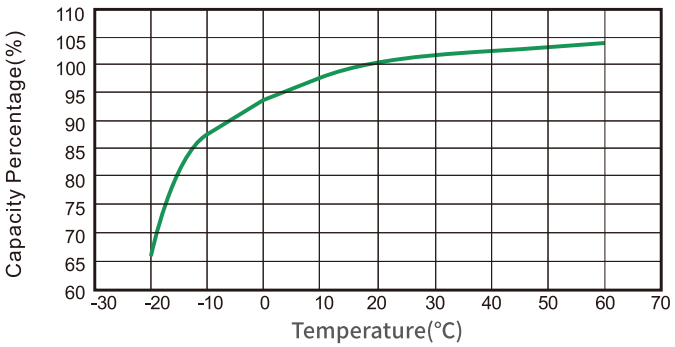
Battery Capacity Vs. Charging Time



Cycle Life in Relation to Temperature



Temperature Effects on Capacity



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