

BMS operation manual

1.BMU Wiring

2.Single RBMS Installation

3.Start-up and Operation

4.Multiple RBMS Parallel System Wiring

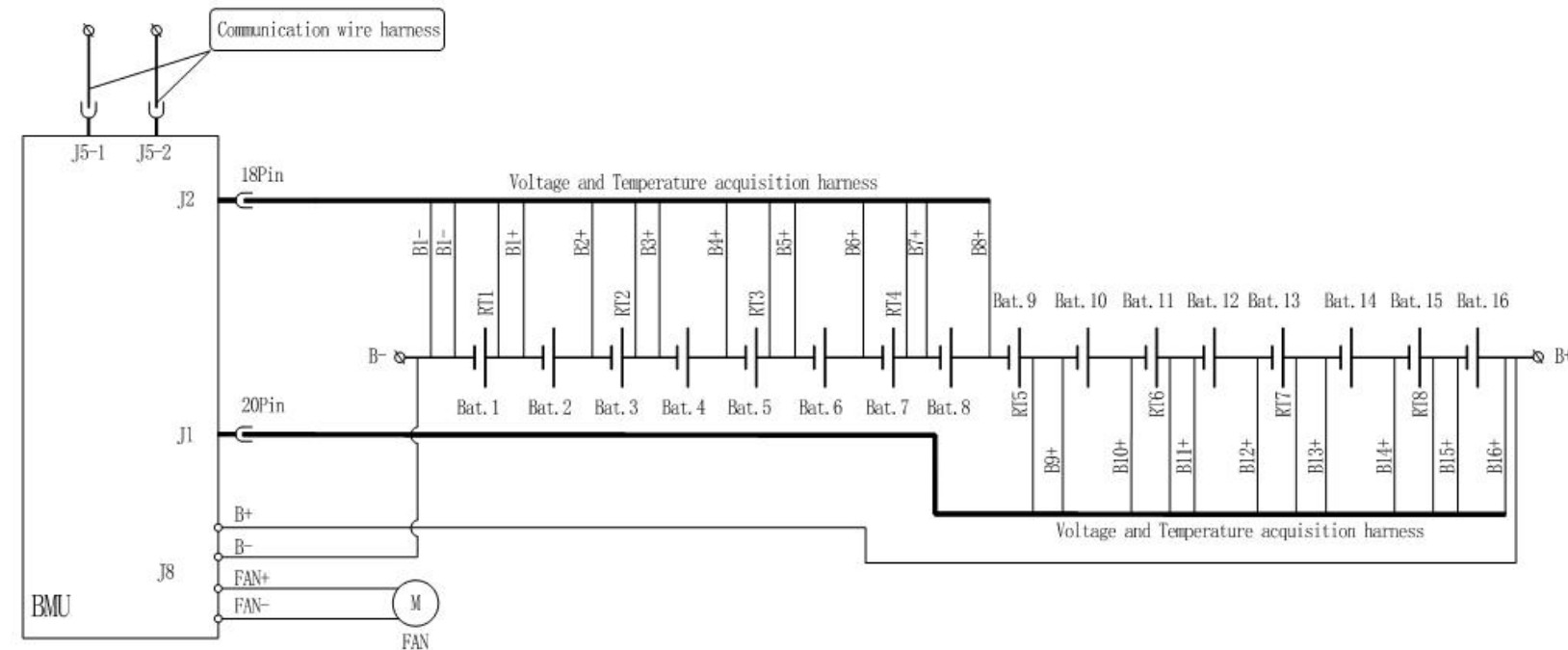
5.SBMS wiring and RBMS Dialing Code Setting

6.Attentions and Program Attachment

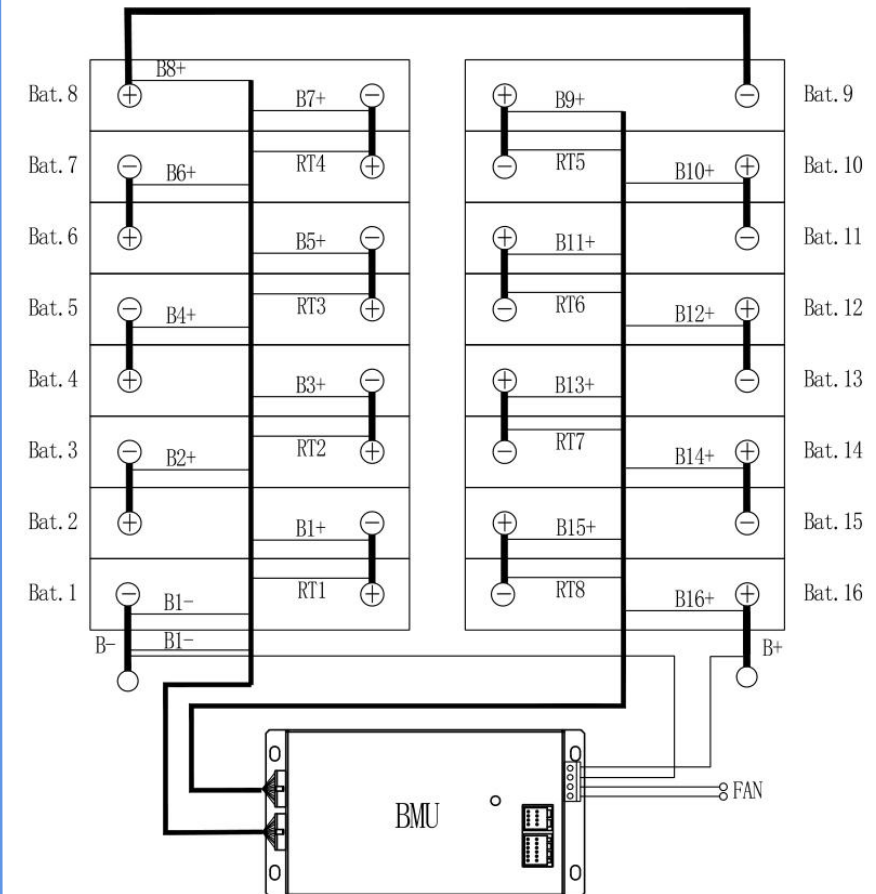
BMU Wiring (16s is used as reference in the drawing, other strings are similar)

1. Connect the voltage and temperature acquisition wire 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



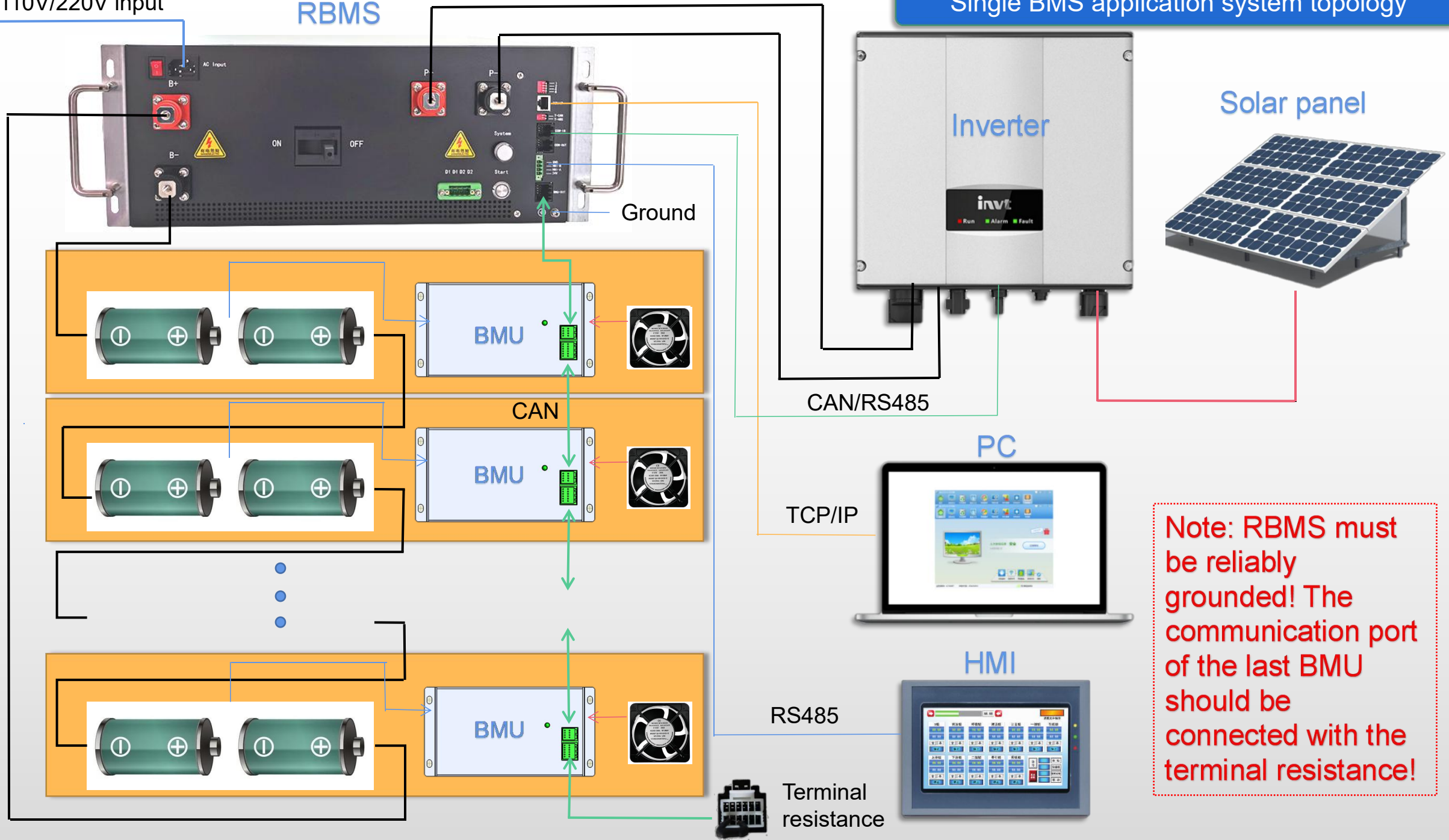
BMU wiring reference



AC110V/220V input

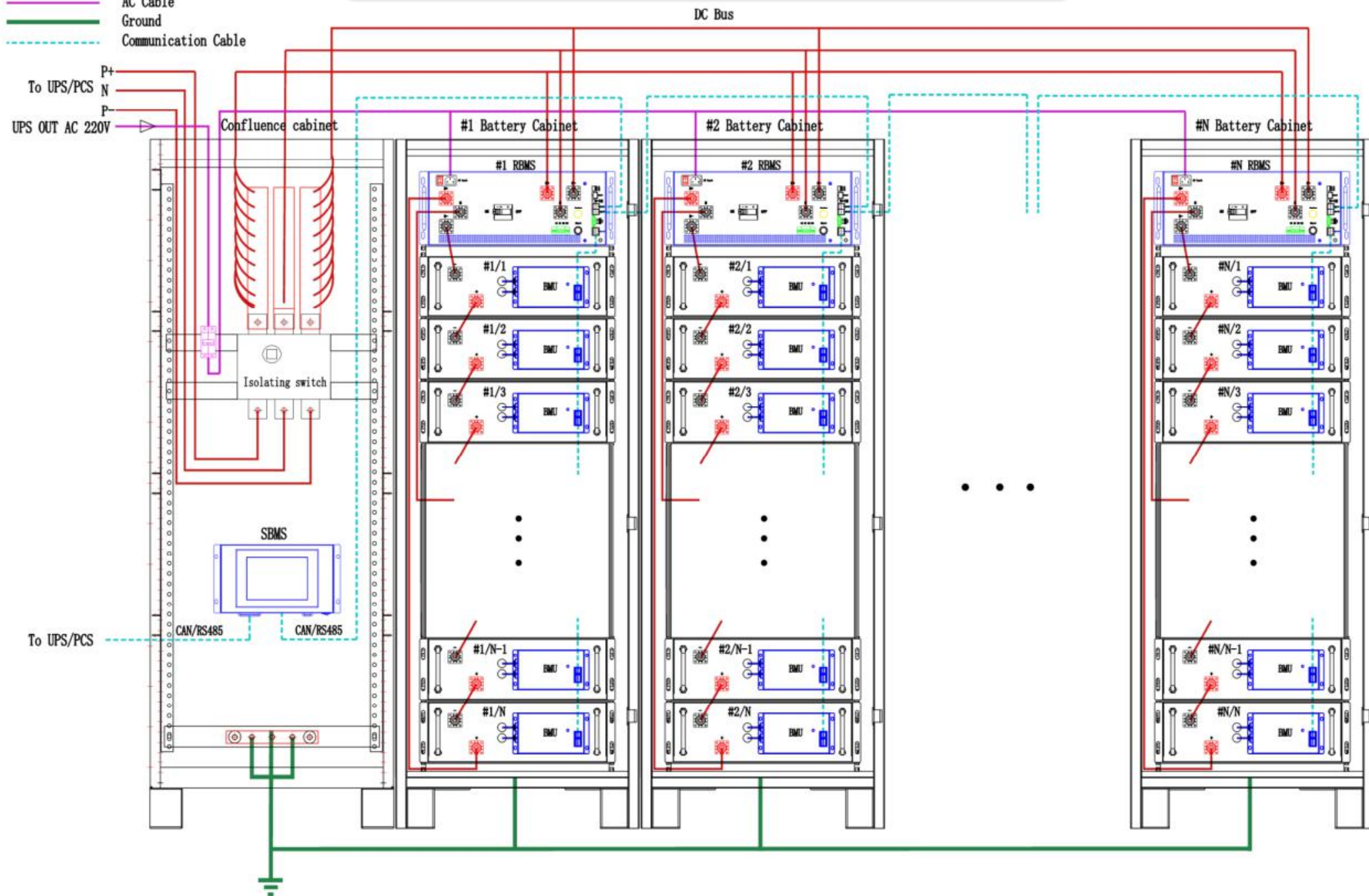
RBMS

Single BMS application system topology



Multiple RBMS parallel wiring diagram

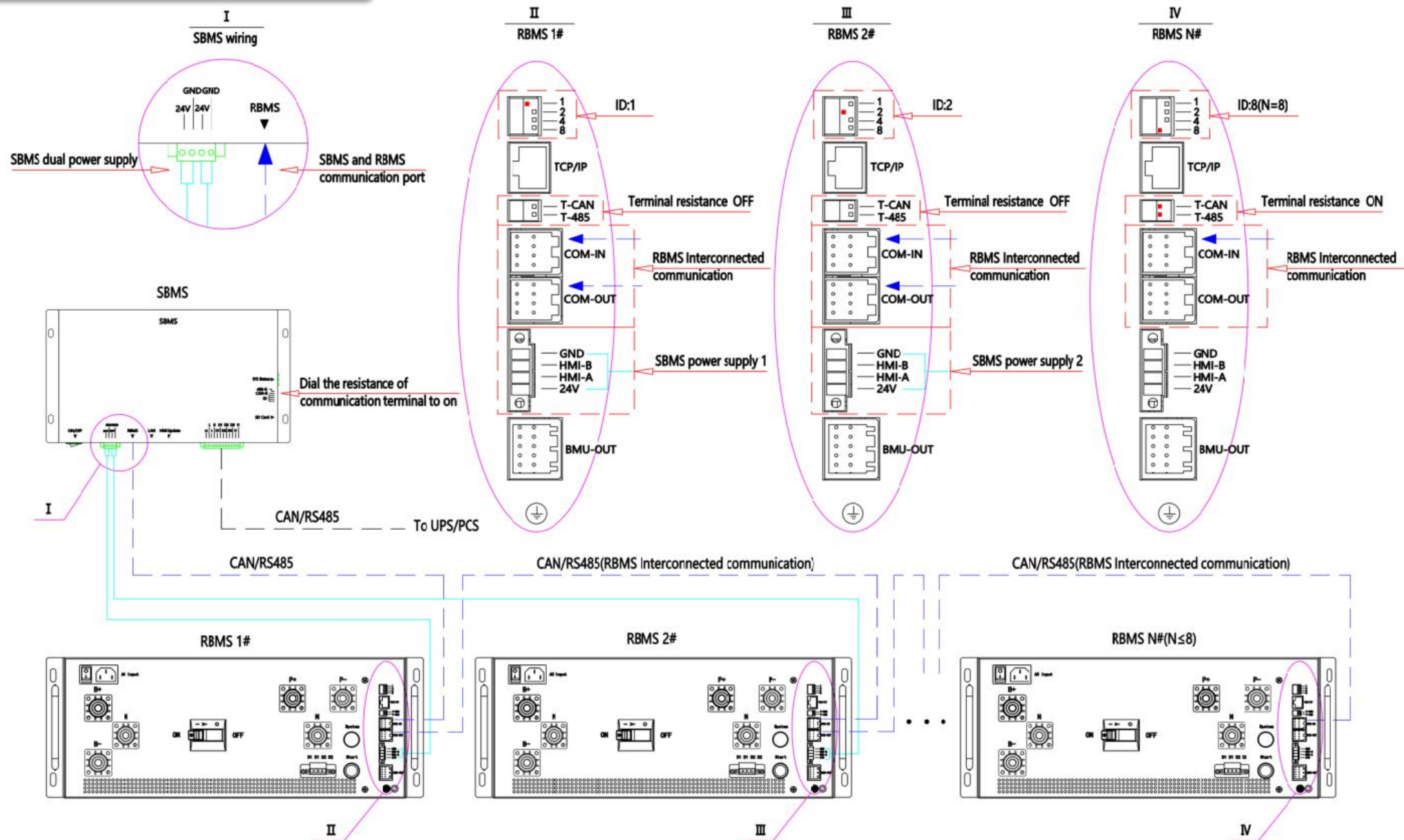
- DC Cable
- AC Cable
- Ground
- Communication Cable



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