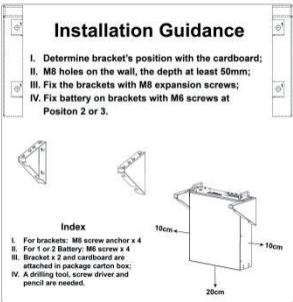


Quick Installation Guide
Model:GBL5.1K3

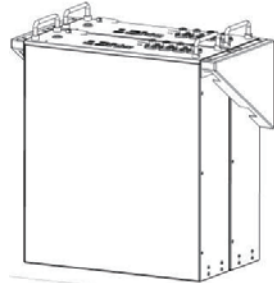


1.Wall mounting

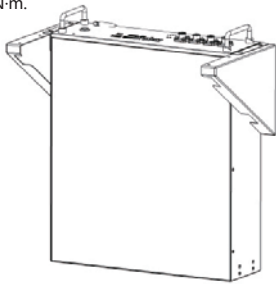
1.Determine bracket mounting place to be fixed using this Positioning cardboard.



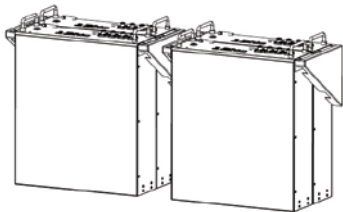
3.Fasten the battery to bracket fasten hole with M6 screws with 2.0N-m roughly.



2.Drill holes in the wall for the M8 expansion screw anchors, which depth should be at least 50 mm. Tighten the screws to a torque around 2.5 N-m.



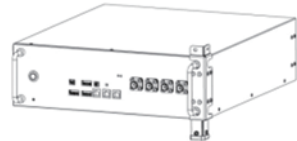
4.Meanwhile, two or four batteries could be installed by theses brackets.



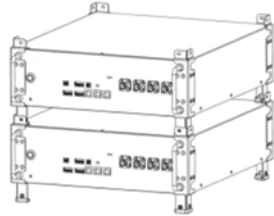
Note:
If more than 4 batteries installed, a cabinet recommended to be selected for the battery' s stable.

2.Ground installation

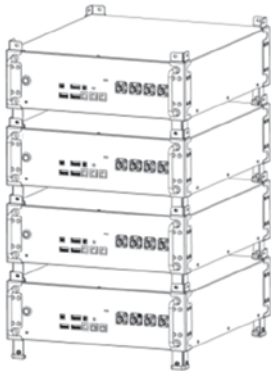
1.Fix the braced feet to battery' s mounting holes one by one.



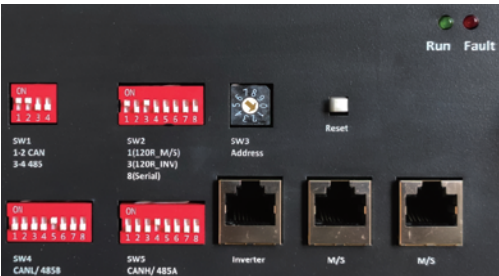
2.If more power and energy needed, two or more (less than 4) batteries could be installed in one stack.



3.But if the number of batteries at the range of 4~8, a cabinet recommended to be selected.



3.Address select of Master and Slave battery(ies) connection



Warning:
Please make sure the SW2 DIP switch selected correctly, if the battery connected in Parallel mode, but select SW2 DIP8 at ON position, probably lead serious fault even dangerous. Meanwhile, if battery connected in Series mode select SW2 DIP8 at OFF status, serious fault and dangerous probably occurred.

For Series&Parallel connection, please set the DIP switches as bellow list.

Connected battery number	Group	Set of SW2		Address Set (SW3)
		Series connect	Parallel connect	
1	—			
2	Master			
	Slave			
3	Master			
	Slave 1			
4	Slave 2			
	Slave 3			
	Slave 4			
	Slave 5			
5	Master			
	Slave 1			
	Slave 2			
	Slave 3			
	Slave 4			
6	Master			
	Slave 1			
	Slave 2			
	Slave 3			
	Slave 4			
7	Master			
	Slave 1			
	Slave 2			
	Slave 3			
	Slave 4			
	Slave 5			
8	Master			
	Slave 1			
	Slave 2			
	Slave 3			
	Slave 4			
	Slave 5			
	Slave 6			

4.Cable connections
4.1Cable connection for Series connection(Ground installation)

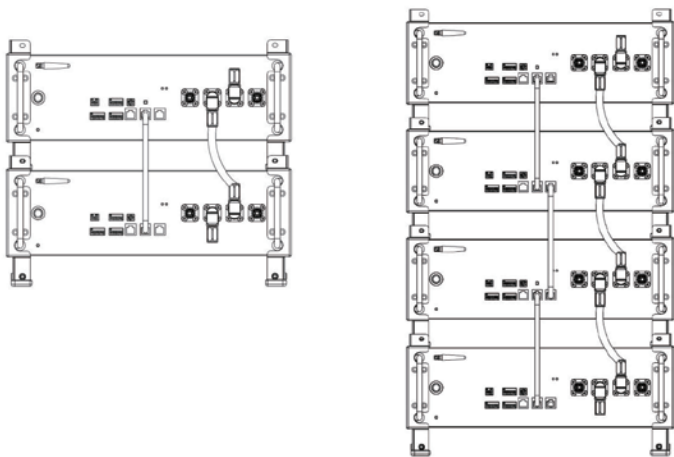
Warning:

Before connecting battery with inverter, please make sure that no inverter connected or the inverter turned off.

Note:

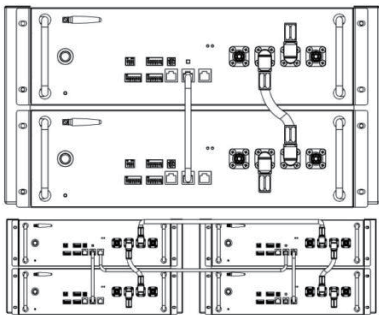
The voltage difference of each battery should be less than 100mV.

- 1.Feed a data cable to M/S communication terminal interface one by one directly.
- 2.If more than 4 batteries installed, a cabinet was recommended. .



4.2Cable connection for Series connection(Wall mounting)

For wall mounting, the battery Series connection number should be less than 4, if more batteries installed, a cabinet was recommended.

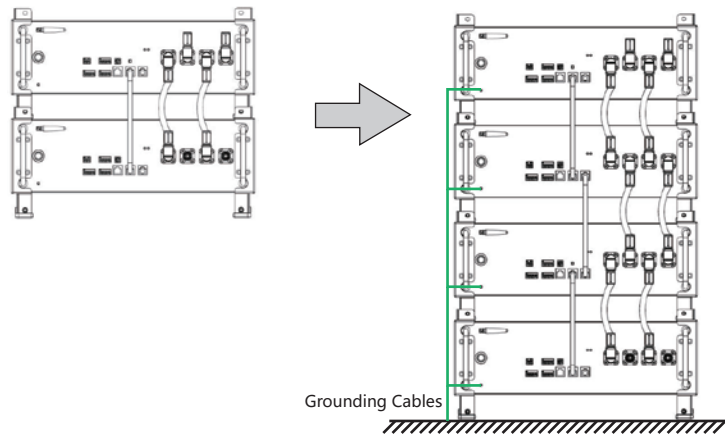


Note:

If battery connected in Series mode, it' s better to be installed in Ground installation method, for the Power cable resistance difference between stack and battery pack, which will have fade effect on voltage balance.

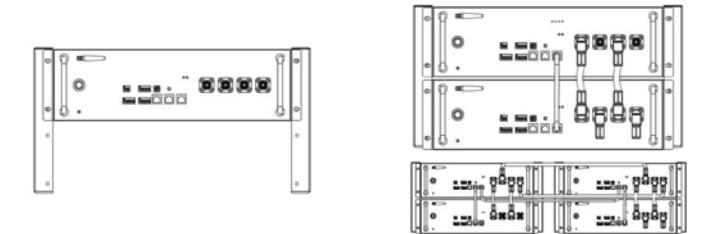
5.Cable connection for Parallel connection
5.1 Ground installation

For parallel installation, please pay attention on Cable connection, and the DIP8 of SW2 no need to be changed and stayed on Initial Factory state.



5.2 Wall mounting

For wall mounting, the battery Series connection number should be less than 4, if more batteries installed, a cabinet was recommended.

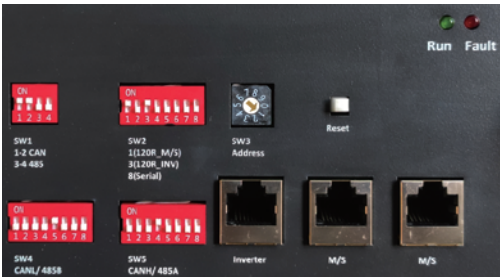


Note:

Before two or more batteries installed in parallel, please check the voltage of each battery and make sure the voltage different less than 2.0V.

6. Configuration
6.1Settings for CAN /485 bus pins

SW1,SW4 and SW5 should be set correctly for proper communication between inverter and battery.



- SW1: For CAN communication, please set pin1 and pin2 at on, pin3 and pin4 at off
- For 485 communication, please set pin1 and pin2 at off, pin3 and pin4 at on
- SW4,SW5: Please use them to set the port of RJ45
- Low signal (CAN) / B (485)--SW4
- High signal (CAN) / A (485)--SW5
- Example (above picture): CAN communication, port 5 of RJ45 is low signal, port 4 of RJ45 is High signal.

Note:

The battery default protocol is CAN bus, if an inverter communication mode is RS485 or other protocol, please contact GS ENERGY hot line +86-574-65292531 before installed the battery.

7.Commissioning

7.1Commissioning battery

- If there is only one battery installed, use the following steps to put it in operation:
- 1.Press and hold the panel button on the left side of the unit for about 5s, after the indicator lights on, release the panel button.
 - 2.Make sure that the Run light is on. If it stays off, do not use the battery and contact GS ENERGY +86-574-65292531 or your distributor.
 - 3.Turn the inverter on, and wait for the start-up sequence to complete fully.
- When there are two or more batteries connected with parallel mode, after the charging cable and the data cable has been connected correctly, follow these steps to put them in operation:
- 1.Check battery voltage level is above 48V
 - a)If battery voltage is under 45V contact your distributor or GS ENERGY after service hot line for help.
 - 2.Press and HOLD the panel button for about 5s, then the indicator lights will turn on.
 - 3.Release the panel button.
 - a)For all batteries, make sure that the Run light is on.
 - b)Make sure the maximum voltage different between batteries less than 2.0V.
 - c)If not, the installer should balance the battery voltage and then parallel connect batteries together.
 - d)Set the DIP switches like part 6-1 Setting for communication interface.
 - 4.Turn the inverter on, and wait for the start-up sequence to complete fully.

7.2Shutting down battery

- 1.Press and hole the Panel Button about 5s, after a disconnect voice of relay come can release it.
- 2.Make sure that every light on the battery is off.

