

## RTLB 51.2-100A(51.2V100Ah)

### Lithium Battery

#### Features of LiFePO<sub>4</sub> Battery

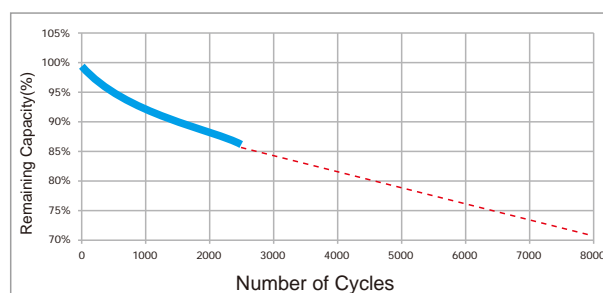
- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement 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°C~60°C.
- **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



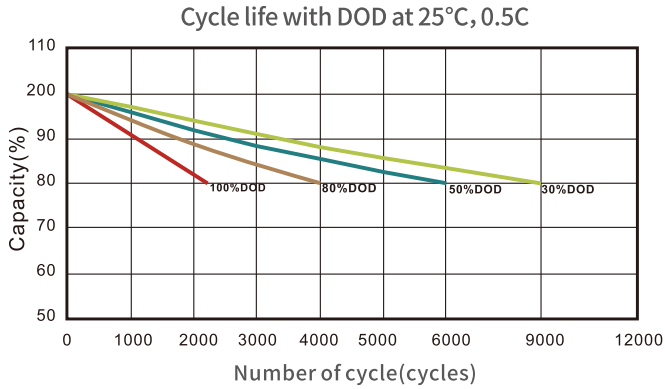
#### Specification

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	100Ah (C <sub>5</sub> ,25°C)
	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 °C to 45 °C (32F to 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 (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

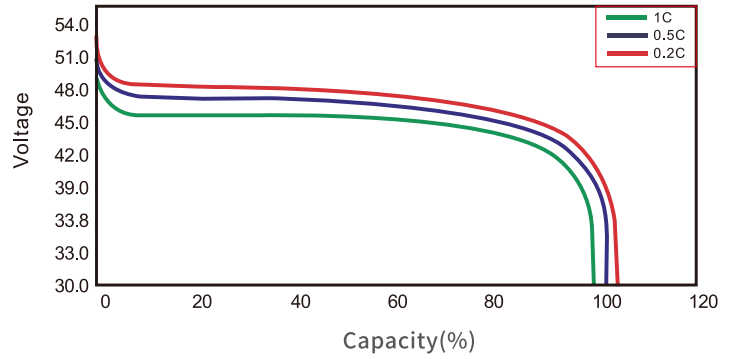
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## Model Performance Diagrams

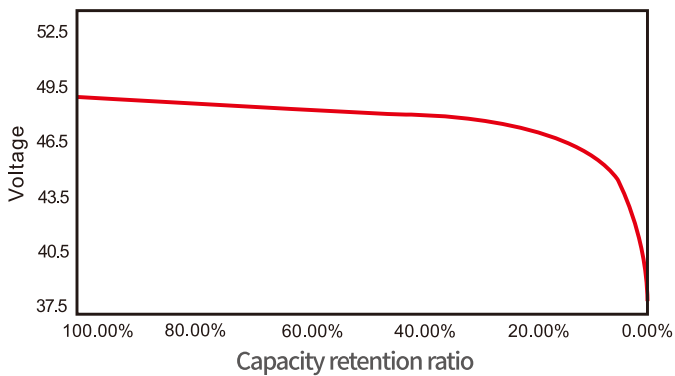
### Number of Cycles Vs. DOD



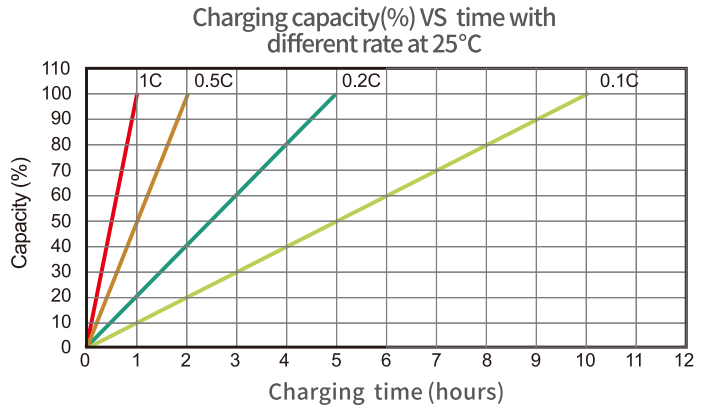
### Discharge Performance at R.T.



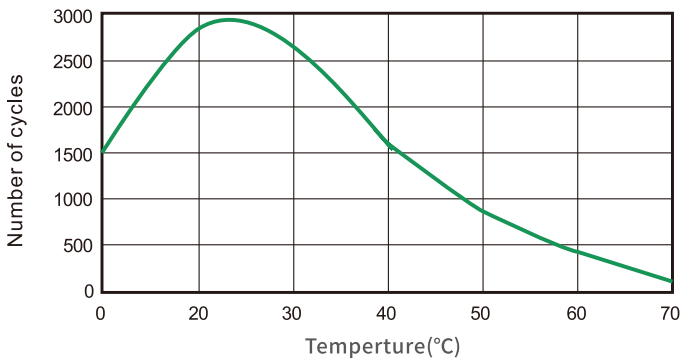
### Battery Capacity (C) VS. Open Circuit Voltage (OCV)



### Battery Capacity Vs. Charging Time



### Cycle Life in Relation to Temperature



### Temperature Effects on Capacity

