Consistent
Energy Storage Concept
CESC

User Manual

MODEL: Venus HV5-01
Lithium-ion Battery

CESC New Energy Technology Co., Ltd.
www.cescpower.com
30408004408
Made in China

Contents

Please read this entire document carefully before installing or using the battery system. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, can damage battery, potentially rendering it inoperable. Warranty claims are invalid,if damage is caused by human error in a manner inconsistent with the installation manual's instructions.

The information included in this manual is verified by CESC to be accurate at the time of publication. However, due to the continuous improvement of products, this manual is subject to change without prior notice.Unless otherwise specified, this manual is for operational guidance only, and all statements contained herein do not constitute any form of warranty.

The illustrations in this manual are intended to help explain operating system configurations and installation instructions. Any confusion, please contact CESC immediately for advice and clarification. Thank you for your choice and trust.

01 Safety

1.1 Safety instructions

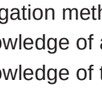
For safety reasons, please read this entire manual before installing, servicing or using. Failure to comply with the instructions can result in electrical shock, serious injury, death, or can damage the battery, potentially rendering it inoperable.

⚠CAUTION

Proper disposal of batteries is required. Please refer to your local regulations for disposal requirements.

1.2 Symbols in the document

This manual uses the following symbols to highlight essential information:

	WARNING
	CAUTION
	RISK OF ELECTRIC SHOCK
	REFER TO OPERATING INSTRUCTIONS
	DO NOT THROW AWAY
	RECYCLABLE
	HEAVY WEIGHT MAY CAUSE SERIOUS INJURIES
	GEOUND(EARTH) CONNECTION
	RISK OF ELECTRIC SHOCK ENERGY STORAGE DISCHARGE TIME

1.3 Qualified personnel

Battery Management System (BMS) installation and maintenance must be carried out only by certified installers who possess all of the following qualifications and experience:

- Knowledge of the installation of electrical devices.
- Knowledge of the functional principles and operation of on-grid and off-grid systems.
- Knowledge of the dangers and risks associated with installing and using electrical devices and acceptable mitigation methods.
- Knowledge of and adherence to this manual and all safety precautions and best practices.
- Knowledge of the protective measures to minimize hazards to themselves and others.

1.4 Equipment requirements

If the battery module seems to be damaged, pack it in its original container, and then return it to your distributor.

- Do not damage the battery module.
- Do not use water to clean electrical components inside or outside of the battery module.
- Do not stand on, lean on, or sit on the top of the battery module.
- Promptly repaint any scratches that occur during the transportation or installation of the battery module.
- Exposing a scratched battery module to the outdoors for extended periods is not advisable.

1.5 Electrical requirements

- Ensure that the power setting matche the rated input of this power supply.
- Make sure to connect the protective grounding to prevent an electric shock before activating the power.
- Never sever the internal or external protective grounding wire, or disconnect the wiring of protective grounding terminal. Such actions can create a shock hazard, potentially causing injury.
- Do not connect the battery module directly to photo-voltaic (PV) solar wiring.
- Do not short-circuit the wiring terminals of the battery module. Short circuits can cause a fire hazard.

⚠ DANGER

Before connecting cables, ensure that the equipment is intact. Otherwise, electric shocks or fire hazards may occur.

1.6 Installation requirements

- Understand the components and functioning of a grid-tied PV power system and relevant local standards.
- Do not install, use, or operate outdoor equipment and cables in harsh weather conditions such as lightning, rain, snow, and level 6 or stronger wind.
- Wear proper personal protective equipment (PPE) during operation. If there is a probability of personal injury or equipment damage, immediately stop the operations, report the case to the supervisor, and take feasible protective measures.
- Tighten screws using tools when installing the battery module.
- To prevent fire due to high temperature, ensure that the ventilation vents of the heat dissipation system are not blocked when the battery is running.
- After installing the battery module, remove idle packing materials such as cartons, foam, plastics, and cable ties from the equipment area.

⚠ DANGER

Do not work with live electricity during installation and equipment operation.

1.7 Environment requirements

Operating Temperature	0°C to 50°C (32°F to 122°F)
Humidity	5%~95%
Storage < =6 months	Stage of Energy (SOE): 50% initial
Maximum Altitude	Max. 3000m (9842 ft)

- Install the battery module in a dry and well-ventilated environment to ensure good heat dissipation.
- Install the battery module in a sheltered place or install an awning over it.
- Install the battery module at a height that prevents damage from flooding.

• Avoid exposing the battery module to direct sunlight or water.
• Do not install the battery module near heating equipment.
• In principle, this product shall not be affected by heat sources. If the installation site fails to meet this requirement, it is recommended to select an installation position outside the distance where no obvious heat from the heat source can be felt.
• Do not place any flammable or explosive materials around the battery module.
• Do not subject the battery module to high pressures.
• Do not place any objects on top of the battery module.
• Do not expose the battery module to ambient temperatures above 60°C (140°F) or below -30°C (-22°F).
• Children are not allowed to enter the installation position.
• Operating or storing the battery module in temperatures outside its specified range might cause damage to the battery module.
• Ensure that there is minimal dust and dirt in the area.
• Ensure that no water sources are above or near the battery module, including downspouts, sprinklers, or faucets.
• The battery module site must be equipped with qualified fire extinguishing facilities, such as fire extinguishing sands and powder fire extinguishers.

⚠ CAUTION

The recommended operating temperature ranges from 15°C to 30°C.

1.8 Transportation requirements

• The outer packaging shall be marked with safety transportation labels, including "Fragile", "Moisture-proof", "This Side Up (↑)", "Stacking Layers", cargo weight indication, and the UN number label for batteries "UN3480" (a label specifically for lithium-ion battery transportation).

• During transportation, the ambient temperature shall be controlled within the range of -20℃~50℃. Avoid exposure to direct sunlight, rain, or proximity to heat sources (such as heaters, engines, etc.). Transport vehicles shall be equipped with temperature control, sunshade, or rainproof facilities to prevent damage to battery cells due to low temperatures. Transport vehicles shall maintain stable driving, avoiding sudden acceleration, sudden braking, and sharp turns. During transportation, the battery packaging and the inner wall of the carriage shall be fixed with anti-slip pads, and the gaps shall be filled with cushioning materials (such as bubble wrap) to prevent the packaging from sliding. Meanwhile, stacking beyond the load-bearing limit of the battery packaging is strictly prohibited.

• Forklifts or electric hoists must be used for loading and unloading battery modules; manual handling is strictly prohibited. The contact parts between loading/unloading tools and battery packaging shall be wrapped with soft materials (such as rubber pads) to avoid scratching the packaging or squeezing the battery casing. During loading and unloading, the battery modules must be kept in a "vertically upward" state. Only one module shall be loaded or unloaded at a time, and lifting multiple modules simultaneously is strictly prohibited. In addition, operators must stand in a safe area (away from the area below the lifting path) and wear anti-slip gloves and safety shoes.

• After the batteries arrive at the destination, check whether the packaging is intact first. If the packaging is found to be damaged, wet, or deformed, stop unpacking immediately and contact the dealer or technical support to evaluate the battery status. Unauthorized disassembly of batteries with damaged packaging is strictly prohibited. After unpacking, inspect the appearance of the battery modules to ensure there are no scratches, dents, or signs of leakage on the casing, and that the BCU and battery interfaces are not loose or damaged. If any abnormalities are found, take photos for retention and contact the manufacturer for handling; do not proceed with installation or use.

• During storage and transportation, protective caps must be installed on the battery's input and output ports. During maintenance and removal, if the battery is removed, protective caps must be installed on its input and output ports immediately. Users shall retain the protective caps for future use.

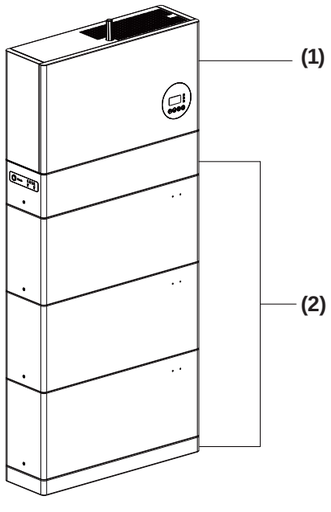
1.9 Requirements for Lifting Batteries During Installation

The battery cases of our products are designed with carrying handles. Lifting a battery module (weight ≤50KG per unit) requires the cooperation of at least 2 trained operators; lifting by a single person is strictly prohibited. Operators must be at least 18 years old, free from waist diseases or physical weakness, and familiarize themselves with the center of gravity of the battery module in advance.

Before operation, complete protective equipment must be worn: anti-slip and wear-resistant gloves (to prevent hand slipping or scratches), anti-smashing safety shoes (with impact-resistant uppers and non-slip soles), and waist support belts (to reduce waist stress). Wearing loose clothing or accessories (such as rings, bracelets) that may cause entanglement risks is strictly prohibited. For battery modules with a weight ≥50KG, it is recommended to use electric lifting platforms or manual hydraulic forklifts for assistance first.

02 Product introduction

Overview



Object	Name	Explain
(1)	Venus 3600 HVS Venus 5000HVS Venus 5000 HVBS Venus 6000 HVS	Venus HVS single-phase series Inverter
	Venus 4000 HVT Venus 5000 HVT Venus 6000 HVT Venus 8000 HVT Venus 10000 HVT	Venus HVT three-phase series Inverter
(2)	Venus HV5-01-1 Venus HV5-01-2 Venus HV5-01-3	Battery System

NOTE

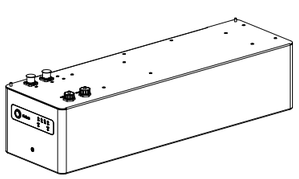
The Venus HV5-01 battery can **only be paired with Venus HVS single-phase series inverters and HVT three-phase series inverters.** Use with inverters of other brands or models is strictly prohibited. Non-compliance may cause system isolation function failure, equipment damage, or even safety hazards.

(Information for the inverter is not included in this manual. Please check the inverter user manual.)

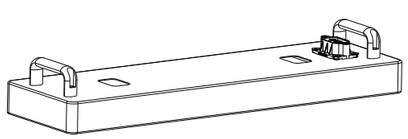
2.1 Dimension and weight

- Battery control unit (BCU) is an electronic system to control battery modules.
- Battery module is the residential battery which can be charged and discharged into a load.
- The base is an SPCC bottom support to make the battery module and BCU stable on the floor.
- The battery system includes the BCU, battery modules and the base.

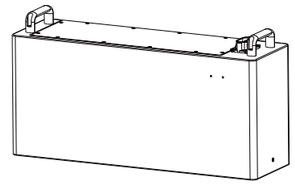
BCU **W*D*H:** 740*220*170mm
Weight: 11KG



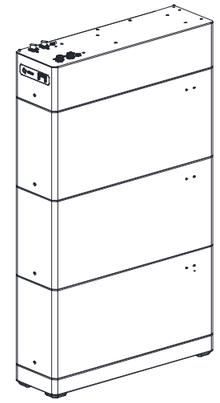
Base **W*D*H:** 740*220*60mm
Weight: 5KG



Battery Module **W*D*H:** 740*220*335mm
Weight: 50KG

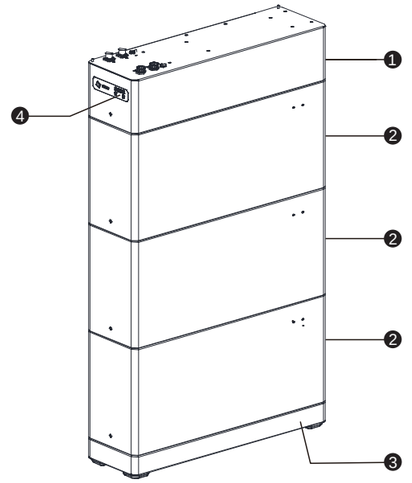


Battery System **W*D*H:** 740*220*1235mm
Weight: 166KG



2.2 Appearance

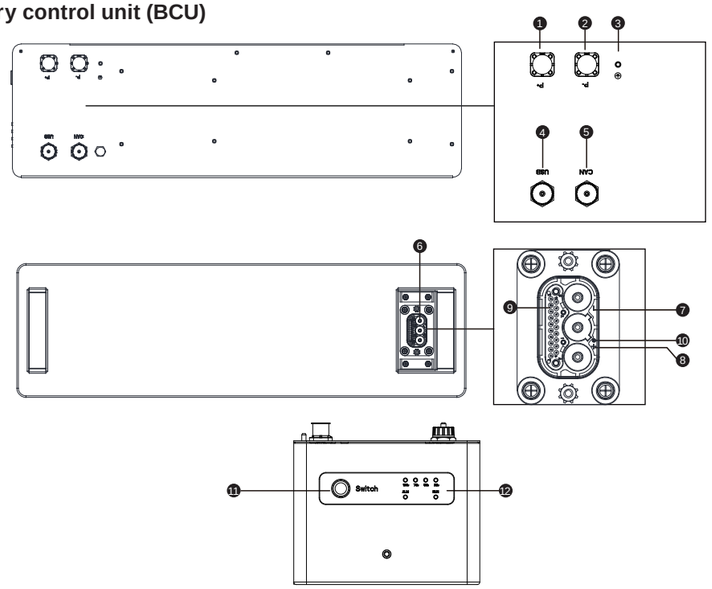
2.2.1 Battery system appearance



NOTE

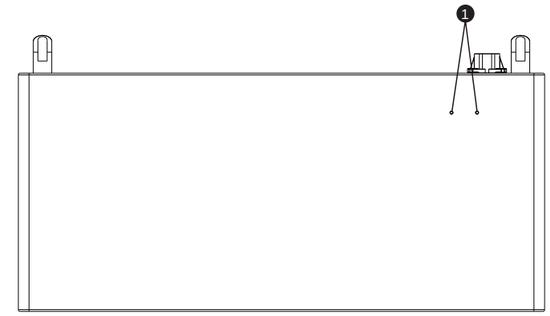
The battery system supports power and capacity expansion. 1 BCU supports a maximum of 5 battery expansion modules in series.
This manual will show you the installation and cable connection of a battery system consisting of 3 battery modules.

2.2.2 Battery control unit (BCU)

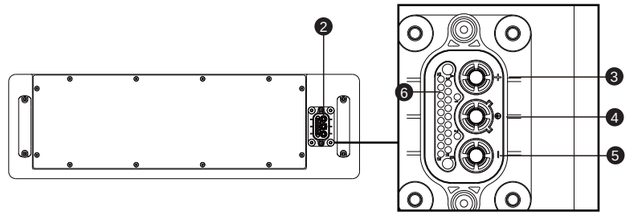


No.	Port Signs	Function Description
1	P-	Power + (BCU to PCS)
2	P+	Power - (BCU to PCS)
3	⏚	Grounding Point (BCU to PCS)
4	USB	Local system updates
5	CAN	CAN COM cable port (BCU to PCS)
6	Composite connector-Male	Power +/- and communication port (BCU to BAT)
7	B-	Power - (BCU to BAT)
8	B+	Power + (BCU to BAT)
9	COM-OUT	Com cable port (BCU to BAT)
10	⏚	Grounding point (BCU to BAT)
11	SW	Switch on/off the battery system
12	LED	Indicates the battery system status, running green light, warning red light, SOC blue light

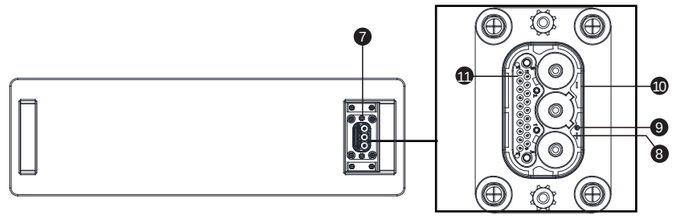
2.2.3 Battery module



Battery Module Top



Battery Module Bottom



No.	Port Signs	Function Description
1	LED	Indicates the battery system status, running green light, warning red light
2	Composite connector-Female	Power +/- and communication port (BCU to BAT or, BAT to BAT)
3	B+	Power + (BCU to BAT, BAT to BAT)
4	⏚	Grounding point (BCU to BAT, BAT to BAT)
5	B-	Power - (BCU to BAT, BAT to BAT)
6	COM-IN	COM cable port (BCU to BAT, BAT to BAT)
7	Composite connector-Male	Power +/- and communication port (BAT to BAT)
8	B+	Power + (BAT to BAT)
9	⏚	Grounding point (BAT to BAT)
10	B-	Power - (BAT to BAT)
11	COM-OUT	COM cable port (BAT to BAT)

2.3 Battery system specifications

Venus HV5-01 SYS Configuration List

Model	Venus HV5-01-1	Venus HV5-01-2	Venus HV5-01-3
Total Energy [kWh]	5.3	10.6	15.9
Battery Module	Venus HV5-01 102.4V 5.3kWh		
Number of Battery Modules	1	2	3
Cell Type	LFP (LiFePO4)		
Rated Voltage [V]	102.4	204.8	307.2
Operating Voltage [V]	80-116.8	160-233.6	240-350.4
Max Charge Current [A]	52	52	52
Max Discharge Current [A]	52	52	52
Dimension[W/D/H. mm]	740*220*565	740*220*900	740*220*1235
Approximate Weight [KG]	66	116	166

2.4 Performance

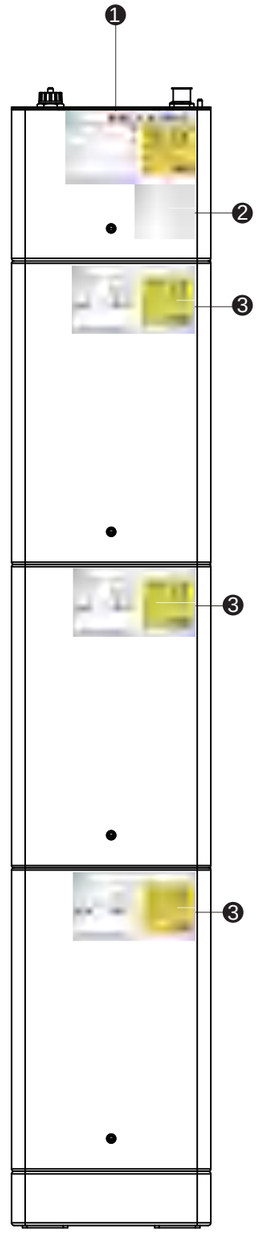
Recommended Max. Depth of Discharge	90%
LED Indicator	4 SOC LED (SOC: 25%~SOC 100% blue), 2 Condition LED (working green, alarming red)
IP Rating of Enclosure	IP65 (Outdoor)
Operating Temperature	Charge: 0°C~50°C/Discharge: 0°C~50°C
Storage Temperature	0°C~35°C
Humidity	5%~95%
Altitude	≤2000m
Cycle Life	10 years, 6000 cycles (90% DOD, 25°C)
Installation	Stack, Floor-Mounted
Communication Port	CAN
Certification	UN38.3, IEC62619, IEC63056, IEC62040, IEC62477

[1] DC usable energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

2.5 Labels

2.5.1 Labels overview



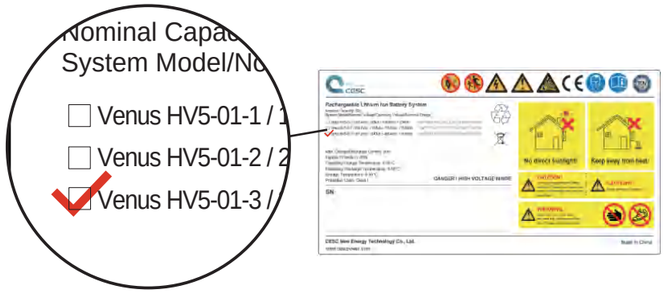
❶ Battery System Label

❷ Battery Control Unit (BCU) Label

❸ Battery Module Label

03 Installation instructions

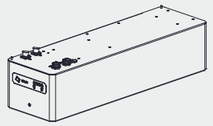
Before installation, please check the corresponding model on the Battery System Label, confirm the relevant parameters, and refer to the figure below. For the specific parameters of the battery, please see Chapter 2.3.



3.1 Installation contents

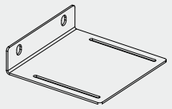
The following items are required for BCU installation and ALL are included in the BCU carton.

Battery Control Unit



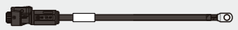
Battery Control Unit x 1

Base x 1

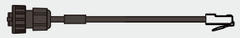


Locking Bracket x 1
(for wooden wall)

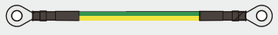
Positive power Cable x1
(BCU-PCS)
*length: 420mm(For Single-phase Inverter)
180mm(For Three-phase Inverter)



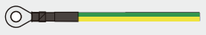
Negative Power Cable x1
(BCU-PCS)
*length: 360mm(For Single-phase Inverter)
150mm(For Three-phase Inverter)



COM Cable x1
(BCU-PCS)



Ground Cable x1
(BCU-PCS)



Ground Cable x1
(PCS-Electric Box)

M8
Expansion Bolt x 4

M5 Screw x 5

Ball Plunger x 2

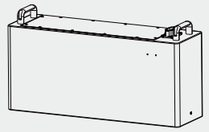
Hex Wrench x 1

RJ45-Plug x1

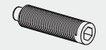
User Manual x 1

The following items are required for Battery Module Installation.

Battery Module



Battery Module x 1



Ball Plunger x 2

3.2 Tools & instruments prepared (not supplied)

The following tools shall be prepared before installation.

No.	Tool	Tool Name	Remarks
1		Driller	Drill holes on the wall
2		Wrench Set	Turning screws
3		Screwdriver	Turning screws
4		Marker	Mark the drilling hole positions on the wall
5		Safety Gloves	Protect the hand

WARNING

The battery modules are heavy. Wear appropriate personal protective equipment (such as gloves and safety shoes) when handling the unit. Only a sufficient number of trained movers should lift the battery modules. The use of lift equipment is recommended.

3.3 Installation location and clearance

Installation location Requirements:

- There must be no highly flammable or explosive materials nearby.
- The ambient temperature should be within the range of -20°C to 50°C(-4°F to 122°F).
- The battery module must be installed on flat leveled ground that can support its weight.
- Product shall be installed indoors (e.g. in a basement or a garage) or outdoors under an eave out of direct sunlight.

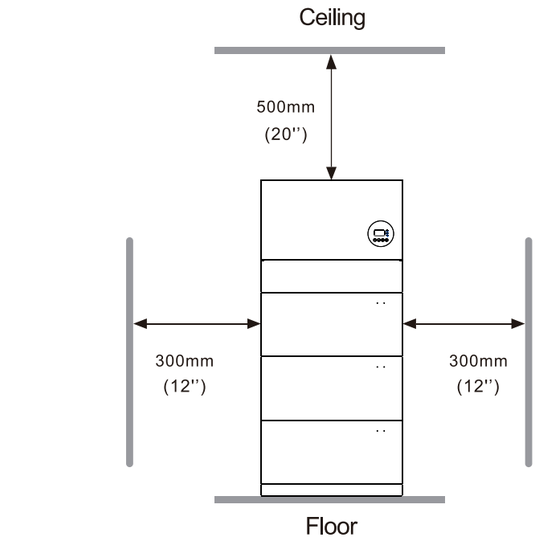
Recommendations:

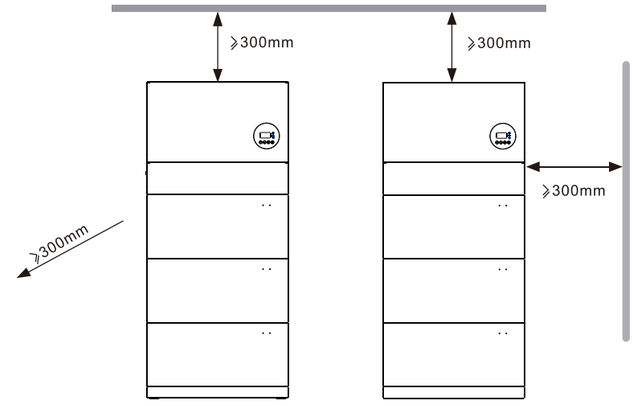
- The building should be designed to withstand earthquakes.
- The area should be waterproof and properly ventilated (IP65).
- The product should be installed out of reach of children and animals.

CAUTION

If the ambient temperature is outside the operating range, the battery module will stop operating to protect itself. The optimal temperature range for the battery module to operate is from 15°C to 30 °C (59°F to 86°F). Frequent exposure to harsh temperatures may deteriorate the performance and lifespan of the battery module.

Clearance:





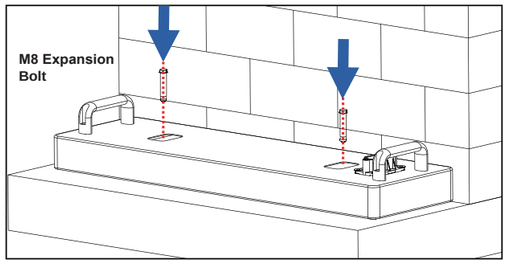
Recommended clearance for the left, right and top of the product is shown in the figure for the proper ventilation and installer convenience.

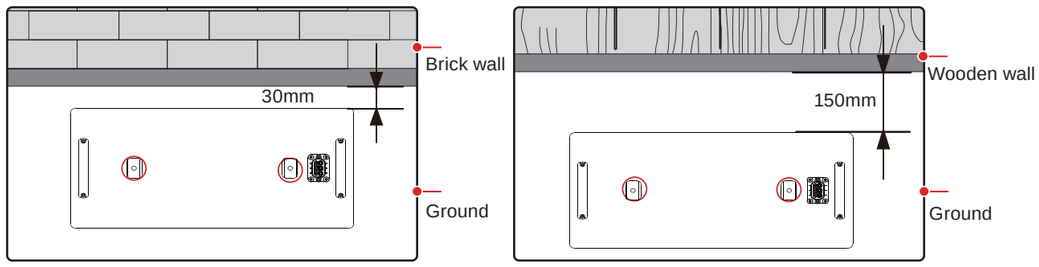
3.4 Equipment installation

Install the battery system through the following steps:

Step 1:

- Lay the base flat on the floor horizontally.
- Align the installation base with the wall and keep 30mm away from the brick wall, or 150mm away from the wooden wall.
- Mark the drilling hole positions using a marker on the floor.
- Then drill the hole and install the base with M8 expansion bolts.
- Hole diameter 12mm and depth 60mm. Fix the M8 Expansion bolts, tightening torque: 20N.m.

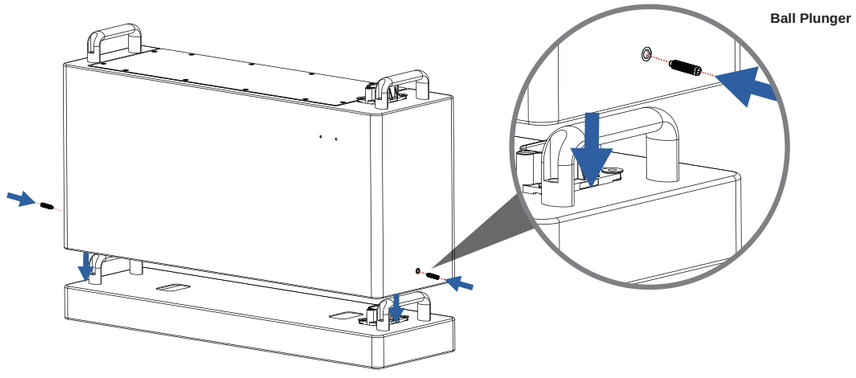




Step 2:

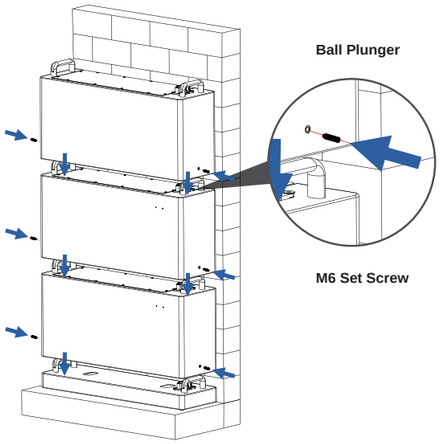
Place the first battery module on the base and tighten the 2pcs ball plunger.

> **CAUTION**
> Place the battery module or BCU at both ends on the base.
> Otherwise,the composite connector pins will be damaged and the battery system cannot run.



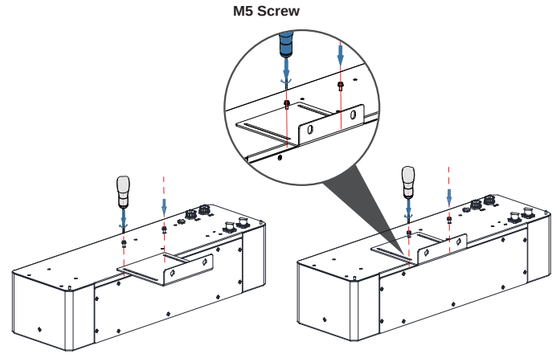
Step 3:

Install the second and third battery expansion module.



Step 4:

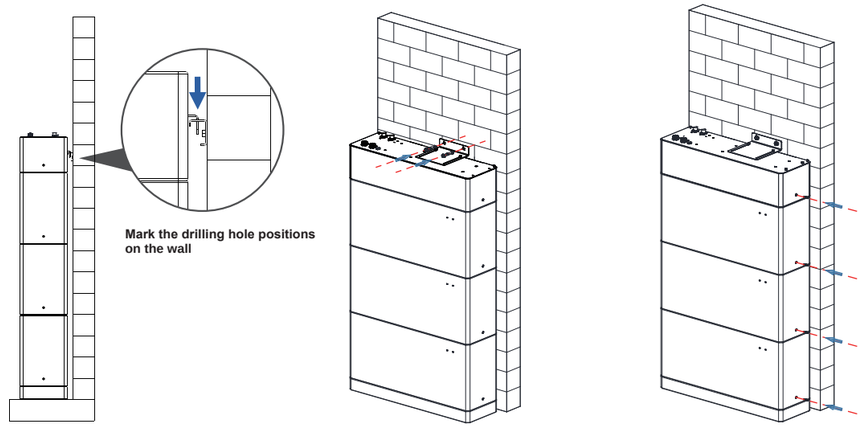
Attach the Wall Mount Bracket to the BCU using M5 screws.



> **CAUTION**
> Place the battery module or BCU at both ends.
> Otherwise,the composite connector pins will be damaged, and the battery system cannot run.

Step 5:

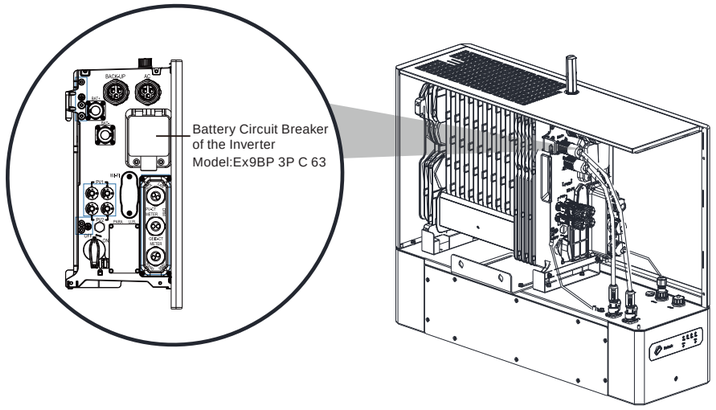
- Position the Wall Mount Bracket on the BCU into the Locking Bracket, and align them with the battery module to determine the correct positions for the Locking Bracket on the wall.
- Mark the drilling hole positions with a marker on the wall.
- After the device has been protected from dust, drill the hole and install the bracket with M8 expansion bolts.
- Hole diameter 12mm and depth 60mm. Fix the M8 Expansion bolts, tightening torque: 20N.m.



04 Cable connection

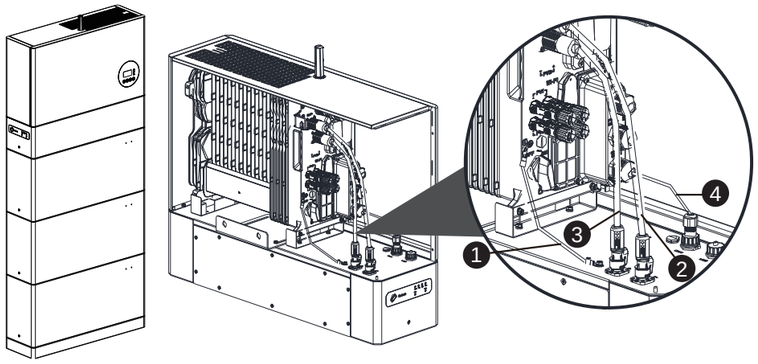
4.1 Cable connection between HVS Series Inverter and Battery

Inverter model: Venus 3600HVS, Venus 5000HVS, Venus 5000HVBS, Venus 6000 HVS



4.1.1 Electrical connection of battery and inverter

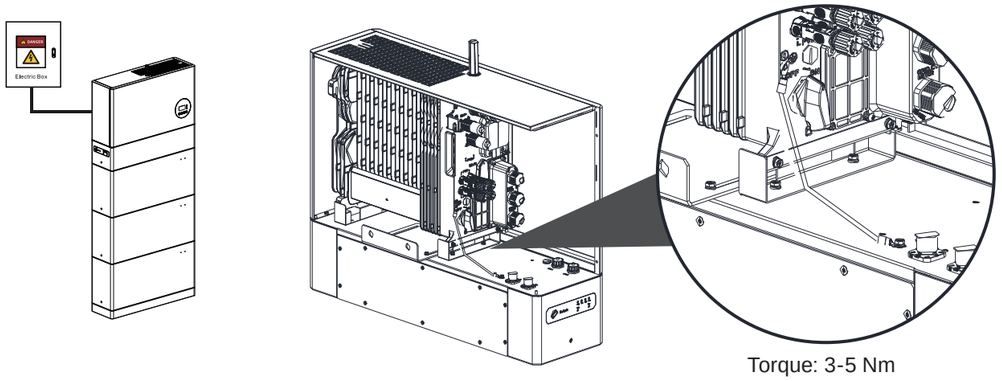
Overview for internal electrical connection between inverter and BCU.



(1) Grounding (8AWG)
(2) DC Power Cable
(+, 6AWG or 16mm²)
(3) DC Power Cable
(-, 6AWG or 16mm²)
(4) Signal Cable (24AWG)

4.1.2 Installing grounding cables

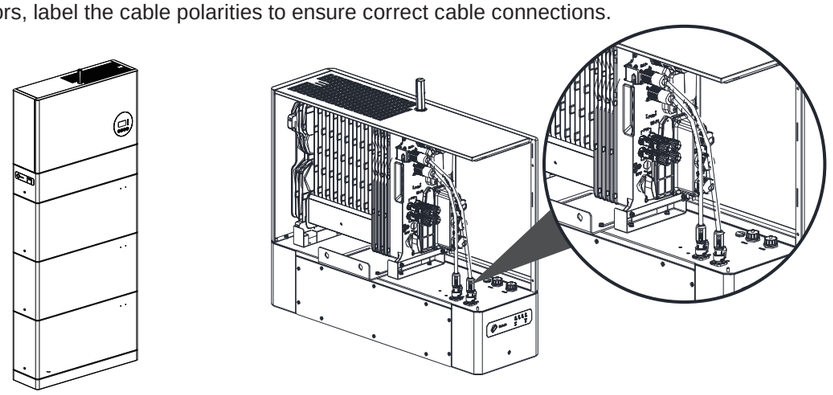
Connect the ground point (⏚) of the BCU to the Inverter. Otherwise, electric shocks may occur.



Torque: 3-5 Nm

4.1.3 Installing DC power cables

Insert the positive and negative battery connectors into the corresponding DC input terminals (P+ and P-). The positive power cable (BAT+) is red and negative power cable (BAT-) is black. Before assembling DC connectors, label the cable polarities to ensure correct cable connections.

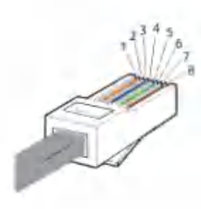


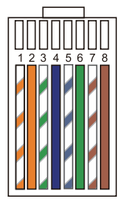
4.1.4 Installing signal cables

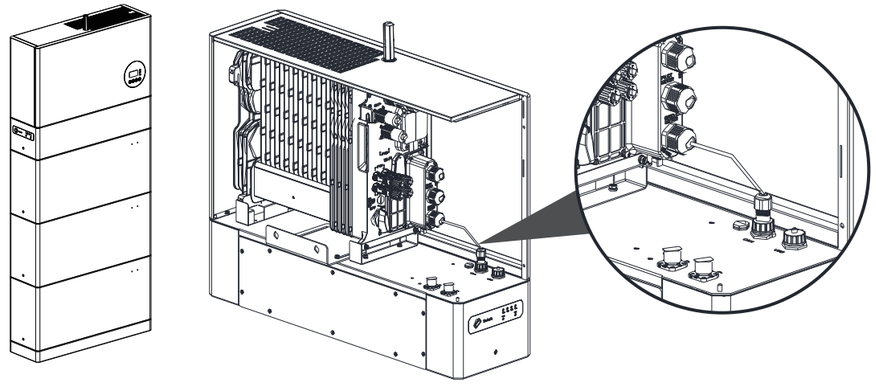
Choose signal cable type (CAN cable) based on the Inverter when laying out a signal cable. Separate the signal cable from power cables when connecting to the BCU and the Inverter. Keep it away from strong interference sources to prevent communication interruption.

The wiring order of the signal cable is as follows:

(1) White with an orange stripe
(2) Orange
(3) White with a green stripe
(4) Blue
(5) White with a blue stripe
(6) Green
(7) White with a brown stripe
(8) Brown



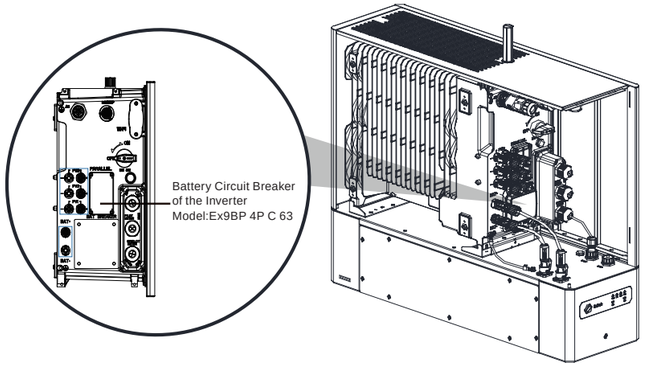




Sequence	1	2	3	4	5	6	7	8
CAN	NC	NC	NC	CAN_ H	CAN_ L	NC	NC	NC

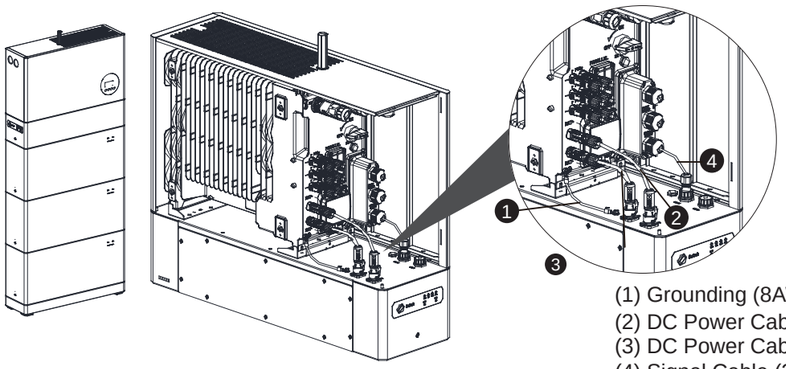
4.2 Cable connection between HVT Series Inverter and Battery

Inverter model: Venus 4000HVT, Venus 5000HVT, Venus 6000HVT, Venus 8000HVT, 10000HVT



4.2.1 Electrical connection of battery and inverter

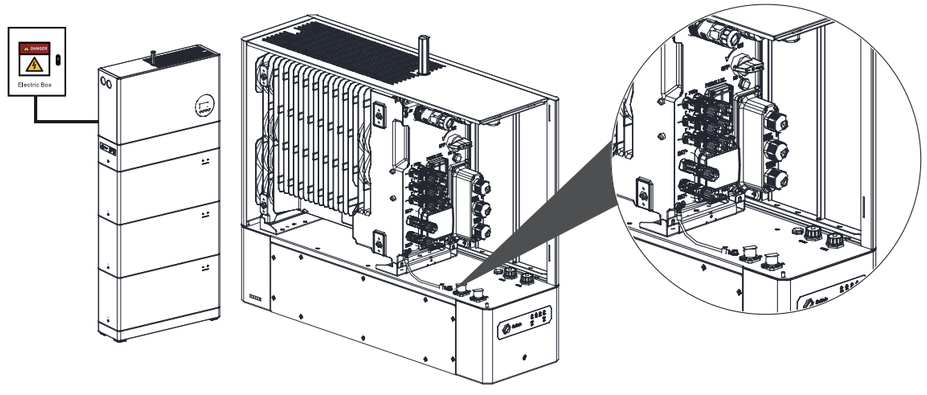
Overview for internal electrical connection between inverter and BCU.



(1) Grounding (8AWG)
(2) DC Power Cable (+, PV 10mm²)
(3) DC Power Cable (-, PV 10mm²)
(4) Signal Cable (24AWG)

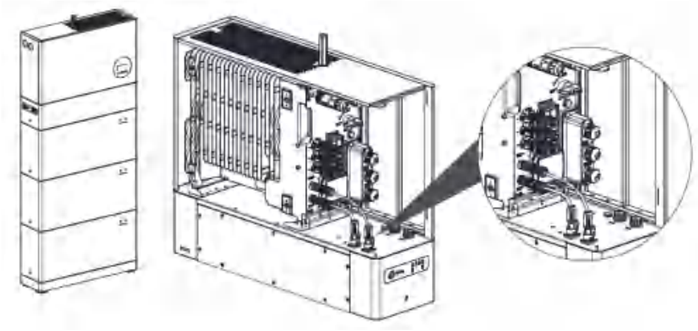
4.2.2 Installing grounding cables

Connect the ground point (⏚) of the BCU to the Inverter. Otherwise, electric shocks may occur.



4.2.3 Installing DC power cables

Insert the positive and negative battery connectors into the corresponding DC input terminals (P+ and P-). The positive power cable (BAT+) is red and negative power cable (BAT-) is black. Before assembling DC connectors, label the cable polarities to ensure correct cable connections.

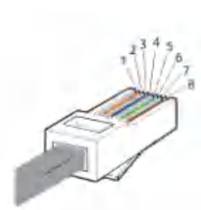


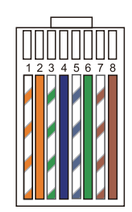
4.2.4 Installing signal cables

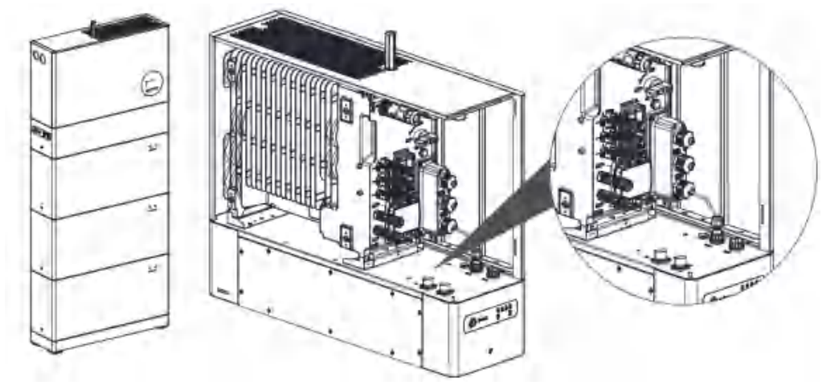
Choose signal cable type (CAN cable) based on the Inverter when laying out a signal cable. Separate the signal cable from power cables when connecting to the BCU and the Inverter. Keep it away from strong interference sources to prevent communication interruption.

The wiring order of the signal cable is as follows:

(1) White with an orange stripe
(2) Orange
(3) White with a green stripe
(4) Blue
(5) White with a blue stripe
(6) Green
(7) White with a brown stripe
(8) Brown







Sequence	1	2	3	4	5	6	7	8
CAN	NC	NC	NC	CAN_ H	CAN_ L	NC	NC	NC

4.3 Supplementary Notes (Australia Region Only)

The installation methods listed in this chapter (04 Cable Connection) are for reference only as examples. For the Australia region, installers must strictly perform the battery system installation in accordance with relevant local installation standards (e.g., AS/NZS 4777 series standards, ASINzs 5139 standard).

If the installation method required by local installation standards differs from the examples in this manual, installers must promptly contact the manufacturer for consultation and confirmation. The manufacturer will provide necessary technical support and assistance to ensure the final installation method fully complies with the installation specifications and safety requirements of the Australia region.

05 System commissioning

5.1 Inspection before power on

Table: Checklist and Acceptance Criteria.

No.	Check Item	Acceptance Criteria
1	Installation	The installation is accurate and secure.
2	Grounding	The Grounding cable is connected correctly and securely.
3	Cable connection	The DC power cables, signal cables and ground cables are connected correctly and securely.
4	Installation environment	The installation space is proper, and the installation environment is clean and tidy.

5.2 System power on

Power on the system through the following steps:
1.Confirm all cables between the battery system and the inverter are correctly connected.
2.Verify that the DC Isolator is in the "OFF" (disconnected) position.
3.Switch the DC Isolator to the "ON" (closed) position and ensure the switch is fully engaged.
4.Press the SW button on the Battery Control Unit (BCU) to start the battery system.
5.Check if the green indicator light on the BCU is illuminated, then activate the inverter main power.
6.If a fault occurs, troubleshoot cable connections or equipment malfunctions. Once the issue is resolved, restart the system following the above steps.

NOTE

The DC isolator is an integrated battery DC isolator located on the inverter side.

5.3 LED indicators

5.3.1 Normal state

LED Indicator	SOC Indicator	Description
Working: Green light blinking for 1s		SOC=0%
		0%＜SOC＜25%
		25%≤SOC＜50%
		50%≤SOC＜75%
		75%≤SOC≤100%

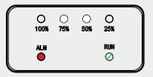
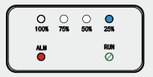
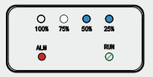
5.3.2 LED indicator

NOTE

refers to the LED indicator is off

refers to the LED indicator is on

refers to the LED indicator is blinking

Button Indicator	LED & SOC Indicator	Fault Description
Green light blinking for 1s Red light on		Over voltage
		Over current
		Under voltage
		Over temperature

5.4 System power off

Power off the system through the following steps:

1. Turn off the inverter main power.
2. Press the SW button on the BCU to switch it to the "OFF" position.
3. Confirm all indicator lights on the BCU are off.
4. Switch the DC Isolator to the "OFF" position and lock it.
5. Wait 15 minutes to discharge residual power from the system. Wear insulated gloves and disconnect all external cables.

NOTE

The DC isolator is an integrated battery DC isolator located on the inverter side.

WARNING

After the system powers off, residual electricity and heat may still pose risks of electric shocks and burns. Therefore, it is advisable to wear protective gloves and wait 15 minutes after the system has powered off before performing any operations on the system.

06 System maintenance

6.1 Routine maintenance

To ensure that the system can operate properly for a long term, it is recommended to perform routine maintenance according to the description in this chapter.

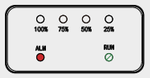
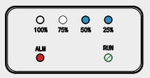
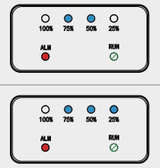
CAUTION

Power off the system before cleaning the system, connecting cables and ensuring the grounding reliability.

Check Item	Check Method	Maintenance Period
Appearance Status	Check that the battery module is not damaged or deformed	Once every 6 months
System Running Status	Check that the battery module does not generate abnormal sound when it is in operation.	Once every 6 months
Electrical Connection	Check that cables are secured and intact, in particular, the parts touching the metallic surface are not scratched.	The first inspection is 6 months after the initial commissioning. From then on, the interval can be 6 to 12 months.
Ground Reliability	Check that ground cables are securely connected.	The first inspection is 6 months after the initial commissioning. From then on, the interval can be 6 to 12 months.

6.2 Troubleshooting

Common alarms find troubleshooting measures as follows:

No.	Warning Messages	Description	Troubleshooting
1	Over voltage		Please contact your dealer or technical support.
2	Under voltage		Please contact your dealer or technical support.
3	Over temperature		Wait till the temperature of cell goes back to the normal state.
4	Under temperature		Wait till the temperature of cell goes back to the normal state.
5	Over current		Please contact your dealer or technical support.
6	PCB over temperature		Wait till the temperature of cell goes back to the normal state.
7	Precharge error		Please contact your dealer or technical support.
8	Relay error		Please contact your dealer or technical support.
9	Self-test failure		Please contact your dealer or technical support.

07 What to do in case of an emergency

In the event of any threat to health or safety, always begin with these two steps before addressing the other suggestions below:

1. Immediately contact the fire department or other relevant emergency response team.
2. Notify all people who might be affected and ensure that they can evacuate the area.

> ⚠ **WARNING**
>
> Only perform the suggested actions below if it is safe to do so.

7.1 In case of fire

The battery module may catch fire when heated about 150°C.

1. Press the Switch button (SW) to be OFF.
2. Turn off the breaker to the inverter.
3. Acceptable fire extinguisher types are CO2 and ABC.

7.2 In case of flooding

1. Stay out of the water if any part of the battery module or any wiring is submerged.
2. Press the Switch button (SW) to be OFF.
3. Turn off the breaker to the inverter.
4. If possible, protect the system by finding and stopping the source of the water, and pumping water away.
5. Let the area dry completely before use.

7.3 In case of unusual noises

1. Press the Switch button (SW) to be OFF.
2. Turn off the breaker to the inverter.
3. Ensure that nothing is inside the case, then restart the system and if there are still unusual noises, please contact your dealer or technical support.

7.4 In case of unusual smell or smoke

1. Please ensure your safety first, then contact your dealer or fire department based on the actual situation to move to the next step.
2. Press the Switch button (SW) to be OFF.
3. Turn off the breaker to the inverter.
4. Ensure nothing is in contact with the battery system.