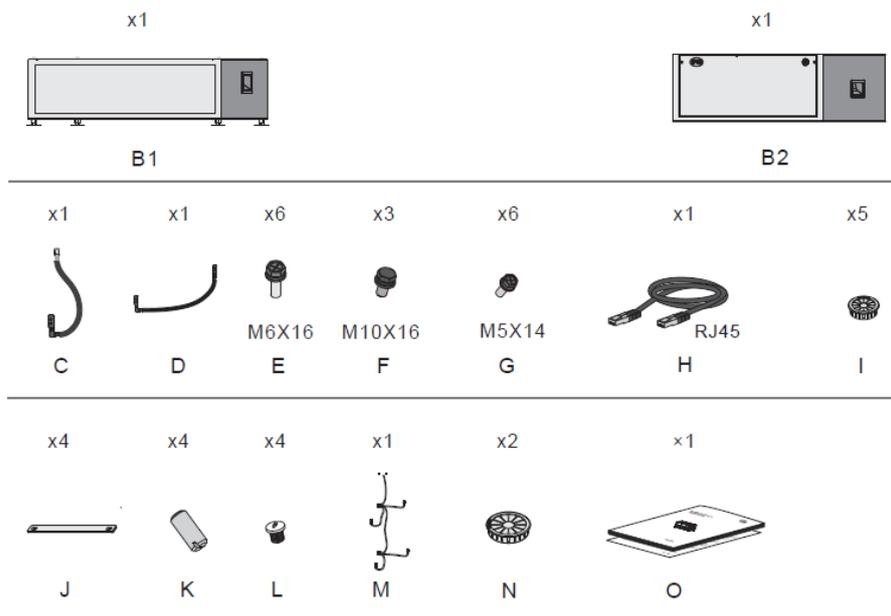


### 3. Scope of Delivery



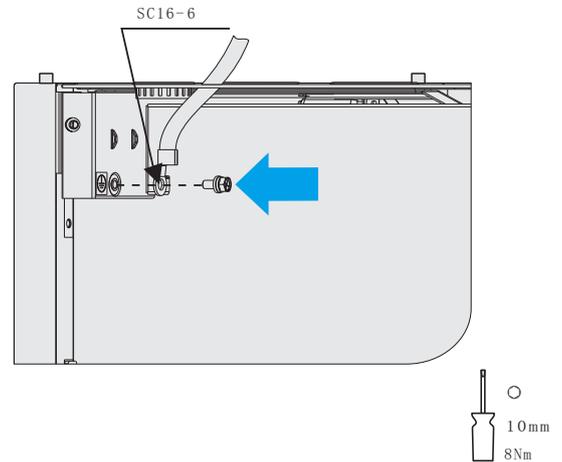
Position	Designation
B1	Battery module 1
B2	Battery module 2
C	Power cable L2
D	Power cable L3
E	Screw M6×16
F	Screw 10×16
G	Screw M5×14
H	Network cable
I	Grommets (small size)
J	Bonding strip for connecting and fixing B1 and B2
K	Alignment pins

Cable requirements:

- Conductor SC16-6
- Grounding cable cross-section: max. 16 mm<sup>2</sup>

Procedure:

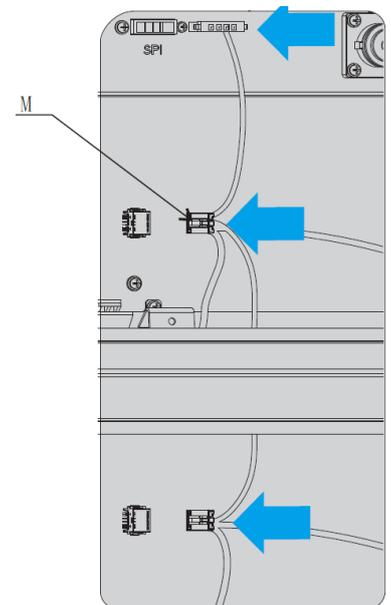
1. Pass the ground conductor through PE port.
2. Connect with grounding point, with a screw M6×12. (Torque, 8Nm).
3. The other side of the grounding cable should be connected to the common ground. It is recommended to join the grounding cable of the inverter.



## 6.2.2. Internal Communication Cable Connection

Procedure:

1. Pass communication cable through the first cable hole on right side of front bottom layer on B2.
2. Connect the communication cable to SPI port and two ports of two BIC boards.
3. Leave the red and black power wires of the communication cable aside.



### 6.2.3. Internal power cable connection

Procedure:

1. Take off the protective cover of B1- ( negative terminal of B1); These covers won't be used again.

2. Pass the cable L2 through the second cable hole on the right side of the front bottom layer on B2.

3. Connect power cable L2 to B- with a screw M10×16.(Torque, 11.5Nm)

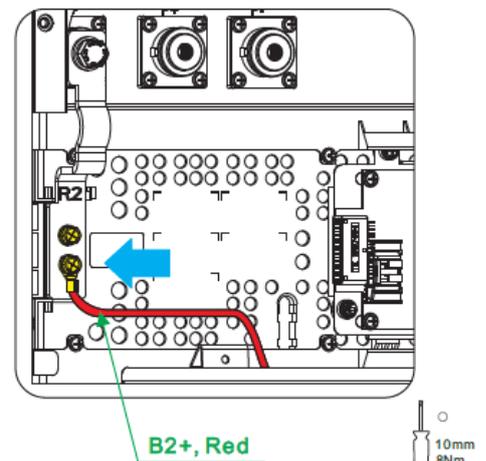
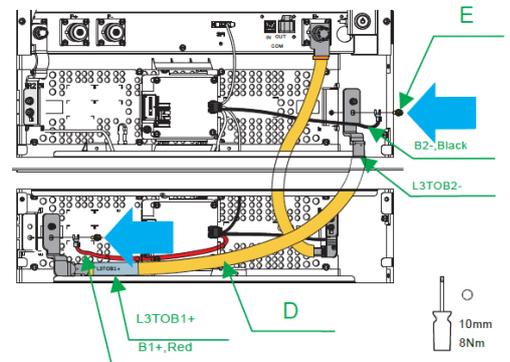
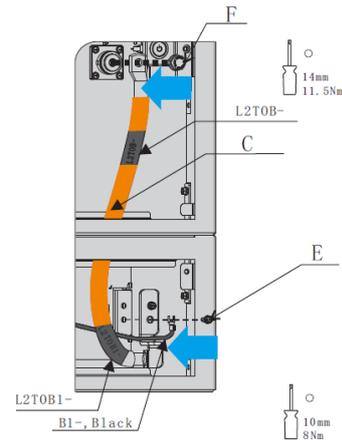
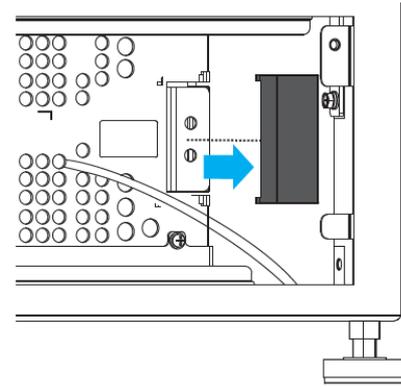
4. Connect L2 to B1- ( negative terminal of battery module B1) with two screws M6×16. (Torque, 8 Nm) Meanwhile, fix the black power wire connector reserved there between the screw and the battery module terminal.

5. Take off protective covers of B1+ ( positive terminal of battery module B1) and B2- (negative terminal of battery module B2).

6. Connect power cable L3 to B1+ and B2- with screws M6×16. ( Torque, 8Nm ) Meanwhile, fix two power wire of the communication cable between the screw and the battery module terminals.

The LED on the BIC board will glow blue for a second once positive and negative power wires of the communication cable are fixed with the battery module terminals.

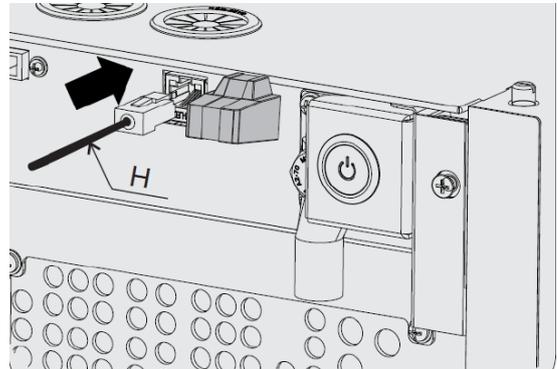
7. Take off one screw on B2+ (negative terminal of battery module B2) and fix the power wire of the communication cable between the screw and the battery module terminal. (Torque, 8 Nm)



## 6.2.4. Data Cable Connection to BMU

Procedure:

1. Check whether the terminal resistor is at the 'OUT' port. There should be a terminal resistor if only one battery system is operated.
2. Lead the data cable into the battery system through small size grommet above the 'IN' port.
3. Plug one side of the data cable in 'In' port, and the other side to the BMU 'BMS' port.



## 6.2.5. DC Cable Connection to Inverter

Additionally required mounting material (not included in the scope of delivery):

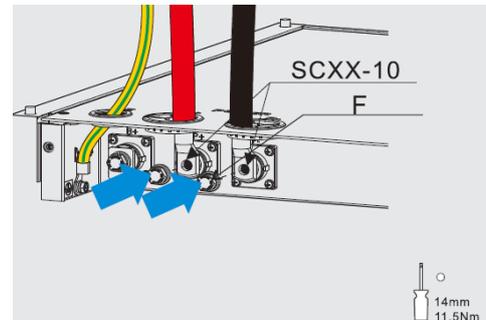
Two DC power cables

Cable requirements:

- Conductor cross-section: Up to 70 mm<sup>2</sup>, following the requirements of the inverter.
- Maximum cable length: 5 m.
- Conductor SCXX-10

Procedure:

1. Lead the DC cables into the battery system through two big size grommets.
2. Fix the connectors with screws M10X16 by a cylinder wrench 14 mm. (Torque, 11.5 Nm)



## 6.2.6. Close the Front Covers

After the electrical connection is finished, close the front cover. Connect the cable behind the Start/Stop button first, and then fix the front cover with screws.

## 6.3. Single Stack Connection

Additionally required installation material (not included in the scope of delivery):

- a. Grounding cable

Cable requirements:

- Conductor SC16-6.
- Grounding cable cross-section: max. 16 mm<sup>2</sup>.

b. Two DC power cables

Cable requirements:

- Conductor cross-section: Up to 70 mm<sup>2</sup>, following the requirements of the inverter.
- Maximum cable length: 5 m.
- Conductor SCXX-10.

Procedure:

1. Fix the ground cable at the grounding point of the upper battery system. The bottom battery system doesn't need to ground anymore.
2. Plug the internal communication cables on each battery system.
3. Fix the internal DC cables (L2, L3) on each battery systems. Fix the three power wires (one red wire and two black wires) of the communication cable meanwhile.
4. Fix the rest of power wires (red) to the B2+ in both battery systems.
5. Fix the data cable to BMU into the 'IN' port in the upper battery system.
6. Remove the terminal resistor on the 'OUT' port of the upper battery system.
7. Connect the 'OUT' port on the upper battery system and the 'IN' port of the bottom battery system with a data cable.
8. Lead two DC power cables into the bottom battery system through the big size grommets of the upper battery system and the bottom battery system. Fix the DC connectors with screws M10X16. ( Torque, 11.5 Nm )
9. Lead two cables into the upper battery system through the big size grommets of the upper battery system. Fix the DC connectors with screw M10X16. (Torque, 11.5 Nm)
10. A junction box is needed if more than one battery system is operated. Please follow the locally applicable connection requirements, standards, and directives and the requirements of the inverter manufacturer to install the junction box.

