

RTLB 48-300A(48V300Ah)

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°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.



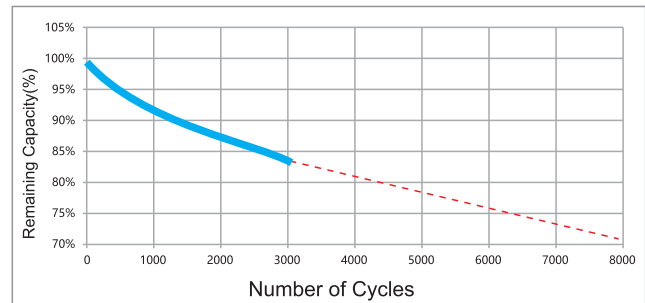
Application

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

Specification

Electrical Characteristics	Nominal Voltage	48V
	Nominal Capacity	300Ah (C ₅ ,25°C)
	Energy	14400Wh
	Internal Resistance	< 50mΩ
	Cycle Life	>3000 cycles @0.2C 100%DOD
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	51.5-54.75V
	Charge Mode	0.2C (CC/CV)
	Charger Current	40A
	Max. Charge Current	50A (When the charging current is greater than 55A, turn on the current limiting, and limit the current by 10A)
	Charge Cut-off Voltage	55.5V
Standard Discharge	Continuous Current	100A
	Max. Pulse Current	150A(<3s)
	Discharge Cut-off Voltage	42V
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	3.2V100AH-15S3P
	Plastic Case	
	Dimensions (in./mm.)	860*620*200 ±2mm
	Weight (lbs./kg.)	110Kg
	Terminal	180A terminal
	Protocol (optional)	RS485/CAN
	BMS	15S100A

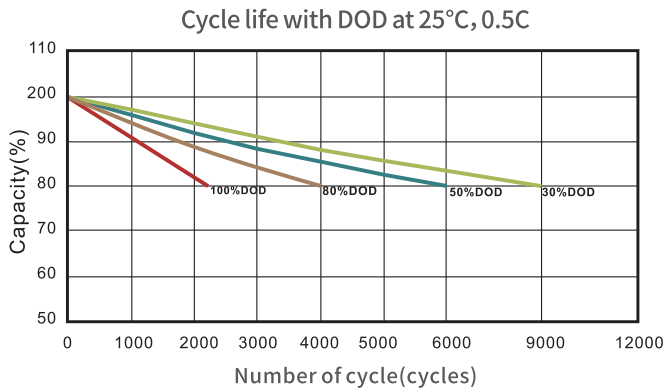
Cycle Life Curve



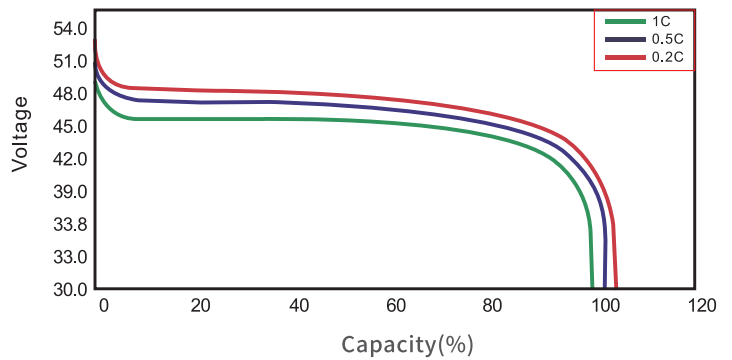
RTL8 48-300A(48V300Ah)

Model Performance Diagrams

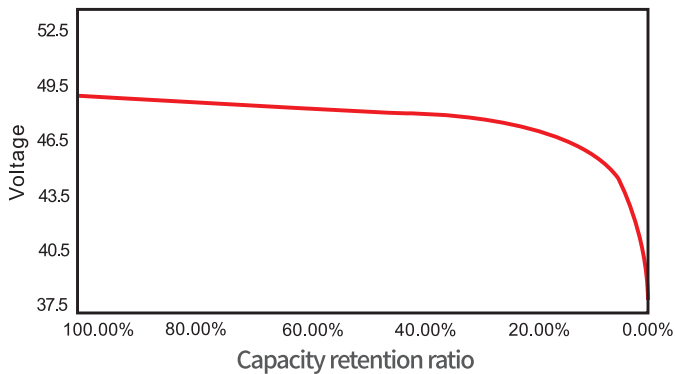
Number of Cycles Vs. DOD



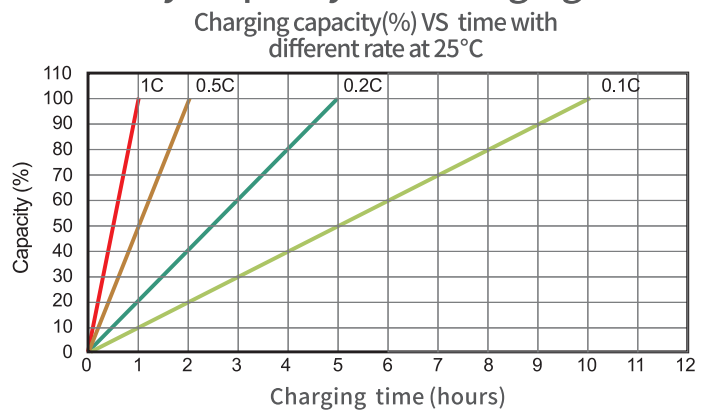
Discharge Performance at R.T.



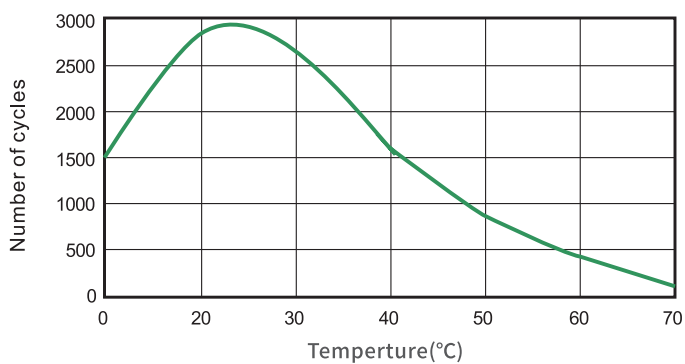
Battery Capacity (C) VS. Open Circuit Voltage (OCV) SOC Vs OCV



Battery Capacity Vs. Charging Time



Cycle Life in Relation to Temperature



Temperature Effects on Capacity

