

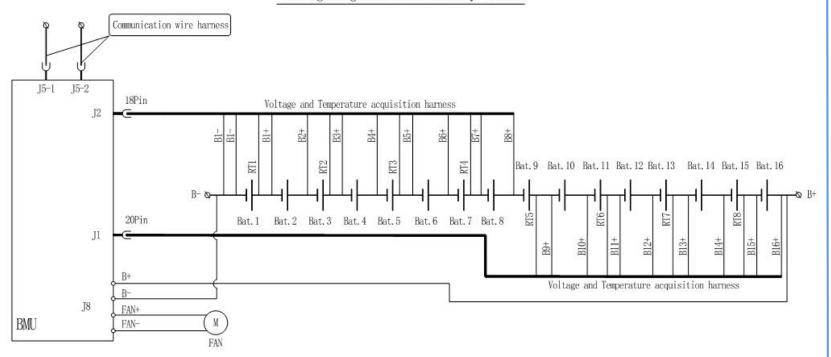
BMS operation manual

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- 6. Attentions and Program Attachment

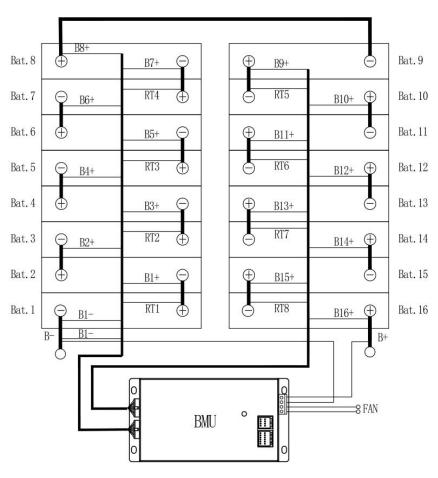
BMU Wiring (16s is used as reference in the drawing, other strings are similar)

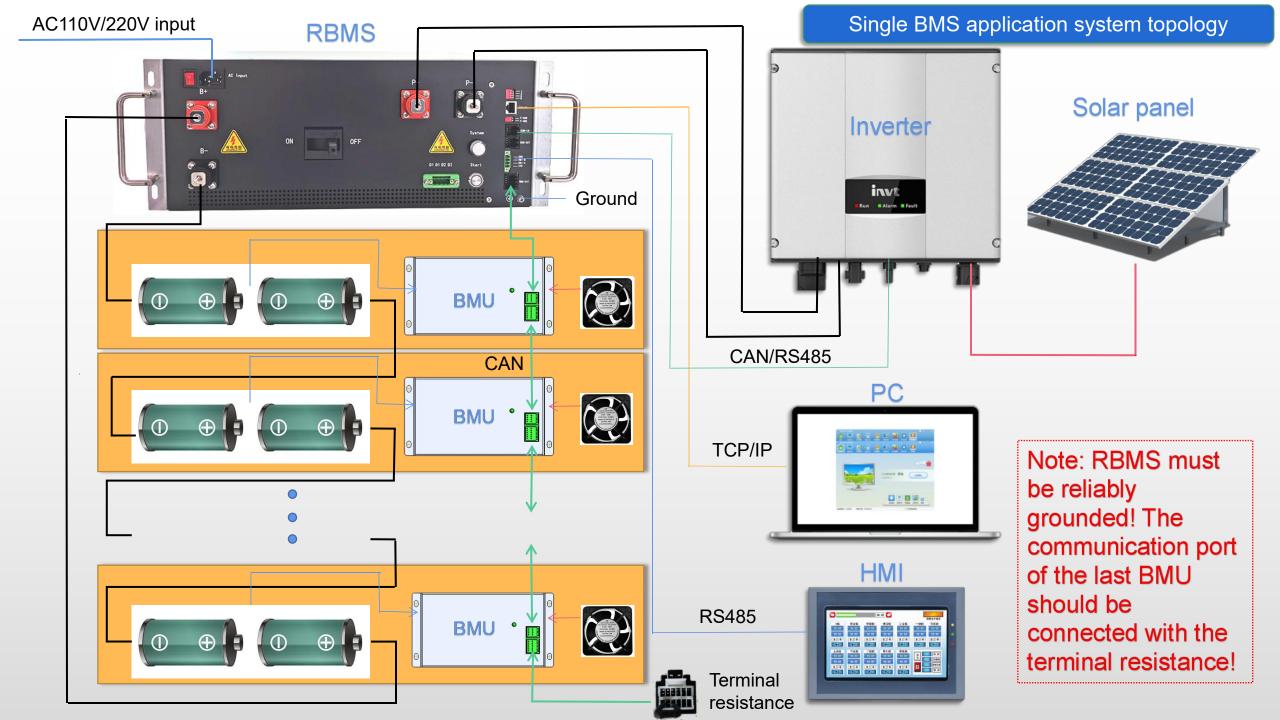
- 1. Connect the voltage and temperature acquisition ire of the battery terminal in sequence according to the following drawing.
- 2.If the battery module has a cooling fan, please connect the total positive, total negative, and fan cable.
- 3. After the above is completed, check that it is correct, and then insert the J2, J1, and J8 in sequence.
- 4. Connect the total positive and total negative of the battery module to the power terminals on the panel.

Wiring diagram of 16S battery module



BMU wiring reference





Single RBMS Wiring (on previous page)

- 1. After the battery module wiring is completed, then connect the total positive and total negative of the battery to B+.B- of the RBMS (note that to keep the circuit breaker disconnected).
- 2.Connect the communication cable of the BMU to the BMU-OUT port of the RBMS in turn, then connect the last BMU to the terminal resistor.
- 3.Connect P+ P- of RBMS to the inverter, If there is communication protocol, then connect the COM port of RBMS to the inverter for communication
- 4. Connect to the display screen (Interface: 24V, HMI-A, HMI-B, GND).
- 5. Software connection: connect TCP/IP port to PC with network cable.
- 6. Start up the inverter first before start up the RBMS.

RBMS operation (See picture on the right))

Operation after start up

- 1.RBMS Monitor Manual (Link)
- 2.BMS Firmware Upgrade Manual (Link)
- 3.RBMS External HMI Manua (Link)
- 4.RBMS Internal 3.5 white HMI Manual (Link)
- 5.SBMS Monitor Manual (Link)
- 6.SBMS HMI Manual (Link)

System status indicator

System running normally: the green indicator is always on

System alarm: yellow indicator is always on

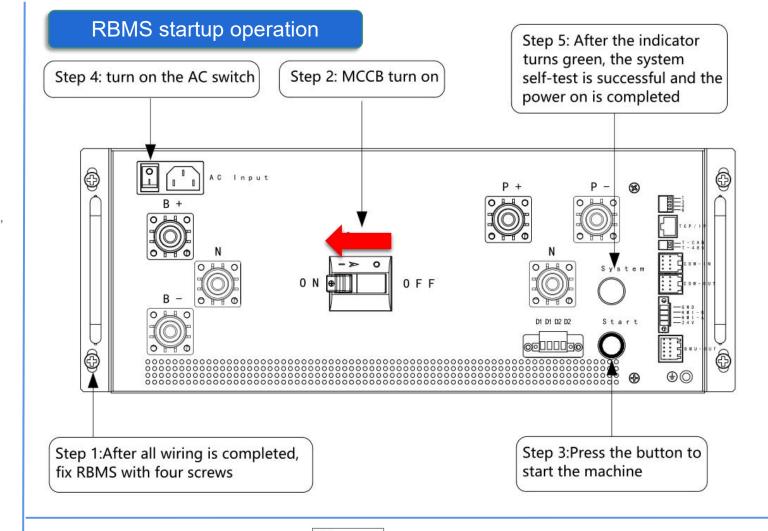
Self-test failed and in protection state: red indicator is always on

Charging: Green indicator flashes Discharge: red indicator flashes

Self-checking: red and green indicator flash alternately

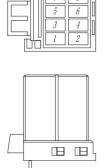
Precharging: yellow indicator flashes

Definition of external communication (COM port) (see the right bottom picture)

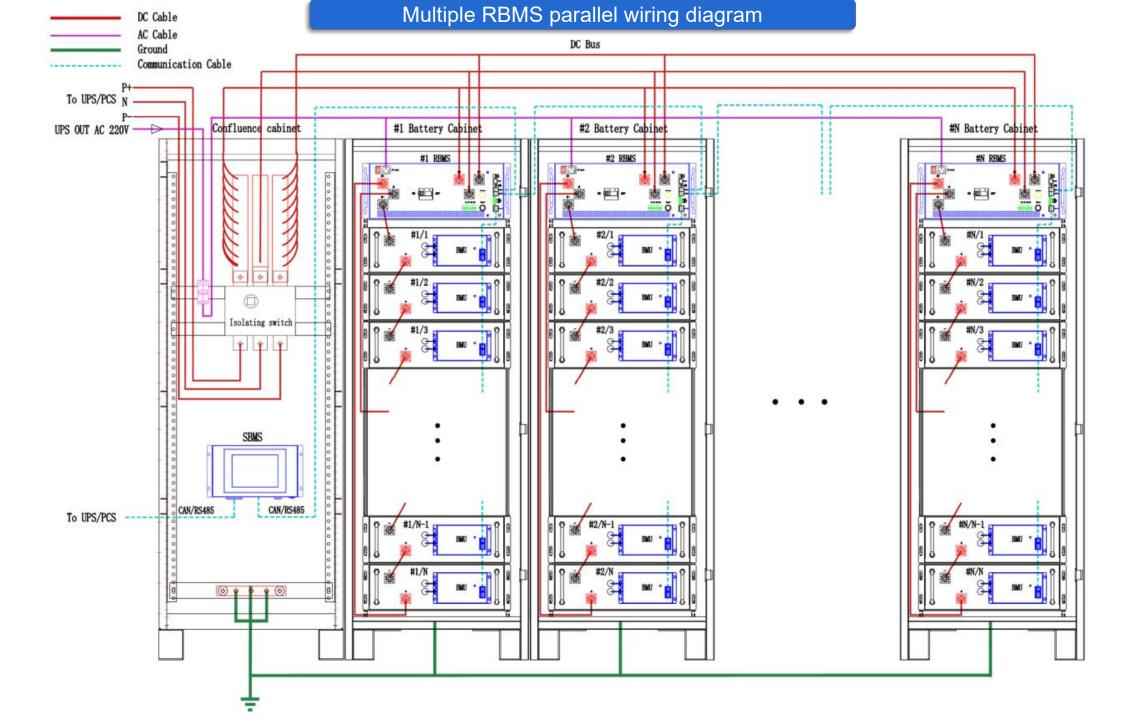


Line sequence definition of COM-IN and COM-OUT ports

Plug model: DJ7082S-1.2-21



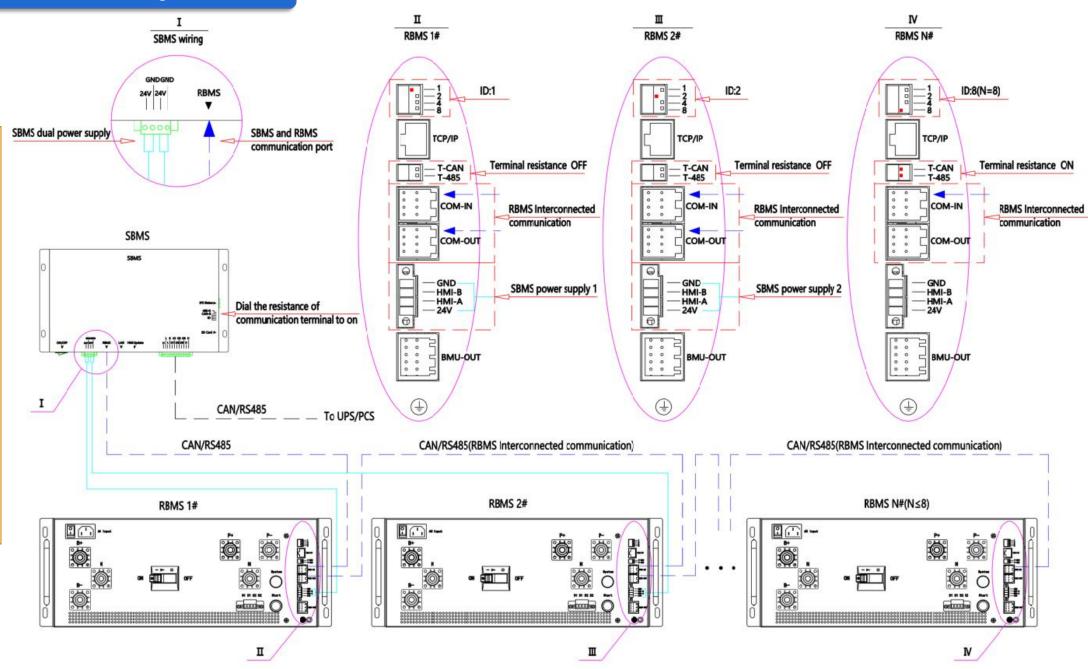
PIN	1	2	3	4	5	6	7	8
Defintion	485-В	485-A	GND	CAN-L	CAN-H	X	GND	X



SBMS wiring and RBMS configuration

Attentions:

- 1.SBMS needs to be powered by two power sources provided by RBMS.
- 2.The ID on the RBMS must be dialed in sequence, and the last RBMS needs to dial the communication terminal resistance.
- 3. When the SBMS communicates with external devices, it is necessary to dial the communication terminal resistance on the SBMS.
- 4. It need to restart to take effect after the above dial codes are set.



Attentions:

- 1). There is high voltage inside the energy storage system, If the technician is not authorized by our company, it is not allowed to open the chassis for disassembly and maintenance without authorization, otherwise there is a danger of electric shock and the warranty rights will be lost.
- 2). Before starting the BMS, please check carefully whether the maximum voltage of the battery system is within the operating voltage range of the BMS. If the BMS is damaged by overvoltage, the consequences will be at your own risk.
- 3). It is strictly forbidden to connect any wires or connectors from the BMS to the positive and negative poles of the battery, otherwise there may be a risk of short circuit and damage to the circuit board.
- 4). It is strictly forbidden to be close to water or fire to avoid fire caused by short circuit or overheating of the battery.
- 5). After the circuit breaker of the BMS is disconnected due to the triggering of the secondary protection, the system must be powered off to eliminate the fault, and then restarted at least 1 minute later. Otherwise, the shunt coil of the circuit breaker may not have enough time to dissipate heat and be damaged.
- 6). If the UPS/PCS needs to be started from the battery, the battery switch on the UPS/PCS side must be closed before starting the battery. If the battery is turned on first, and then the battery switch on the UPS/PCS side is closed, since the DC side of the UPS/PCS side generally has a large capacitor, the closing instantaneous capacitor is equivalent to a short circuit, and the current charged by the battery to the capacitor will be much higher than that inside the RBMS machine. The rated value of the contactor can easily cause ablation and adhesion of the contactor contacts, increase the contact resistance of the contactor contacts, heat and burn, or the contacts cannot be disconnected, thereby triggering secondary protection.

Program File (Link):

- BMS_Upgrade_Tool
- RBMS Monitor
- SBMS_Monitor_Monitor