

Battery Junction Box

Quick Installation Guide

SJC160-02



1. Contents may be periodically updated or revised due to product development. The information in this guide is subject to change without notice. In no case shall this guide substitute for the related notes on the device.
2. All installations must be carried out by qualified personnel trained in the installation and commissioning of electrical systems, as well as in handling hazards, and familiar with the knowledge in this manual and local regulations and directives.
3. Before installation, check that the package contents are intact and complete according to the packing list. Contact SUNGROW or the distributor in case of any damaged or missing components.
4. The cable used must be intact and well insulated. Operation personnel must wear proper personal protective equipment (PPE) all the time.
5. Any violation could result in personal death or injury or device damage, and will void the warranty.

Safety

The battery junction box has been designed and tested strictly according to international safety regulations. Read all safety instructions carefully prior to any work and observe them at all times when working on or with the battery junction box. Incorrect operation or work may cause:

- injury or death to the operator or a third party.
- damage to the battery junction box and other properties.

⚠ NOTICE

Danger to life from electric shock due to lethal voltage!

- damage to the battery junction box and other properties.

Battery Junction Box

The icons on the battery junction box body are as follows.



Disconnect the equipment from all the external power sources before maintenance!



Read the user manual before maintenance!



Danger to life due to high voltages!
Only qualified personnel can open and service the battery junction box.



Do not dispose of the battery junction box together with household waste.

⚠ DANGER

Danger to life from electric shocks due to live voltage

- Do not open the enclosure at any time. Unauthorized opening will void warranty and warranty claims and in most cases terminate the operating license.
- Live components are exposed if the enclosure lid is removed. Electric shock can occur if they are touched, resulting in death or serious injury.

Lethal electric shock due to possibly damaged combiner box

- Only operate the battery junction box when it is technically faultless and in a safe state.
- Operating a damaged battery junction box can lead to electric shock, resulting in death or serious injuries.

⚠ WARNING

All the warning labels and nameplate on the battery junction box body:

- must be clearly visible.
- must not be removed or covered.

⚠ CAUTION

Risk of burns due to hot components!

- Do not touch any hot parts (such as the heat sinks) during operation.

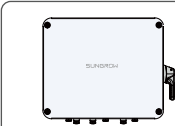
⚠ NOTICE

Risk of battery junction box damage due to electrostatic discharge (ESD)!

By touching the electronic components, you may damage the battery junction box. For battery junction box handling, be sure to:

- avoid any unnecessary touching.
- wear a grounding wristband before touching any connectors.

Scope of Delivery



Battery junction box



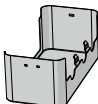
Mounting plate bracket



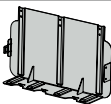
Power connector x 6



Fastener



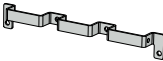
Back plate of the protective cover



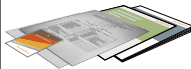
Front housing of the protective cover



DT terminals x 1

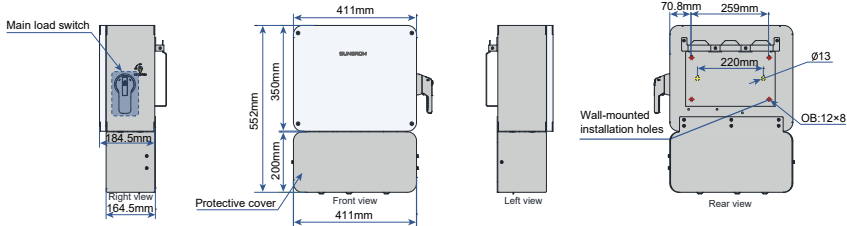


Mounting ear



Documents

Dimensions



Mounting Location



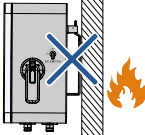
55 °C (+122°F)



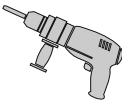
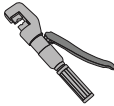
-20 °C (-4°F)



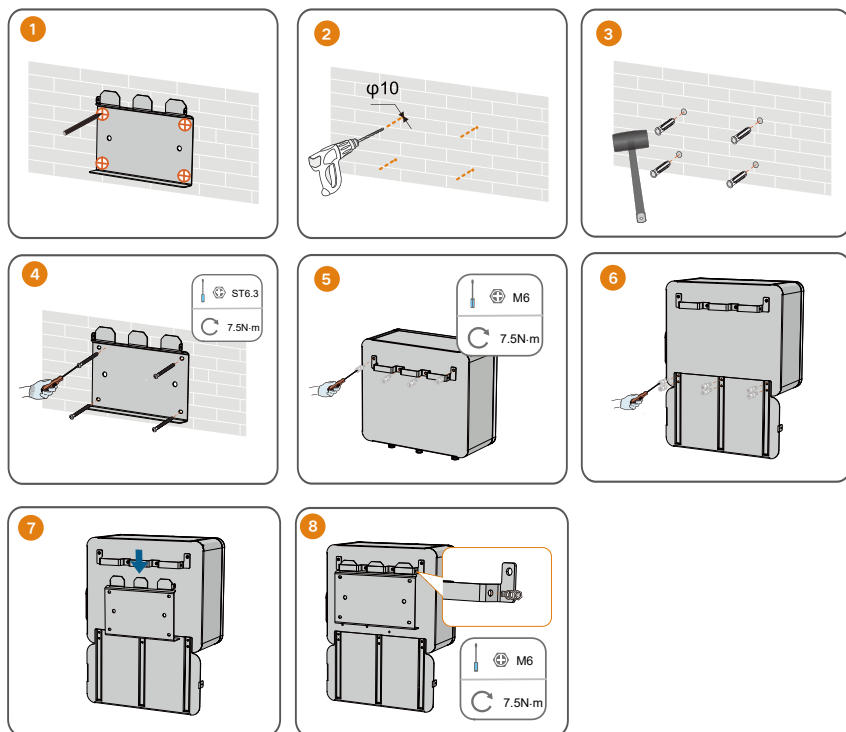
0-100 %



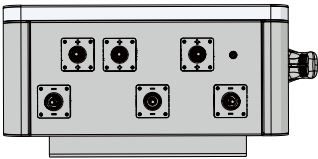
Installation Tools

Marker 	Hammer drill: $\phi 10$ 	Wire stripper 	Hydraulic plier 
Tube terminal crimping tool: 0.5-1.0 mm² 	Phillips screwdriver: M4, M5, M6, ST6.3 	Heat gun 	Wrench: 16mm, 17mm, 35mm 
Crimping pliers 4-6 mm² 	M4 Allen wrench 	Rubber mallet 	Measuring tape 

Mounting



Battery Junction Box Terminal

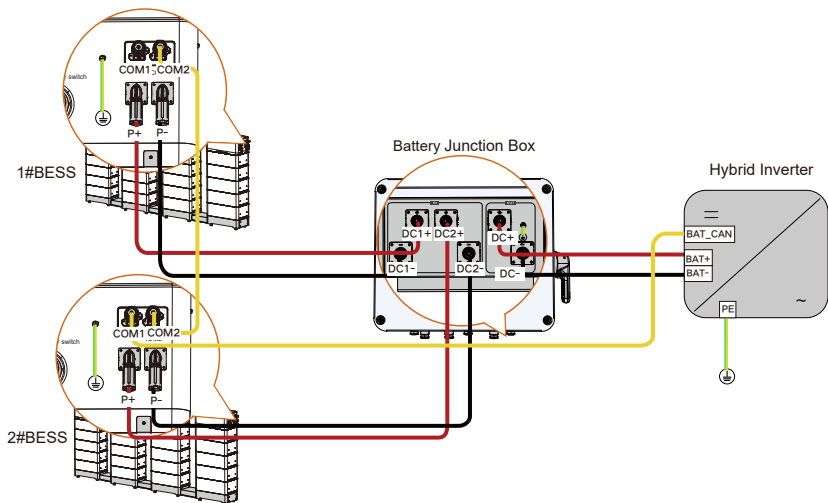


The label of battery junction box terminal

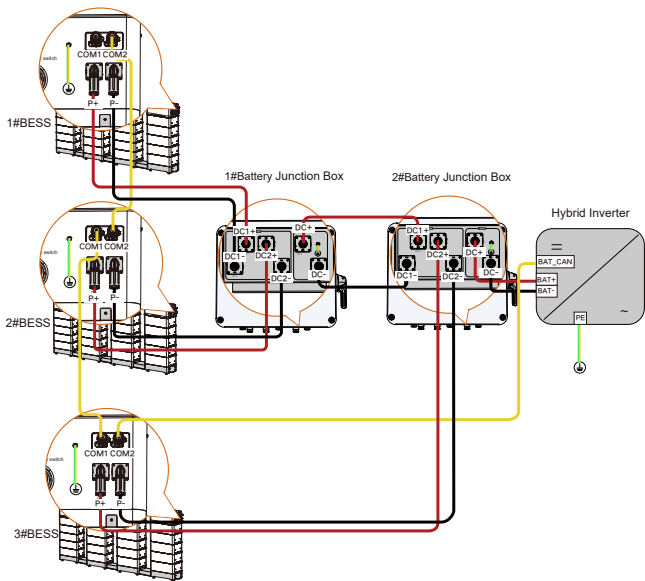
Label	Description
DC1+, DC1-, DC2+, DC2-,	DC1+,DC2+ terminals, connected to the BESS P+ or the battery junction box DC+ terminal. DC1-,DC2- terminals, connected to the BESS P- or the battery junction box DC- terminal.
DC+, DC-,	DC+ terminals, connected to the hybird inventer P+ or the battery junction box DC1+,DC2+ terminal. DC- terminals, connected to the hybird inventer P- or the battery junction box DC1-,DC2- terminal.
	Connected to the ground.

Wiring Between Battery Junction Box and Batteries

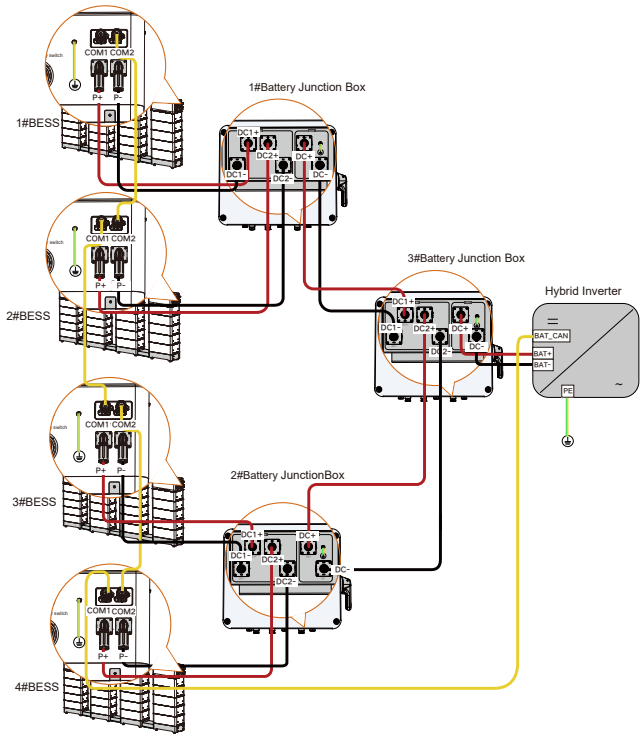
4H Battery System Cascade Diagram



6H Battery System Cascade Diagram



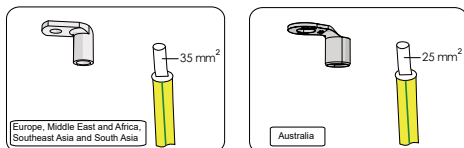
8H Battery System Cascade Diagram



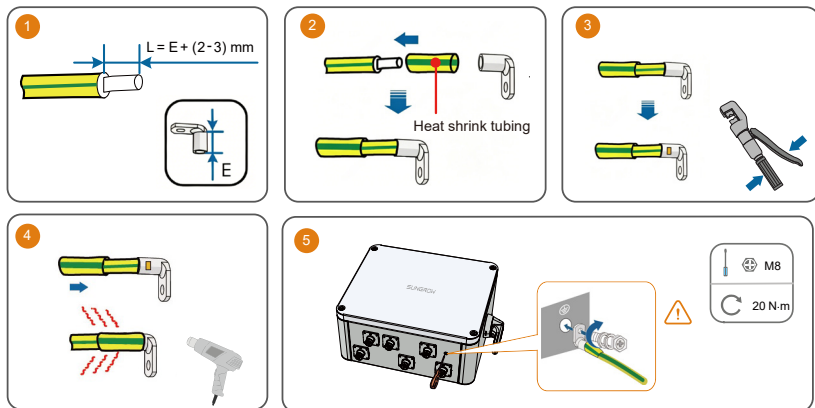
PE

Cable Requirements

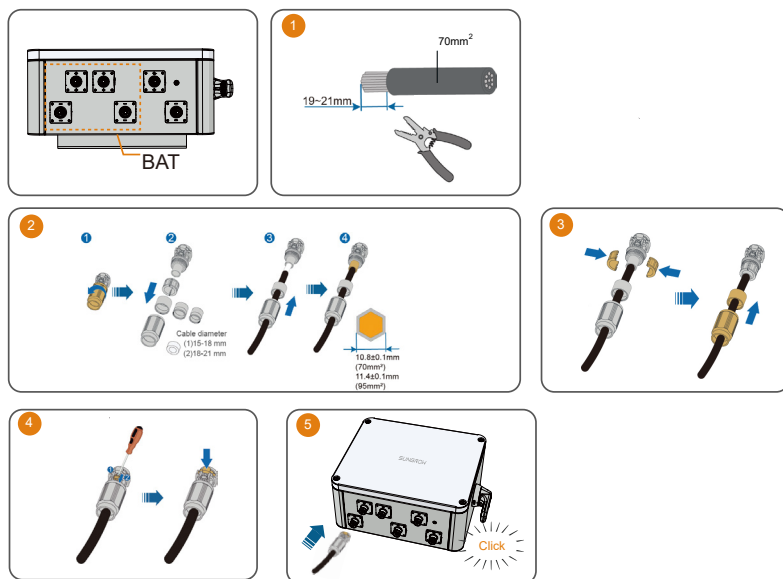
- The grounding terminals and cable specifications shall comply with applicable local electrical regulations. The following figure is for reference only:



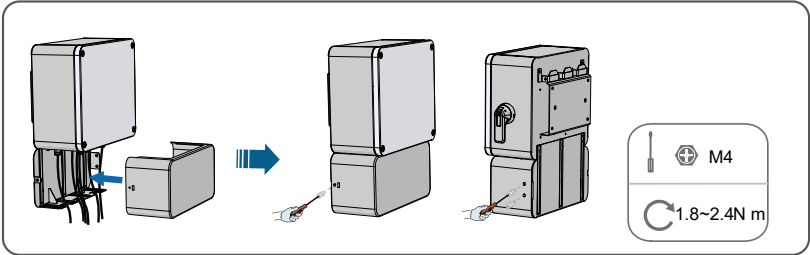
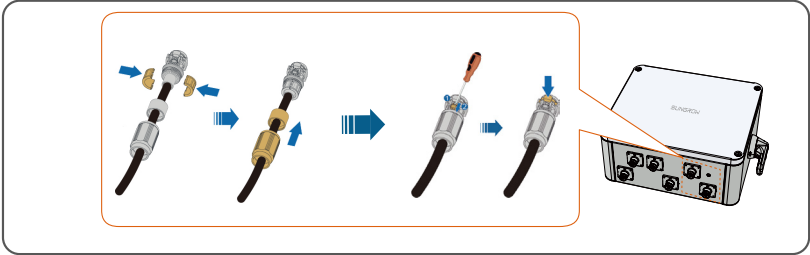
Ground Connection



BESS



Hybrid Inverter Connection





More information in the QR code or
at <http://support.sungrowpower.com>

SUNGROW

Sungrow Power Supply Co., Ltd.
www.sungrowpower.com

