Quick Installation Guide

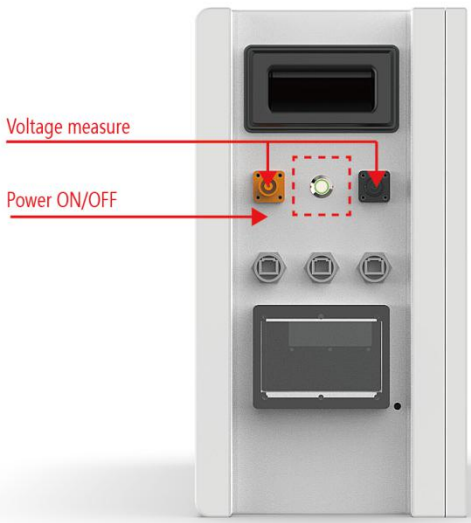
Model:GBL5.8K3

1.Checks before installation

Check item : Check the battery voltage.

> Warning:
> If this checking process is executed for any reason after the battery is fully installed, make sure that the inverter is turned off or break the connection between battery and inverter while checking the battery.

Press and hold the Power ON/OFF button for about 4s and then release it after the two LED lights on, measure the voltage at the terminal interface with a voltmeter. If the voltage is lower than 48V, do not use the battery and contact GSMART hot line 4001018585 or your distributor.



2. Installation the battery

To prevent the battery from moving, make sure the battery fixed to a wall.

> Note:
> The symbol located on the back cover plate, and the earth wire between battery and inverter is not compulsive but recommended.

> Note:
> If the battery is installed above the floor or on a platform, make sure that the wall or platform is capable of supporting the battery’ s weight.

1.Determine bracket mounting place to be fixed using the bracket.
2.Drill holes in the wall for the M6 (0.25 in) screw anchors, and the hole depth should be at least 50 mm.

3.Drive the screw anchors through the mounting bracket into the holes.
4.Tighten the screws to a torque of 2.5 N·m.

5.Fasten the mounting beam to battery.

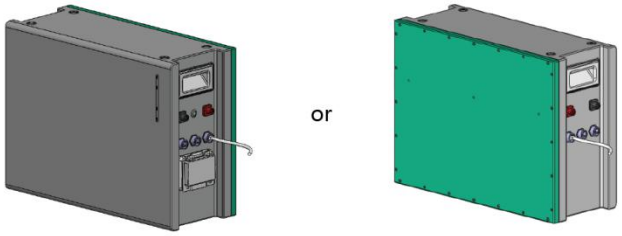
6.Fixing the battery to bracket with screws.

3.Cable connections

3.1.Connect the communication cable from inverter

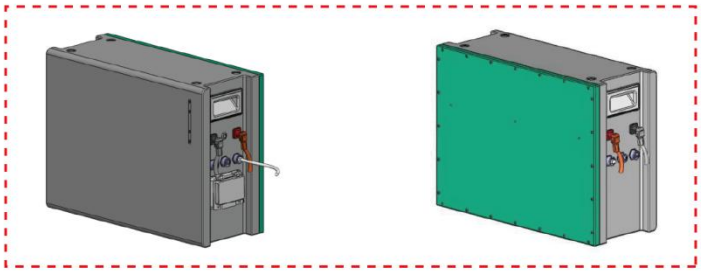
Warning:
Before connecting battery with inverter, please make sure that no inverter connected or the inverter turned off.

Plug in the communication cable from inverter to the CAN/485 port. The ports on both sides of battery are optionally used.



3.2.Connecting the power cables for battery

Take off the covers of power cable sockets, then plug in a pair of power cables (to inverter) into them through the correct positive and negative directions, and the sockets on both sides of battery are optionally used.

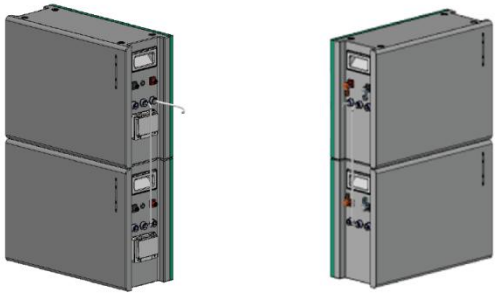


*Warning:Pay attention not to reverse polarity. Connection with reversed polarity will cause severe damage to the battery and even fire.

4.Parallel connection

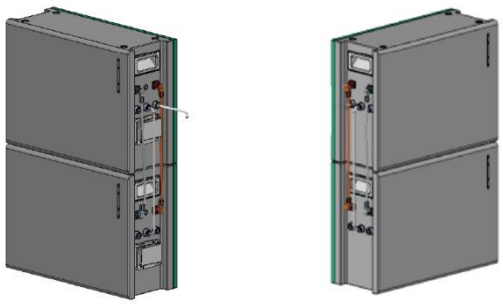
4.1.Communication cable connect between batteries

Plug in an additional communication cable between two batteries.The ports on both sides of battery are optionally used.



4.2.Power cables connect between batteries

Take off the covers of the other side power sockets, and plug in another pair of power cables to the sockets between two batteries, positive to positive, and negative to negative. optionally used.



Warning:
GBL5.8K3 energy storage battery only could be used by parallel mode if two or more batteries installed.Before two or more batteries installed in parallel, please check the voltage of each battery and make sure the voltage different less than 1.0V.

5.Configuration

DIP switch should be set correctly for proper communication between inverter and batteryIf parallel connecting multiple batteries, please set the DIP switches as following:
For GSMARTE GBL5.8K3 Energy Storage battery, the limit of parallel number is 4. For each connecting mode, the DIP switch SW7 dial mode like following tables 5-1

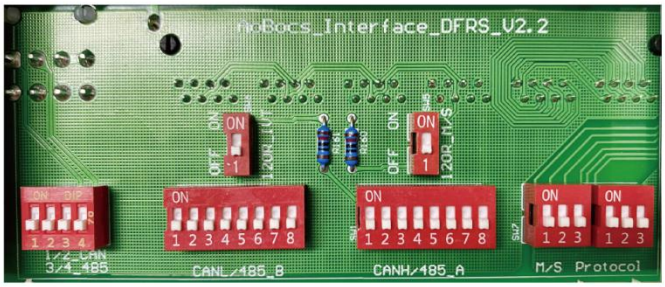
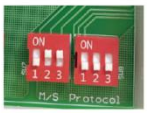
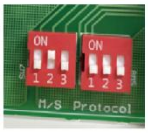


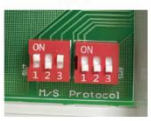
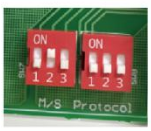
Table 5-1 The DIP switch SW7 selected for 1 battery connected with inverter

Parallel battery	Group	DIP Switch	120R_INV	120R M/S
1	—	000 	ON	ON

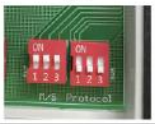
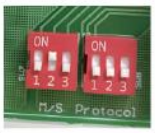
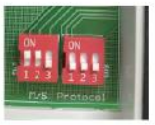
The DIP switch SW7 selected for 2 batteries connected with inverter

Parallel battery	Group	DIP Switch	120R_INV	120R M/S
2	Master	011 	ON	ON
	Slave	010 	OFF	ON

The DIP switch SW7 selected for 3 batteries connected with inverter

Parallel battery	Group	DIP Switch	120R_INV	120R M/S
3	Master	011 	ON	ON
	Slave1	010 	OFF	OFF
	Slave2	100 	OFF	ON

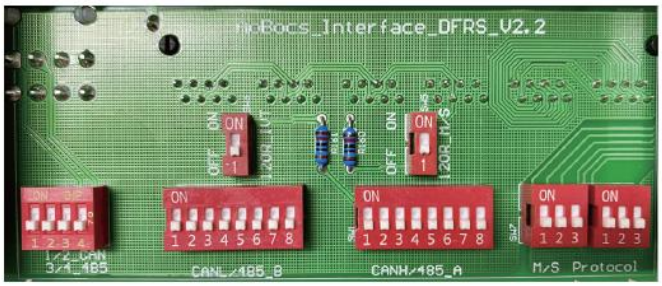
The DIP switch SW7 selected for 4 batteries connected with inverter

Parallel battery	Group	DIP Switch	120R_INV	120R M/S
4	Master	111 	ON	ON
	Slave1	010 	OFF	OFF
	Slave2	100 	OFF	OFF
	Slave3	110 	OFF	ON

Note:
If two or more batteries connected with parallel mode, batteries need to be restarted.

6.Settings for CAN /485 bus pins

Confirm that the CANL/485B DIP switch is set to SW2 which pin is used for CAN high signal by inverter (4-CANH/485A), and the CANL/485B DIP switch is set to SW1 which pin is used for CAN low signal by inverter (5-CANL/485B).
As SW3 the CAN/485 GND DIP switch, installer should confirm which pin is used for ground by inverter or not.



7.Commissioning battery

If there is only one battery installed, use the following steps to put it in operation:
1.Move the DC breaker to the ON position.
2.Press and hold the panel button on the side of the unit for about 4s, after the four indicator lights on, release the panel button.
3.Make sure that the Standby light is on. If it stays off, do not use the battery and contact GSMARTE or your distributor.
4.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 45V
a)If battery voltage is under 42V contact your distributor or GSMARTE after service hot line for help.
2.Move the DC breaker to the ON position. Press and HOLD the panel button for about 4s, after four seconds the indicator lights will turn on.
3.Release the panel button.
a)For all batteries, make sure that the Standby light is on.
b)Make sure the maximum voltage different between batteries less than 1.0V.
c)If not, the installer should balance the battery voltage and then parallel connect batteries together.
d)Set the DIP switches like part
4.Turn the inverter on, and wait for the start-up sequence to complete fully.

8.Power on strategy

1.Turn on the DC breaker of the battery,and press switch 4 s long time, the button lights will be on;
2.After hearing the closing sound of the keypad relay,release the button;
3.When there is no power on fault, BMS closes the auxiliary relay;
4.After waiting for 100ms, BMS will close the main relay when there is no power failure
5.After waiting for 200ms, close the auxiliary relay;
6.BMS power on is completed.

Note:
A breaker between GBL5.8K3 battery and inverter was recommended to install, and the breaker's min. current should be over 125A or following with local regulations.

7.3 Shutting down battery

Shut down the battery only when the battery is no charge or discharge current
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 .