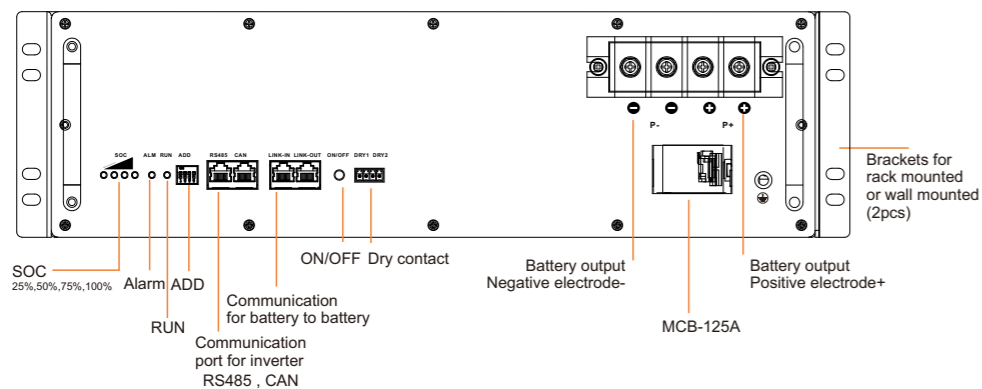


This guide provides guidance on the safe and effective installation and operation rack mounted Li-ion batteries (48V series & 51.2V series) which use 48100-5G-B0 version BMS . It also provides information on how to safely connect multiple batteries in parallel (Max. 15), as well as how to charge and discharge the batteries.

## CAUTION

- Due to the regulations governing the transportation of Lithium Ion cells and batteries internationally. The battery is only 50% SOC during transport. Please charge battery fully in the first use.
- Before connecting any electrical cable, turn OFF all the switches and breakers and turn OFF the batteries by press the ON/OFF button.
- Avoid any fall or collision during the installation process.
- Do not remove the battery components. The maintenance of the battery should be carried out by a professional engineer.
- Do not expose the Li-ion battery to heat in excess of 55°C during operation, 60 °C in storage.

## System Introduction



### RS485 PIN MAP



RJ45 PIN	Description
1	RS485_B
2	RS485_A
3,4,5,6,7,8	NC

### CAN PIN MAP



RJ45 PIN	Description
1,2,3,4,5,6	NC
7	CAN_H
8	CAN_L

### LINK-IN/OUT PIN MAP



RJ45 PIN	Description
1,2,3,4,5,6	NC
7	RS485-2_A
8	RS485-2_B

## ON/OFF Button



**OFF mode**

During in transport, BMS ON/OFF button is at OFF status. it will turn off the BMS power supply.



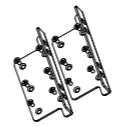
**ON mode**

By press ON/OFF button to active BMS to enter into working mode, if the MCB is also ON, the battery voltage will can be measured by terminal.

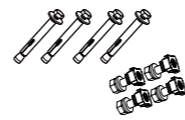
Even if the button is at ON mode, The BMS will enter into dormancy mode after 24 hours when there are no charge, no discharge and no communication. it can be activated again by charge or communication or repress ON/OFF button.

## 1 Unpacking Inspection

- Unpack the battery and visually inspect the appearance. If any shipping damage is found, notify the carrier immediately.
- Press ON/OFF button to active the battery, the SOC and RUN indicator will be light. turn on MCB to measure the output voltage by multimeter, For parallel application, the voltage difference should less than 500mV.
- Press ON/OFF button to shutdown the battery, the indicator light will turn off.
- Check the accessories which should include:



2 pcs Brackets for rack mounted or wall-mounted



4 pcs stainless steel expansion screws M6\*80 for wall mounted  
4 pcs stainless steel snap nut-M6  
5 pcs M6\*12 screws for rack mounted



1pc Communication cable-586B, CAT5e, 1m  
CAN: Victron  
RS485: Growatt / DEYE / INHERGENCY  
Battery to Battery: LINK IN/OUT



3pcs 25-6 OT terminal



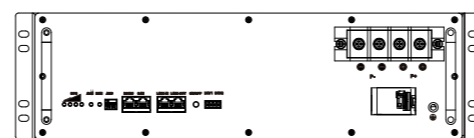
1pc User manual



Optional Part  
RS485-USB device  
Only for install engineer and after-sale engineer.

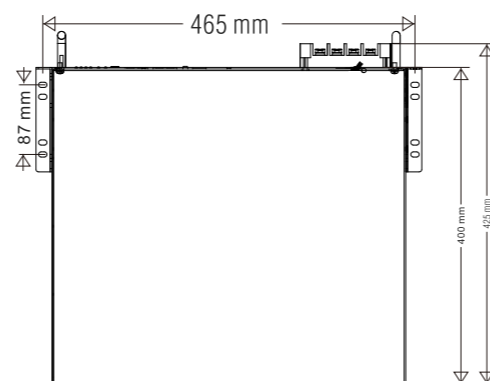
## 2 Mechanical Installation

### 2.1. Rack mounted



2.1.1. Take out the brackets and M4\*8 screws from the accessories, and fix the brackets onto the battery module using the screws through the installation holes.

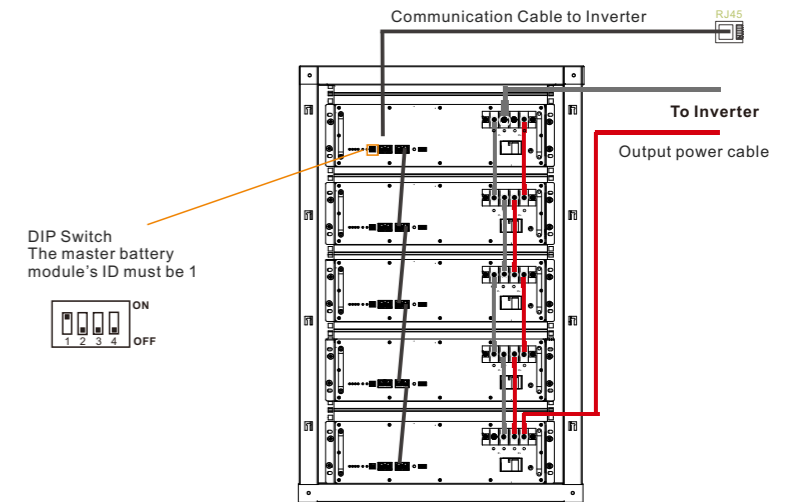
### 2.2. Wall mounted



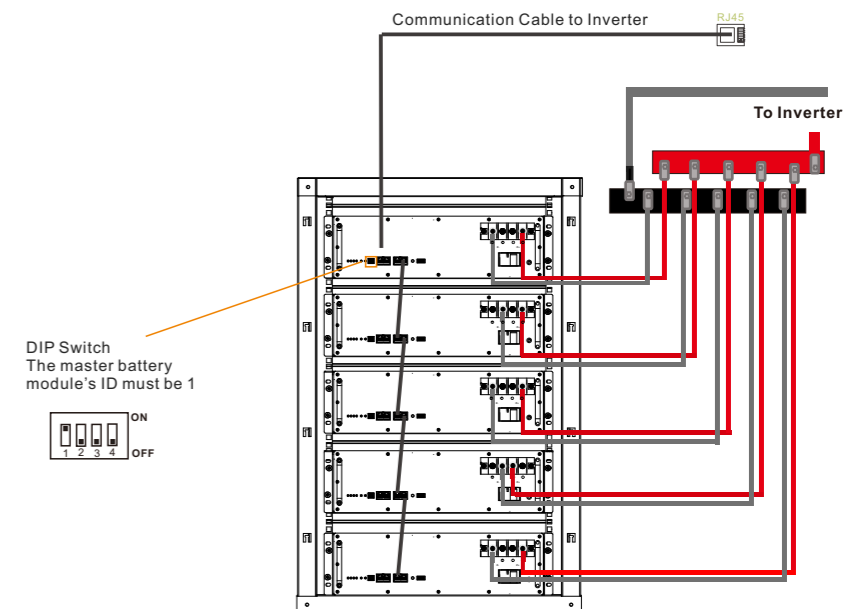
2.2.1. Take out the brackets and M4\*8 screws from the accessories, and fix the brackets onto the battery module using the screws through the installation holes.

## 3 Connecting Cables

3.1. For 3KVA-5KVA inverter or load less than 5KW, refer to below cable connection.



3.2. For 5KVA and above capacity inverter, refer to below cable connection.



Note :

- The power cable to every battery should be same size and length.
- The communication cable connection and modification refer to user manual.

- Make sure all batteries are turned off and the breaker is in off condition. Connect the internal power cable and output power cable. Make sure the screws are tight.
- Connect the communication cable.
- Set the battery module ID by ADD. **The master battery which do communication with inverter ADD must be 1.** Change others battery ID from 2~...
- Make sure the inverter had be installed correctly.
- Turn on all batteries breaker and then press the master battery's ON/OFF button to active the battery, the slave modules will be activated automatic.
- Charge the batteries fully in first use.