

HESS-Gateway-M1

Quick Installation Guide

Version 02



Android APP



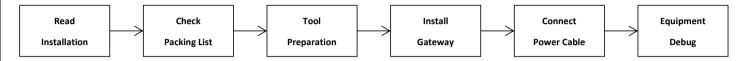
iOS APP



1.Installation Precautions

Flow chart of installation steps:

Please follow the equipment installation steps process to ensure the equipment can be successfully installed.



Please ensure that the installer meets the following requirements:

This system should only be installed by personnel with training and adequate knowledge of electrical power systems.

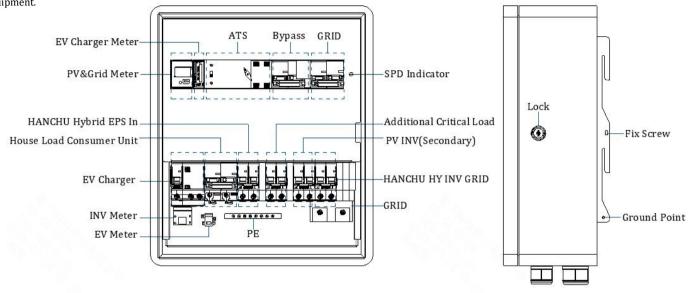
Please ensure that the installation location meets the following conditions:

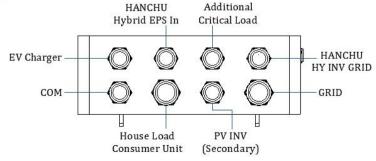
- The installation and use environment need to comply with local laws and regulations and relevant international national.
- Install in a dry, well-ventilated environment and secure the equipment on a sturdy, level support surface.
- Avoid water accumulation in the installation location, and keep away from water sources such as faucets, sewer pipes, sprinklers, etc. to avoid water infiltration
- The environment around the installation location is clean, and there is no large amount of infrared radiation, organic solvents and corrosive gases, etc.
- Please choose a sheltered installation site, or build a awning to avoid direct sunlight or rain.
- Each cable knockouts should be completely sealed in case unexpected invasions such as insects causing short-circuit.

Installation personnel must inspect the customer's existing wiring before installing the Gateway to ensure the household circuit is in normal condition, so as to prevent the circuit breaker from tripping due to line leakage.

Schematic diagram of gateway interface:

The definition of each interface must be clear during the installation process, otherwise the wrong connection will lead to installation failure or even damage to the equipment.



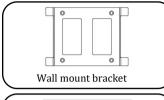


2.Check the Packing List

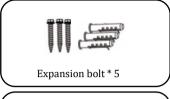
Please refer to the packing items shown below, please check the packing list carefully, if any items are missing, please contact your dealer directly.













3.Tool preparation

Step 1: Protective equipment products must be worn and maintained during the installation process.



Safety gloves



Safety glasses



Step 2: Installation Tools: tools needed in the process of installing equipment, more effective to improve installation efficiency.



Phillips screw driver



Ruler



Electric driver



Torque screw driver



Marker pen

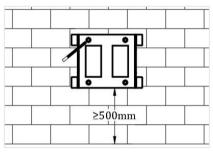
4. Gateway Installation

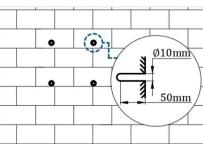
Before you start connecting cables, make sure that gateway and the equipment is fully switched off!

Make sure the wall is strong enough to bear the weight of the gateway.

Step 1: Locate drill holes in the wall

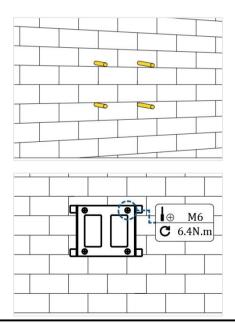
Use the bracket as a template to make positioning holes in the wall, mark the positions of the 4 holes, and then drill 10mm holes to ensure that the depth of the holes is greater than 50mm. The bracket should be placed at least 500mm above the ground.





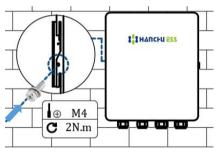
Step 2: Fix the wall mount bracket

Fix the expansion tubes into the holes, pull them tight, and then use the expansion screws (packaged with expansion tube for use) to install and secure the wall mount bracket to the wall.



Step 3: Fix the gateway

There is a hook design on the back of the gateway. Align and fix it to the positioning groove of the Wall mount bracket, and secure it with M4*14 screws. Make sure there is enough space around the gateway.





5. Power cable connection

Installation Preparation:

- 1. Before operation, please make sure all power supplies to the equipment have been disconnected, including but not limited to the grid side and inverter power switches.
- 2. Using the key to open the equipment door.
- 3. Loosen the waterproof socket connector under the gateway. Tighten it after the cable installation.

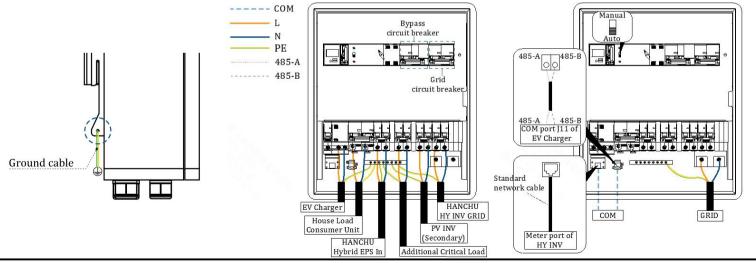
Cable Connection

1. Connect the gateway ground cable

The area of the grounding cable shall be prepared at least 6mm2, using a ground screw and terminal to connect the ground cable which can ground the gateway. The bolt locking torque is 2NM.

- 2. Recommended Routing
- Connect cables according to the corresponding labels to prevent personal injury and equipment damage caused by incorrect cable connection.
- To ensure that the inverters, loads, and the Gateway are connected to the common ground point, connect the PE cable.
- The cable colours shown are for illustrative purposes only and the colours are subject to actual conditions.

Note: When the system is working normally, please turn the switch of the ATS to the automatic switching state, otherwise it may cause the load to be disconnected.



6. Equipment Debugging

Check before Powering On:

- Check if the gateway is firmly installed, check if the components and terminals inside the gateway are tightened without any loosen part.
- Check all wires and cables are connected properly. Check if the L and N lines are connected properly.
- After checking the cables, tighten the waterproof socket connector under the gateway to prevent insects and steam from going in.

Note:

- 1. The bypass circuit breaker shall be permanently turned off, and only when the system failure occurs, it is necessary to turn on the circuit breaker to carry the load; at this time, the GRID circuit breaker should be turned off.
- 2. When the grid stops working, if the power of the household load is greater than the power of the inverter, please switch off the equipment that exceeds the power, otherwise the inverter may not work properly.

Equipment Debugging:

1. Device Connectivity

Ensure all inverters and batteries are online and connected.

Confirm that the communication cable from the inverter to the gateway is a standard patch lead.

2. Inverter Connectivity

- Set the inverter working mode to AC Coupled.
- Change the meter type to Chint DDSU666 Q Channel A.
- Enable the N-PE contactor in the function settings.

3. Firmware and Device Updates

Verify that all devices (inverters, batteries, meters, gateway, etc.) are fully updated with the latest firmware.

4. Gateway Breakers

Turn on the following breakers inside the gateway:

- 1 Hybrid power supply
- (2) EPS power supply
- (3) Grid power supply
- (4) Load supply to property

Important: If there is a secondary PV system, its circuit must be connected to the "Secondary PV" breaker in the gateway.

5. ATS (Automatic Transfer Switch) Configuration

- Normal operation indicators should be:
- > Green light at Point A
- Red light at Point B
- > Transfer switch physically pointing to A
- ATS switch set to Auto

Note: If there is no red light at Point B, the EPS may not be enabled. This could be due to:

- Low State of Charge (SOC) of the battery
- Communication issues between battery and inverter, or inverter and meter

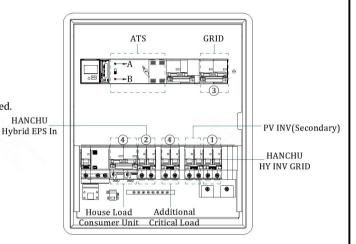
6. Safety and Earth Verification

Ensure the earth spike is installed by the installer and that the resistance has been recorded.

7. Monitoring and Testing

- Verify that inverter monitoring is reading correctly.
- Ask the installer to turn off the grid power supply at the gateway. This should:
 - > Trigger the system to enter EPS mode
- > Cause the ATS to automatically switch to Point B
- Ensure the property's circuits remain powered normally
- Once tested, ask the installer to turn the grid supply back on. This should:
- Cause the ATS to switch back to Point A
- Confirm that the system is now back on grid supply

 $\textbf{Note:}\ This\ commissioning\ procedure\ also\ supports\ basic\ fault\ finding\ if\ issues\ arise\ during\ setup.$



Contact

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