

#### **Lithium Battery**

### RTLB 48-200A(48V200Ah)

#### **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

#### 105% 100% 100% 95% 95% 95% 70% 0 1000 2000 3000 4000 5000 6000 7000 8000 Number of Cycles

**Cycle Life Curve** 

	Nominal Voltage	48V
	Nominal Capacity	200Ah (C₅,25°C)
	Energy	9600Wh
Electrical	Internal Resistance	< 50m Ω
Characteristics	Cycle Life	>2500 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	54.75V
	Charge Mode	0.2C to 54.75V, then 54.75V charge current 0.02C(CC/CV)
	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	< 55V
Standard Discharge	Continuous Current	90A
	Max. Pulse Current	110A(<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	3.2V50AH-15S4P
	Plastic Case	
	Dimensions (in./mm.)	860*540*160 ±2mm
	Weight (lbs./kg.)	80Kg
	Terminal	180A terminal
	Protocol (optional)	RS485/CAN
	BMS	15S100A

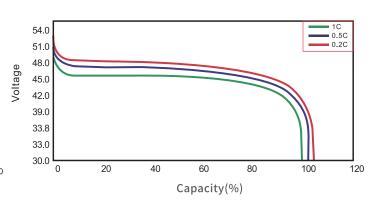
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#### **Model Performance Diagrams**

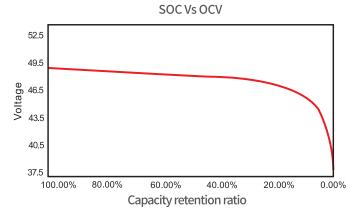
### Number of Cycles Vs. DOD

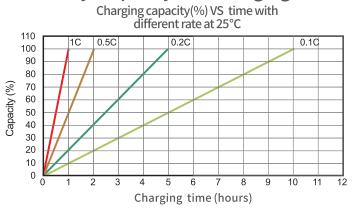
#### Cycle life with DOD at 25°C, 0.5C 200 Capacity(%) 60 50 12000 1000 2000 3000 4000 5000 6000 9000 Number of cycle(cycles)

### Discharge Performance at R.T.

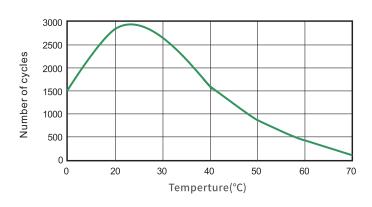


# Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time

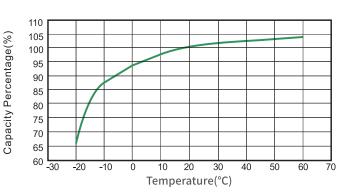




## Cycle Life in Relation to Temperature



## Temperature Effects on Capacity



(E) WWW.RESTARSOLAR.COM



(🖂) sales@restarsolar.com

Add: 30 Yongshun Road, Zhulin Town, Jintan District, Changzhou, Jiangsu Province, China.