

SMART SODIUM-ION BATTERY SERIES-5U

COSPOWERS

CN48100T NEW

Application Field:
Communication base stations, macro station retrofits, power supply for shelters/outdoor cabinets, grid peak shaving and valley filling, and other scenarios, compatible with various energy storage system requirements.



Excellent high and low temperature performance
Operates with natural cooling at ambient temperatures below 50°C, saving energy.



Intelligent protection
Features smart voltage, current, and temperature protection functions.



Easy maintenance
Integrated BMS design supports battery self-management, remaining energy, battery health monitoring, and other functions.



Anti-theft functionality
Compatible with various optional anti-theft features.



Operating modes
Includes self-managed constant voltage discharge, power-managed constant voltage discharge, and battery-characteristic discharge modes such as constant power discharge, enabling hybrid use of different battery types.

BMS Introduction

| | Introduction |
|------------------------------------|--|
| Communication interface | RS485/RS232/CAN |
| Information sampling function | With each series-connected single cell voltage, external busbar voltage, total battery pack voltage, charging and discharging current, cell surface temperature, BMS single-board temperature sampling function |
| Battery Cell equalization function | The battery has a passive equalization function, which can be activated when the cell pressure difference exceeds a certain value during charging. |
| Charging current Limit function | With the function of automatically entering the current-limiting charging mode when detecting the battery cell: low voltage, high voltage, low temperature, high temperature, poor consistency, charging over-current protection |
| Voltage acquisition accuracy | 0~5V, Detection accuracy≤10mV; 0~60V Detection accuracy≤0.5% |
| Current acquisition accuracy | Detection accuracy≤1% (0.5C charging/discharging) |
| Anti-theft function | Software anti-theft, communication anti-theft, gyroscope anti-theft and other functions |
| System component failure alarm | It has failure detection and alarm function for key components of BMS board. While it is detected with temperature sensor failure, voltage detection failures, charge and discharge MOS failure, an alarm will be generated and the charge and discharge loops will be disconnected (if the charge and discharge loop is damaged, it is not required to disconnect), the battery cannot recover automatically, and all the indicators flash to prompt. |
| History logs | 500 historical records, 10000 historical records and life-cycle storage are optional; Independent storage space; BMS has power failure preservation capability; Historical data records include battery voltage, current, ambient temperature, SOC, SOH, cycle times, cumulative discharge capacity and other data |

Module Specification and Parameters

| Model | CN48100T | |
|-----------------------|--|----------------|
| Connection Method | 1P10S | 1P16S |
| Rated Energy | 4800Wh | 4640Wh |
| Rated Capacity | 100Ah | 100Ah |
| Rated Voltage | 48V | 46.4V |
| Voltage Range | 40~58V(22~58V) | 40~58V(22~58V) |
| Charging Current | 50A | 50A |
| Discharging Current | 50A | 100A |
| Operating Temperature | Charging: -10~50°C; Discharging: -30~70°C; Storage: -30~45°C | |
| Self-Discharge Rate | ≤3% (0~30°C / 3 months) | |
| Dimensions (W*D*H) | 440*550*200mm | 440*430*222mm |
| Weight | 46Kg | 76Kg |
| Lifespan | 4000 cycles @80% DOD, 0.5C/0.5C | |
| Certification | YD2344.1-2023, UN383 | |



Shenzhen Coslight Power Technology Co., Ltd.

W: WWW.COSPOWERS.COM

A: No.2, Guangtian Road, No.3 Industrial Zone, Luotian Community, Yanluo Street, Baoan District, Shenzhen, Guangdong Province, P.R.C

T: +86-755-33185898

Copyright and final interpretation rights belong to Shenzhen Coslight Power Technology Co., Ltd.