

PR-BAT-T48100-3U

Chargeable Battery 48V 100A

PROSE



Part number

PR-BAT-T48100-3U	chargeable battery 48V 100A, 3U
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Features

Longer Cycle Life	Offers up to 10 times longer cycle life and 5 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 battery.
Higher Power	Delivers twice power of lead acid battery, even high discharge rate, while maintain high energy capacity.
Wider Temperature Range	-10°C~55°C.
Superior Safety	Lithium iron phosphate chemistry eliminates the risk of explosion or combustion due to high impact, over charging or short circuit situation.
No Memory Effect	Support unstable partial state of charge (UPSOC) (charge/discharge) utilization.

Mechanical data

Nominal Voltage	48V
Nominal Capacity	100Ah
Minimum Capacity	97Ah
Energy	4800Wh
Internal Resistance (ACR)	≤30mΩ
Cycle Life	≥4000 cycles

Design Life	≥10 years @25°C
Self-Discharge (30 days)	≤5% @25°C
Efficiency of Charge	≥98%
Efficiency of Discharge	≥100% @ 0.2C
	≥96% @0.5C
Charge Mode	0.2C to 54V, then 54V charge current to 0.02C (CC/CV)
Max. Continuous Charge Current	100A
Max. Continuous Discharge Current	100A
Discharge Cut-off Voltage	≤43.5V
Water Dust Resistance	IP21
Case	Iron (Insulation painting)
Dimensions (W*D*H) (excluding hanger and handle bar)	442*430*133mm
Max. Weight	≤43kg
Min. Gravimetric Specific energy	≥ 112Wh/kg
Parallel in maximum	15pcs

Working Environment

Charge Temperature Range	0°C~45°C
Discharge Temperature Range	-10°C~55°C
Optimum Operation Temperature	10°C~35°C
Storage Temperature	-10°C~35°C, ≤85% Relative Humidity

General Functions

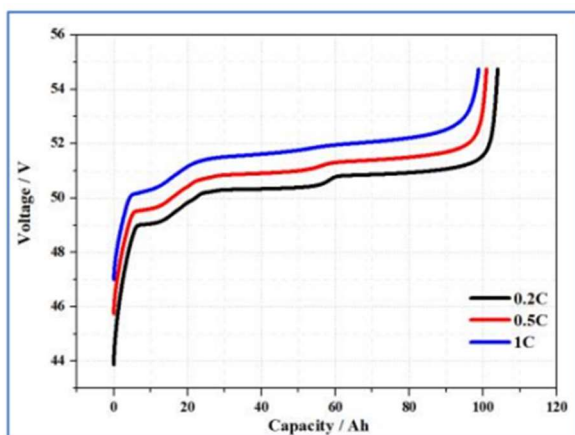
Parallel Communication	RS485
Battery with Equipment	RS485
Battery Debugging Communication	RS232
SOC Light	4 * LED
Charge Current limit	When the charging current exceeds the set value, turn on the current limit and limit the current to 20A
SNMP	Yes
Dry Contact	PIN1 to PIN2:Normally open, closed during low power PIN3 to PIN4:Normally open, closed during fault protection

Qualifications

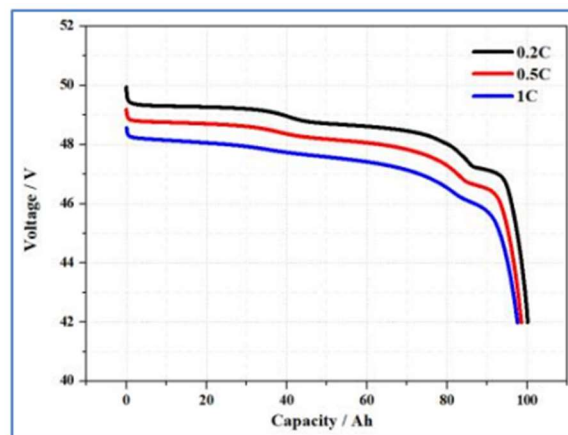
Passed ISO9001, ISO14001, ISO45001, UL1642, CE, ROHS, IEC62619, IEC62620, UN38.3

Battery cell cost advantage

Curves



Charge curves at different C-Rate @25°C



Discharge curves at different C-Rate @25°C

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