

Quick Installation Guide

Grid-Tied PV Inverter

(CSI1000 | CSI1500 | CSI2000 | CSI2500 | CSI3000)

V1.0-2023-02-30

01 Safety Precautions

General Disclaimer

- The information in this quick installation guide is subject to change due to product updates
 or other reasons. This guide cannot replace the product labels or the safety precautions in
 the user manual unless otherwise specified. All descriptions here are for guidance only.
- Before installations, read through the quick installation guide. For additional information, please see the user manual.
- All operations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Check the deliverables for correct model, complete contents, and intact appearance. Contact the manufacturer if any damage is found or any component is missing.
- Use insulating tools and wear personal protective equipment when operating the equipment
 to ensure personal safety. Wear anti-static gloves, clothes, and wrist strip when touching
 electronic components to protect the inverter from damage. The manufacturer shall not be
 liable for any damage caused by static electricity.
- Strictly follow the installation, operation, and configuration instructions in this guide and user manual. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions.

Safety Disclaimer



Warning

DC Side:

- 1. Ensure the component frames and the bracket system are securely grounded.
- 2. Connect the DC cables using the delivered PV connectors. The manufacturer shall not be liable for equipment damage if other connectors are used.
- 3. Ensure the DC cables are connected tightly, securely, and correctly. Inappropriate wiring may cause poor contacts or high impedances, and damage the inverter.
- 4. Measure the DC cable using the multimeter to avoid reverse polarity connection. Also, the voltage should be under the max DC input voltage. The manufacturer shall not be liable for the damage caused by reverse connection and extremely high voltage.
- 5. The PV modules used with the inverter must have an IEC61730 class A rating.

AC Side:

- 1. The voltage and frequency at the connecting point should meet the on-grid requirements.
- Additional protective devices like circuit breakers or fuses are recommended on the AC side. Specification of the protective device should be at least 1.25 times the rated AC output rated current.
- 3. PE cable of the inverter must be connected firmly. The resistance between the neutral wire and the earth cable is less than 10Ω .
- 4. You are recommended to use copper cables as AC output cables. If you prefer aluminum cables, remember to use copper to aluminum adapter terminals.

Product:

- 1. Do not apply mechanical load to the terminals, otherwise the terminals can be damaged.
- 2. All labels and warning marks should be visible after the installation. Do not scrawl, damage, or cover any label on the device.
- 3. Unauthorized dismantling or modification may damage the equipment, the damage is not covered under the warranty.
- 4. Install the inverter away from high magnetic field to avoid electromagnetic interference. If there is any radio or wireless communication equipment below 30MHz near the inverter, you have to:
 - Install the inverter at least 30m far away from the wireless equipment.
 - Add a low pass EMI filter or a multi winding ferrite core to the DC input cable or AC output cable of the inverter.
- 5. Warning labels on the inverter are as follows.

| 4 | HIGH VOLTAGE HAZARD. Disconnect all incoming power and turn off the product before working on it. | A Comin | Delayed discharge. Wait 5 minutes after power off until the components are completely discharged. |
|----|--|----------|---|
| | Read through the guide before working on this device. | <u>•</u> | Potential risks exist. Wear proper PPE before any operations. |
| | High-temperature hazard. Do not touch the product under operation to avoid being burnt. | | Grounding point. Indicates the position for connecting the PE cable. |
| (€ | CE marking | X | Do not dispose of the inverter as household waste.Discard the product in compliance with local laws and regulations, or send it back to the manufacturer. |

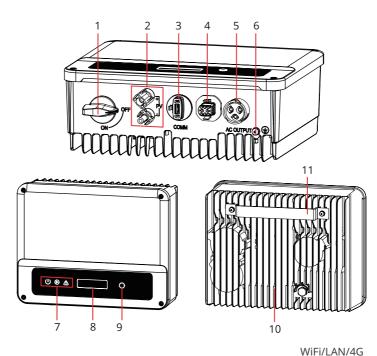
Check before Power-on

| No. | Check Item |
|-----|---|
| 1 | The product is firmly installed at a clean place that is well-ventilated and easy-to-operate. |
| 2 | The PE, DC input, AC output, and communication cables are connected correctly and securely. |
| 3 | Cable ties are intact, routed properly and evenly. |
| 4 | Unused ports and terminals are sealed. |
| 5 | The voltage and frequency at the connection point meet the inverter grid connection requirements. |

LED Indicators

| Indicator | Status | Description | |
|-------------|--------|--|--|
| | | ON = WiFi is connected/active. | |
| | | BLINK 1 = WiFi system is resetting. | |
| U | | BLINK 2 = WiFi not connect to the router. | |
| Power | | BLINK 4 = WiFi server problem. | |
| | | BLINK = RS485 is connected. | |
| | | OFF = WiFi is not active. | |
| (Departing) | | ON = The inverter is feeding power. | |
| | | OFF = The inverter is not feeding power at the moment. | |
| \triangle | | ON = A fault has occurred. | |
| Faulty | | OFF = No fault. | |

Parts

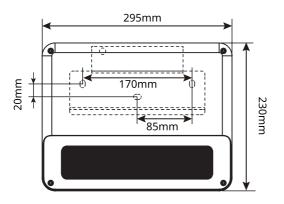


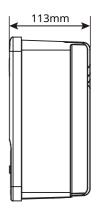
- 1. DC Switch(optional)
- 2. PV Input Terminal
- 3. Communication Module Port

DRED/CT/

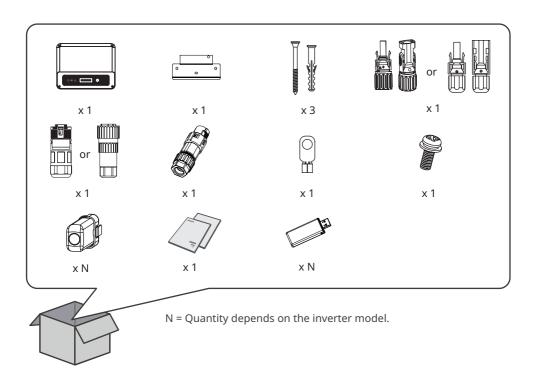
- 4. Remote Shutdown Communication Cable Port(optional)
- 7. Indicator
- 10. Heat Sink

- 5. AC Output Terminal
- 8. LCD(optional)
- 11. Mounting Plate
- 6. PE Terminal
- 9. Button(optional)





03 Inverter Installation

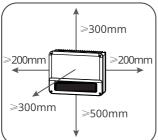


Space Requirements

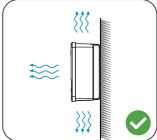


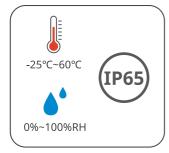


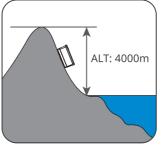




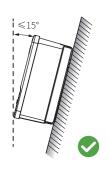


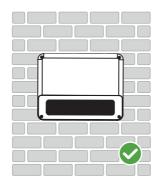






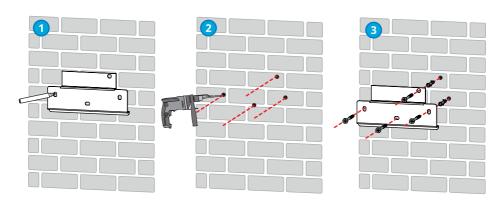
Angle Requirements

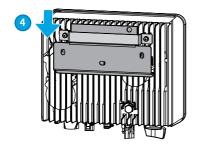


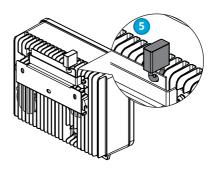




Installing the Inverter



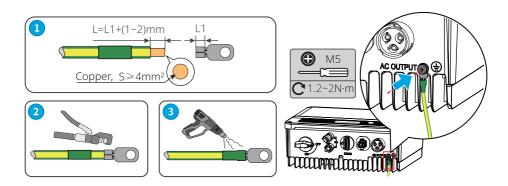




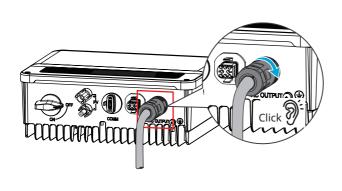
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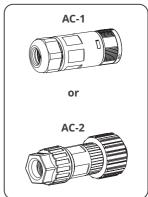
Electrical Connection

PE Cable

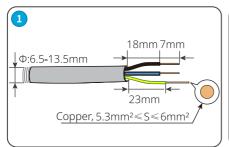


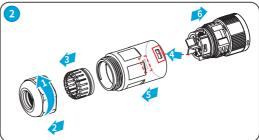
AC Cable

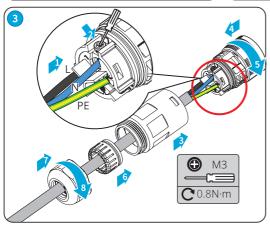


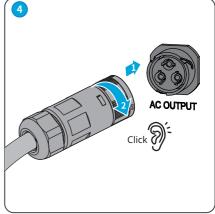


AC-1 Connector

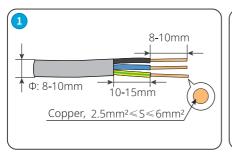


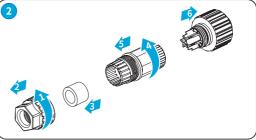


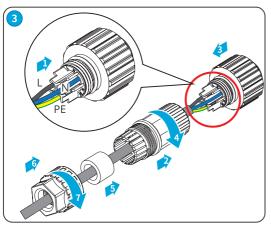




AC-2 Connector

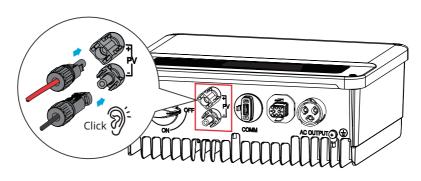


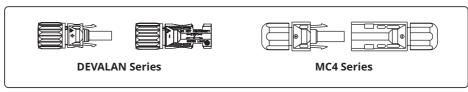


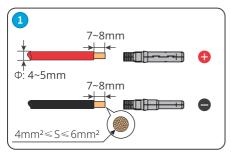


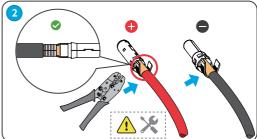


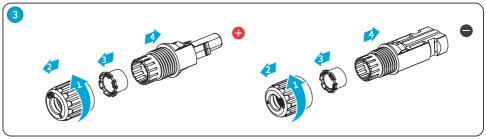
DC Cable

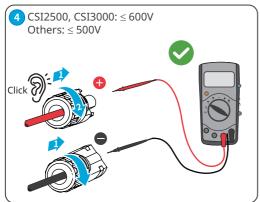


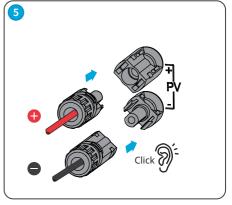




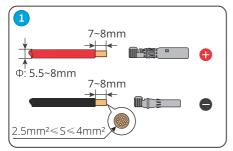


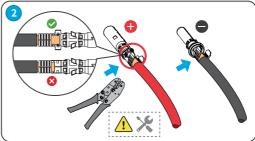


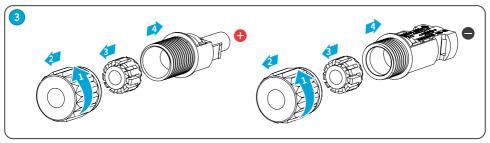


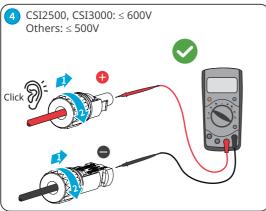


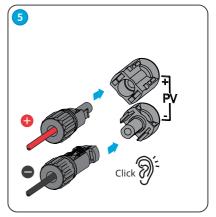
DEVALAN



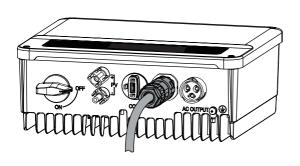




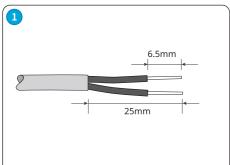


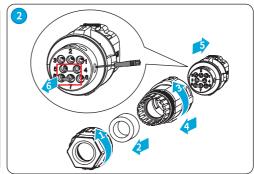


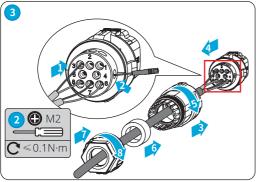
RS485 Communication Cable

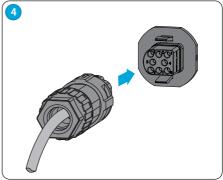


| No. | Function |
|-----|----------|
| 1 | N/A |
| 2 | N/A |
| 3 | RS485- |
| 4 | N/A |
| 5 | N/A |
| 6 | RS485+ |
| 7 | RS485- |
| 8 | RS485+ |

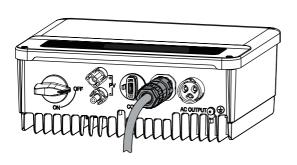




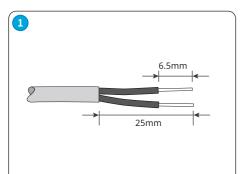


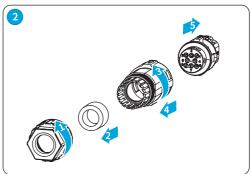


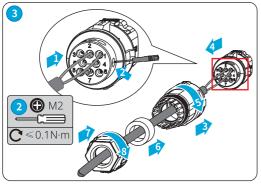
CT Communication Cable

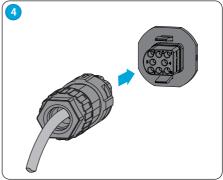


| No. | Function |
|-----|----------|
| 1 | CT- |
| 2 | CT+ |

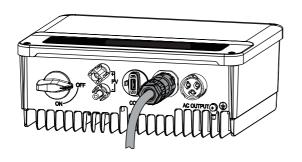




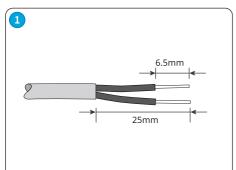


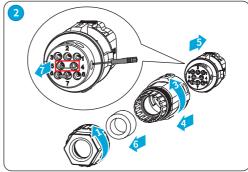


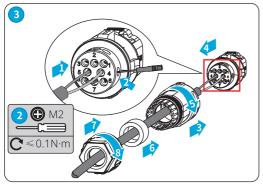
For Europe only: Remote Shutdown Communication Cable

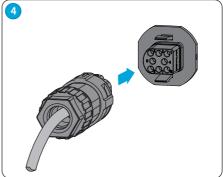


| No. | Function |
|-----|-----------|
| 4 | Content + |
| 5 | Content - |



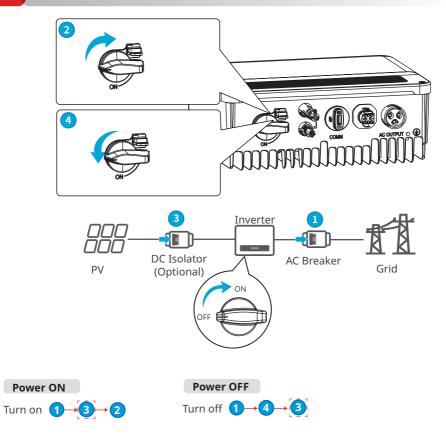






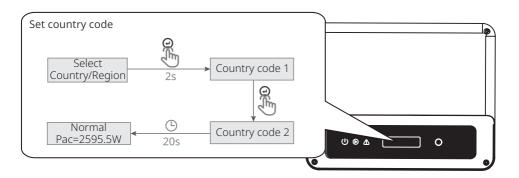
MARNING

Keep the Remote Shutdown Terminal installed anyway.

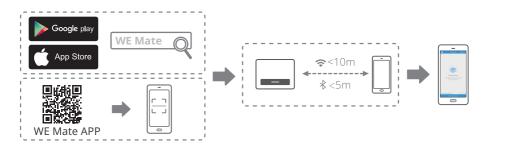


06 Commissioning

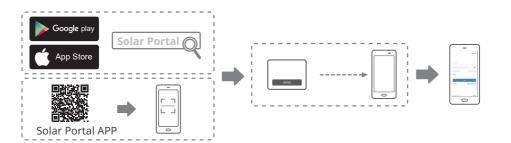
Commissioning via LCD



Commissioning via WE Mate APP



Monitoring via Solar Portal App











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