



H E S S - G a t e w a y - M 1

Quick Installation Guide

V e r s i o n 0 1



Android APP



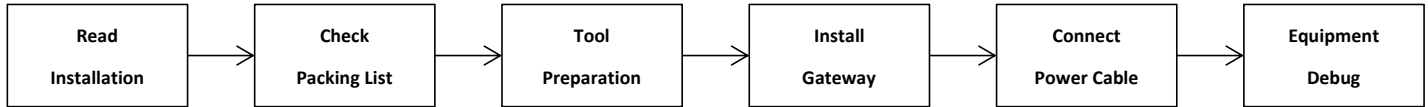
iOS APP



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:

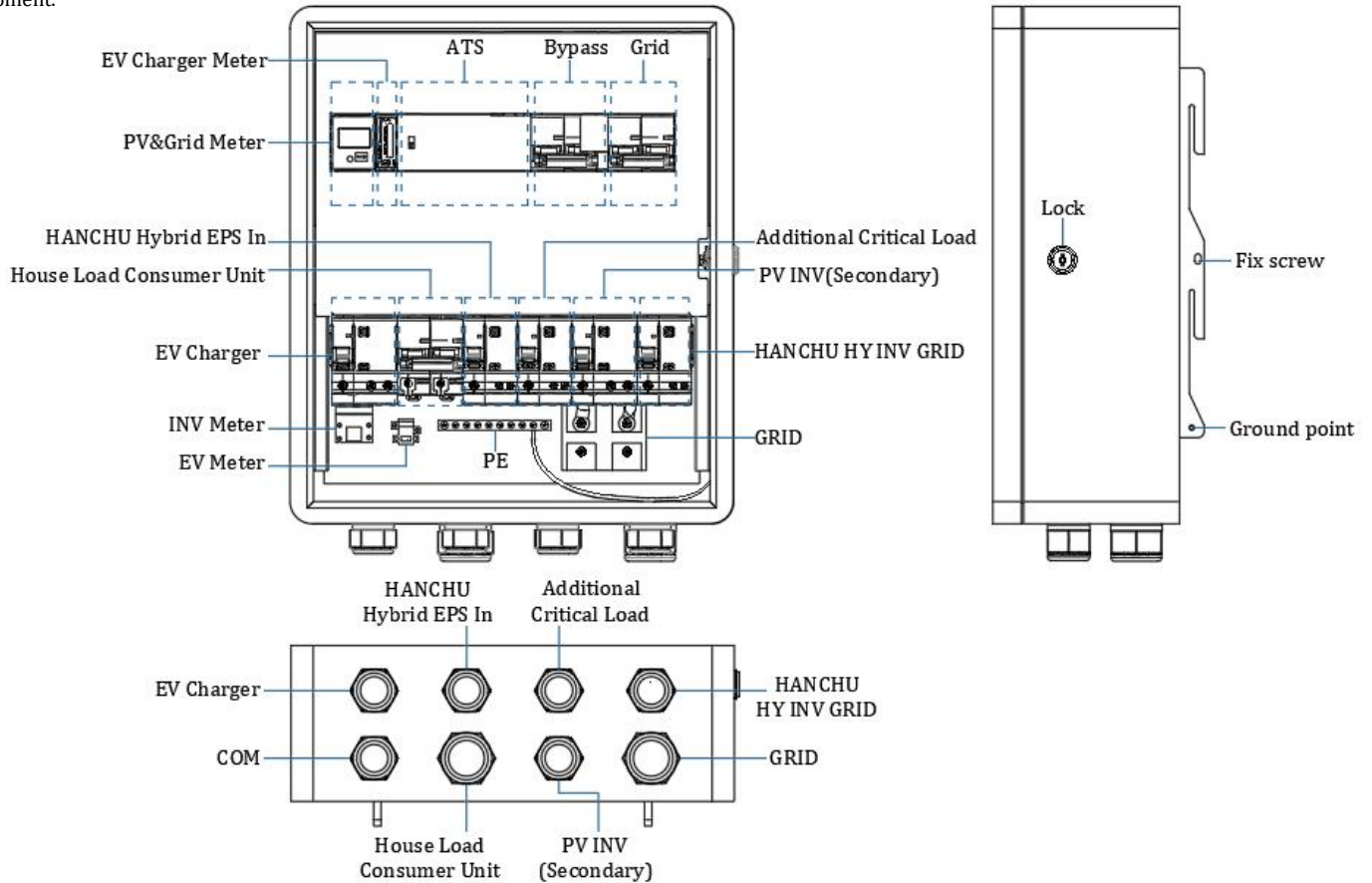
This system should only be installed by personnel with training and adequate knowledge of electrical power systems.

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.

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.

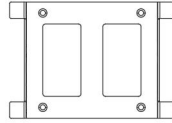


2. Check the Packing List

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



Gateway



Wall mount bracket



Expansion bolt * 5



Screws and terminal/
M4*10/OT6-4/M4*14*2



Quick Installation Guide



Keys

3. Tool preparation

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



Safety gloves



Safety glasses



Safety shoes

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



Phillips screw driver



Hammer



Torque screw driver



Ruler



Electric driver



Marker pen

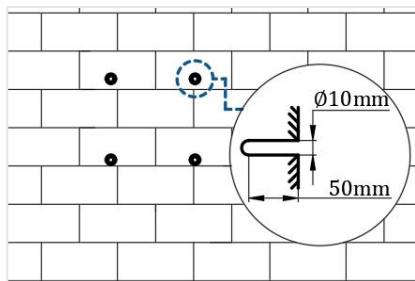
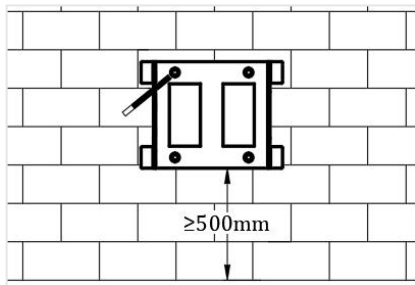
4. Gateway Installation

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.

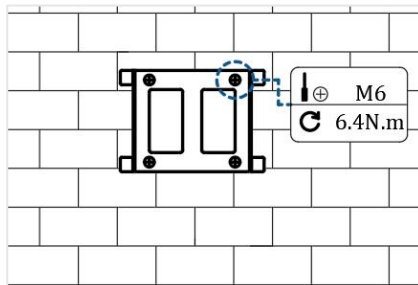
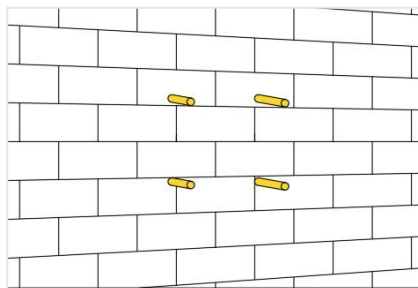
Step 1: Locate drill holes in the wall

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.



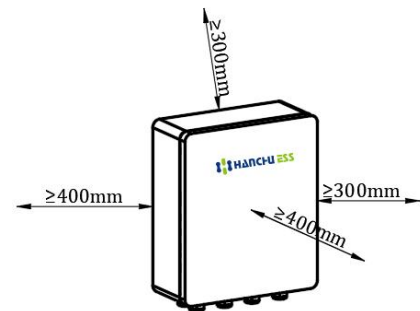
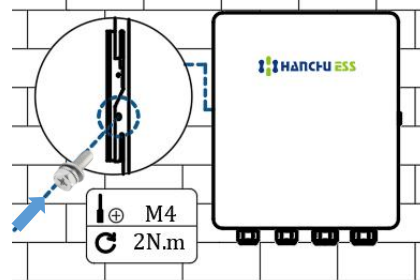
Step 2: Fix the wall mount bracket

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:

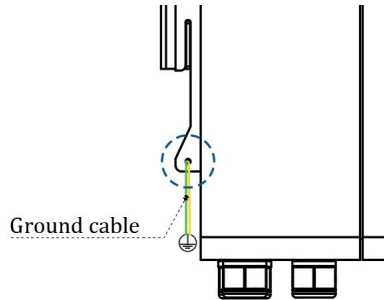
1. Before operation, please make sure all power supplies to the equipment have been disconnected, including but not limited to the grid side and inverter power switches.
2. Using the key to open the equipment door.
3. Loosen the waterproof socket connector under the gateway. Tighten it after the cable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

Cable Connection

1. Connect the gateway ground cable

The area of the grounding cable shall be prepared at least 6mm^2 , using a ground screw and terminal to connect the ground cable which can ground the gateway.

The bolt locking torque is 2NM.

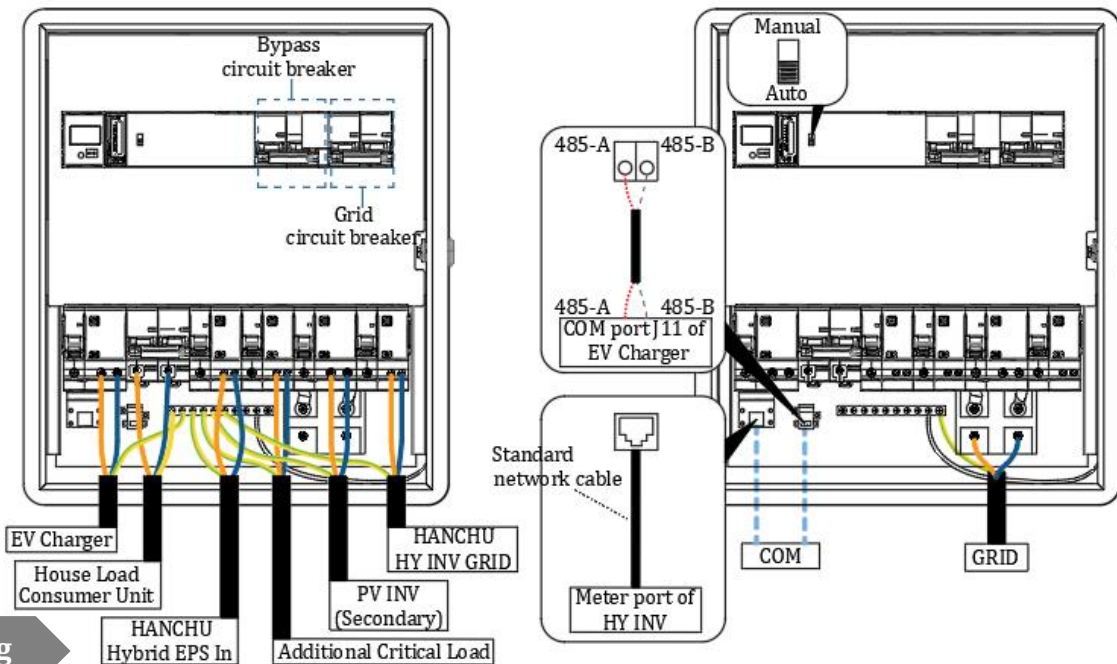
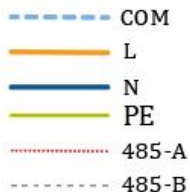


2. Recommended Routing

- 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

Step 1 : Check if the gateway is firmly installed, check if the components and terminals inside the gateway are tightened without any loosen part.

Step 2 : Check all wires and cables are connected properly. Check if the L and N lines are connected properly.

Step 3 : After checking the cables, tighten the waterproof socket connector under the gateway to prevent insects and steam from going in.

Step 4 : Tide up and secure the cables outside the gateway with cable ties to prevent from tangle.

Step 5 : With all steps above checked with no errors, turn on all circuit breakers in the gateway in turn.

When the operation is complete, close the appliance door.

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.

7. Disclaimer

1. **Important Safety Notice:** When installing the Hanchu Gateway within a property where an existing string inverter is connected to the property's consumer unit, it is mandatory to disconnect the existing string inverter from the consumer unit and connect it directly to the Hanchu Gateway.

- Hanchu Ltd. will not be held liable for any damage, fire, or safety issues arising from improper installation where the existing string inverter is not connected to the Hanchu Gateway as instructed.
- Installers and property owners assume full responsibility for ensuring the installation complies with this guideline and all relevant safety regulations.

2. **Risk of Severe Damage or Fire Hazard:**

Failure to follow this procedure can result in severe damage to the property's consumer unit, including the risk of fire or melting of the consumer unit. This is due to the following reasons:

● **Inability of the String Inverter to Detect Power Cuts:**

If the string inverter remains connected to the consumer unit, it will be unable to detect a power cut because the Hanchu Gateway keeps the consumer unit live.

Under G98 regulations, the string inverter must automatically shut down during a power cut for safety reasons. However, the continued live state of the consumer unit can prevent the string inverter from shutting down.

● **Potential Power Imbalance and Overload:**

In the event of a power cut, if the property's energy consumption is lower than the energy generated by the PV system, the excess energy will be forced back into the consumer unit.

This scenario can cause overloading, overheating, and potentially result in a fire or severe damage to the consumer unit and other connected systems.

3. **Compliance with G98 Regulations:**

By connecting the existing string inverter to the Hanchu Gateway:

- The Gateway will automatically shut down the existing string inverter in the event of a power cut.
- This ensures compliance with G98 regulations for safe disconnection and protection of the property.
- It also protects the consumer unit from potential damage or hazards associated with improper power feedback.

4. **Installation Guidance and Support:**

- For further installation guidance or technical support, please contact Hanchu Ltd. or refer to the official Hanchu Gateway Installation Manual.
- It is strongly recommended that installation is carried out by a qualified and certified electrician experienced with **PV systems and consumer unit configurations.**

By proceeding with the installation, you acknowledge that you have read, understood, and agreed to the terms and safety requirements stated in this disclaimer.

Contact

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