Version: V1.0



INSTALLATION GUIDE

Hoymiles HIT Inverter and IG-16K-U Battery System

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1. Preparation Before Installation

1.1 Safety Requirements

• Installation personnel must hold the relevant local electrical operation qualifications.

• Ensure that no flammable or explosive materials are present on site and that ventilation is adequate.

• During installation, wear personal protective equipment such as insulated gloves and safety goggles.

• Power-off operation: before connecting or disconnecting any wiring, make sure the inverter is powered off.

1.2 Inverter Accessories Check

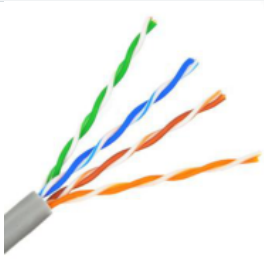
Please check whether the following accessories are complete:



Hoymiles HIT energy storage inverter — 1 pc



Five-core copper cable — 1 pc



BMS communication cable with RJ45 connectors — 1 pc

If any component is missing, please contact the supplier for a replacement.

1.3 IG-16K-U Accessories Check

Please check whether the following accessories are complete:



IG-16K-U — 1 pc



Grounding cable — 1 pc



BMS communication cable — 1 pc



Power cable (DC cable) — 1 pc



Mounting screws — 2 pcs

If any component is missing, please contact the supplier for a replacement.

1.4 Installation Tools and PPE Check

Required tools:

• Phillips / flat-head screwdriver

• Wrench (suitable for M6–M10 bolts)

• Insulated pliers

• Multimeter (for voltage testing)

Personal protective equipment:

• Insulated gloves

• Safety goggles

• Safety shoes

2. Wiring Connections Between the IG-16K-U Battery and the Inverter

2.1 Single-Unit Mode Connection

Cable Type	Connection Description
Grounding cable	Connect the grounding terminal of the IG-16K-U enclosure to the building grounding system; resistance ≤ 4 Ω.
Communication cable	Use a BMS communication cable to connect the IG-16K-U to the inverter communication interface.
Power cable	Connect the positive and negative poles respectively to the inverter DC input terminals (DC+ / DC−). Be sure to verify polarity.

NOTE	All connections must be secure to prevent poor contact caused by looseness.

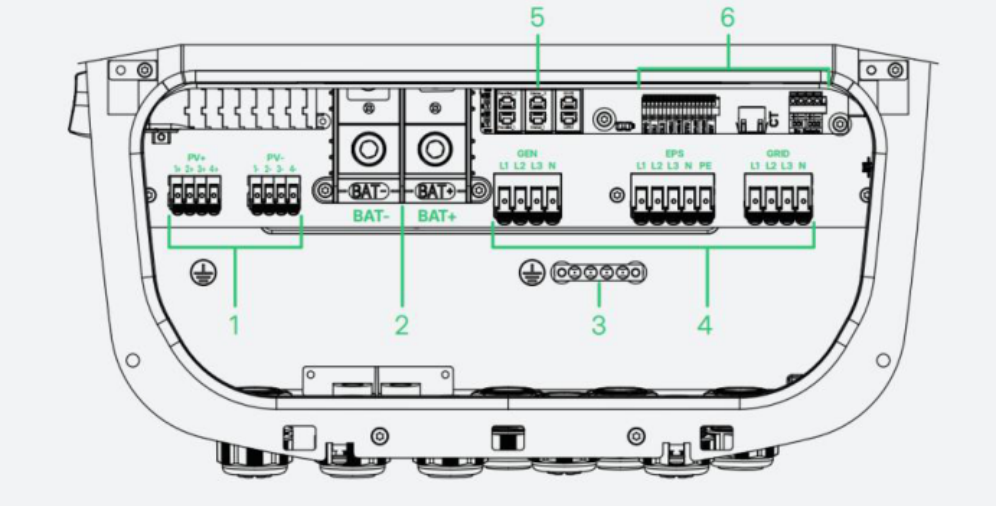


Figure 1: Inverter connection points

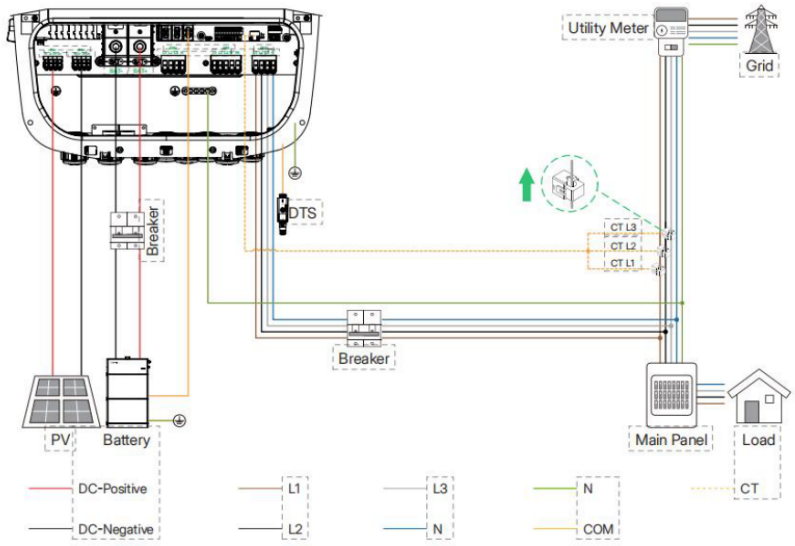


Figure 2: IG-16K-U power terminal connection points

Connect “PACK+” in Figure 2 to the terminal marked “BAT+” at “2” in Figure 1; connect “PACK−” in Figure 2 to the terminal marked “BAT−” at “2” in Figure 1; use the BMS communication cable to connect “INV” in Figure 2 to the port marked “BMS” at “5” in Figure 1.

CAUTION	Do not replace the supplied communication cable with a standard Ethernet cable unless the cable pinout has been verified and approved by UZ Energy.

After connection, the battery can supply power to the inverter.



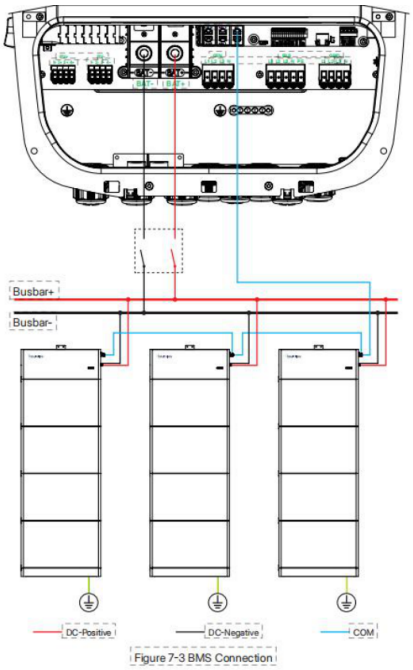
Single-unit connection simulation diagram (for installation reference only)

2.2 Parallel Mode Connection

When multiple IG-16K-U units need to be connected in parallel, connect them as follows:

Cable Type	Connection Method
Grounding cable	Each IG-16K-U should be grounded independently and share a common grounding busbar.
Communication cable	Daisy-chain the communication ports of the IG-16K-U units using the specified battery communication cables. Connect the designated master IG-16K-U to the inverter BMS communication port.
Power cable	After the positive and negative poles of all IG-16K-U units are bused separately, connect them to the inverter DC input terminals.

During parallel operation, ensure that all battery PACK units have the same model, software version and voltage, with similar SOC, to avoid unbalanced operation.



Parallel connection simulation diagram (for installation reference only)

2.3 Installation Environment Requirements

- The installation location should be dry, well ventilated and free of corrosive gases.
- It is recommended to install the unit under an eave to avoid direct sunlight and rain exposure.
- Maintain at least 30 cm of heat dissipation space around the unit, with the bottom at least 10 cm above the ground.
- Do not install in areas with high temperature, high humidity or heavy dust.

3. System Startup

3.1 System Power-On and Power-Off Sequence



1. Close the DC breaker on the IG-16K-U side and press START.



2. Start the inverter power supply (AC side).



3. Disconnect the inverter power supply (AC side).



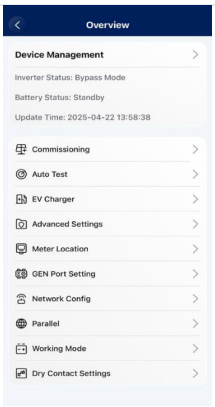
4. Open the DC breaker on the IG-16K-U side and press START.

WARNING	Do not plug or unplug cables under load or cut off power suddenly!

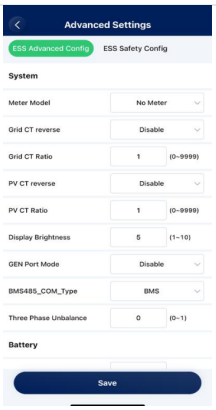
3.2 Related Settings in the Inverter App

Complete the following configuration in the inverter S-MilesCloud app:

- Set the system parameters. Tap “Operations and Maintenance” > “Toolkit” > “Advanced Settings” to set the parameters for the system, battery, PV, emergency power supply (EPS) and generator.



"Overview" screen.



"Advanced Settings" screen.

4. Common Faults and Handling Methods

The following issues may occur during the initial operation stage. Please refer to the handling methods:

Fault Symptom	Possible Cause	Handling Method
Inverter cannot start	1. Battery voltage too low	1. Check the battery voltage. If it is lower than 42 V, recharge the battery with an external DC power supply at about 20 A until the voltage exceeds 48 V.
	2. Communication fault	2. Unplug and reconnect the communication cable, and check the wiring.
	3. Protection function triggered	3. Check the inverter fault code and clear the corresponding fault.
Abnormal charge/discharge current	1. Current limit setting too low	1. Adjust the inverter charge/discharge current limit parameters.
	2. Over-temperature protection	2. Improve heat dissipation conditions and reduce the ambient temperature.
Communication interruption	1. Network fault	1. Check the network connection and router status.
	2. Poor contact of the communication cable	2. Reconnect the communication cable and check the shield grounding.
	3. BMS fault	3. Restart the BMS or contact the manufacturer for repair.

Appendix

• Appendix A: Product Specification — IG-16K-U User Manual

Notes:

• This product is intended only for installation and commissioning by qualified personnel. Non-professionals must not disassemble it without authorization.

• Unauthorized modification of circuits or replacement of core components is strictly prohibited.

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Please keep this manual properly for future reference.



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