GUANGZHOU SANJING ELECTRIC CO.,LTD

Tel.: (86)20 66608588 **Fax.:** (86)20 66608589 **Web:** www.saj-electric.com
Add: SAJ Innovation Park, No.9, Lizhishan Road, Science City, Guangzhou High-tech Zone, Guangdong, P.R.China

V2

M2 Series

MICROINVERTER
USER MANUAL

M2-1.8K-S4 | M2-2K-S4 | M2-2.2K-S4 | M2-2.25K-S4

Preface

Thank you for choosing SAJ inverter. We are pleased to provide you first-class products and exceptional service.

This manual includes information for installation, operation, maintenance, trouble shooting and safety. Please follow the instructions of this manual so that we can ensure delivery of our professional guidance and wholehearted service.

Customer-orientation is our forever commitment. We hope this document proves to be of great assistance in your journey for a cleaner, greener world.

Please check for the latest version at www.saj-electric.com

Guangzhou Sanjing Electric Co., Ltd.

TABLE OF **CONTENTS**

1.

SAFETY INSTRUCTIONS

1.1. About This Document

This User Manual describes the instructions and detailed procedures for installing, operating, maintaining, and troubleshooting the following SAJ products:

M2-1.8K-S4; M2-2K-S4; M2-2.2K-S4; M2-2.25K-S4;

1.2. Safety Levels

DANGER

· DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

·WARNING indicates a hazardous situation which, if not avoided, can result in death or serious injury or moderate injury.

CAUTION

· CAUTION indicates a hazardous condition which, if not avoided, can result in minor or moderate injury.

NOTICE

· NOTICE indicates a situation that can result in potential damage, if not avoided.

1.3. Target Group

Only qualified electricians who have read and fully understood all safety regulations contained in this manual can install, maintain and repair the device. The operators must be aware that this produce is a high-voltage device.

1.4. Safety Instructions

For safety, be sure to read all the safety instructions carefully prior to any works, and please observe the appropriate rules and regulations of the country or region where you install the inverters.

DANGER

· Danger to life due to electrical shock and high voltage.
· Do not touch the operating component of the inverter; it might result in burning or death.
· To prevent risk of electric shock during installation and maintenance, make sure that all AC and DC terminals are plugged out.
· Do not touch the surface of the equipment while the housing is wet. Otherwise, it might cause electrical shock.
· Do not stay close to the equipment while there are severe weather conditions including storm, lighting, etc.
· Before opening the housing, the SAJ inverter must be disconnected from the grid and PV generator; you must wait for at least five minutes to let the energy storage capacitors completely discharged after disconnecting from the power source.
· Please keep the power off prior to any operations.
· Keep inflammable and explosive dangerous items or flames away from the inverter.

WARNING

· Only qualified personnel who have full knowledge of local safety regulations and local standards can install, maintain, retrieve, and process this product.
· SAJ Electric shall not be liable for any loss or warranty claims arising from any unauthorized change of product which may cause fatal injury to the operator, third party, or equipment performance.
· For personal and property safety, do not short-circuit the positive (+) and negative (-) electrode terminals.

CAUTION

· Risk of damage due to improper modification.
· Use professional tools when operating the products.
· The inverter will become hot during operation. Do not touch the heat sink or peripheral surface during or shortly after the operation.

NOTICE

· The inverter is designed to feed AC power directly to the public utility power grid; do not connect AC output of the inverter to any private AC equipment.

1.5. Symbol Explanations

Symbol	Description
	**Danger: Electrical shock hazard** This device is directly connected to the public grid, thus all operations on the inverter shall only be carried out by qualified personnel.
	**Danger to life due to high electrical voltage!** There might be residual currents in the inverter because of the large capacitors. Wait for 5 minutes before you remove the front lid.
	**WARNING: No open flames** Do not place or install near flammable or explosive materials.
	**Danger of hot surface** The components inside the inverter will release a lot of heat during operation. Do not touch the metal plate housing during operation.
	**Attention:** Check the user manual before service. If an error has occurred, refer to the troubleshooting chapter to remedy the error.
	**Attention:** This device shall NOT be disposed of in residential waste.
	**CE Mark** Equipment with the CE mark fulfills the requirements of the Low Voltage Directive and Electro-Magnetic Compatibility.
RoHS	**RoHS compliant mark** Equipment with the RoHS mark does not exceed the allowable amounts of the restricted substances defined in Restriction of Hazardous Substances in Electrical and Electronic Equipment.

2.

PRODUCT INFORMATION

2.1. Product Introduction

The M2-(1.8K-2.25K)-S4 microinverters can be applied in grid-tied applications. The M2 microinverters convert the DC electricity generated by solar panels into grid-compliant AC electricity and sends the AC into the public grid to reduce the load pressure of the grid and enhance overall energy utilization.

The M2 inverters are equipped with the monitoring and analysis system that allows for real-time performance tracking and system health checks, maximizing operational efficiency and reliability.

One M2-(1.8K-2.25K)-S4 series microinverter can be integrated with four PV panels at maximum as the following figure shows:

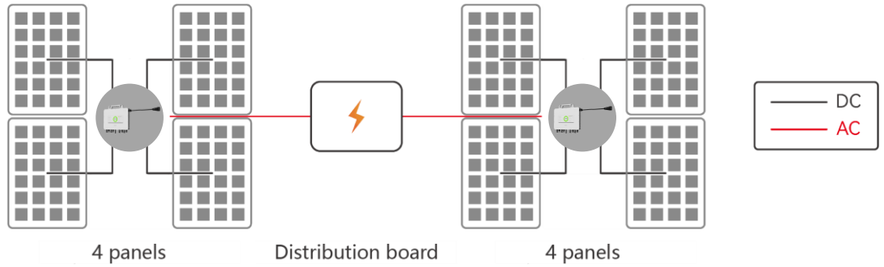


Figure 2.1. System overview

2.2. Model Description

$$\underset{①}{M2} - \underset{②}{\mathit{X}K} - \underset{③}{S4}$$

① M2 represents the product name.

② *X*K represents the rated power of the inverter in *X*kW. For example, 2.25K means 2.25kW.

③ S means single phase; 4 represents that the inverter has the function of 4 MPP trackers.

2.3. Dimensions

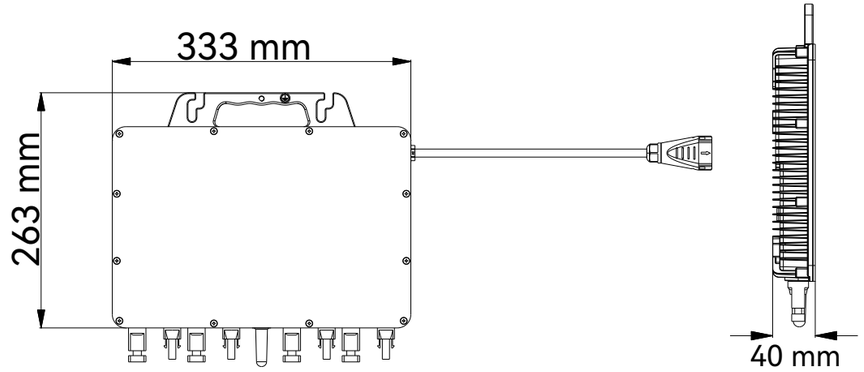


Figure 2.2. Dimensions of M2 microinverter

2.4. Terminal Descriptions

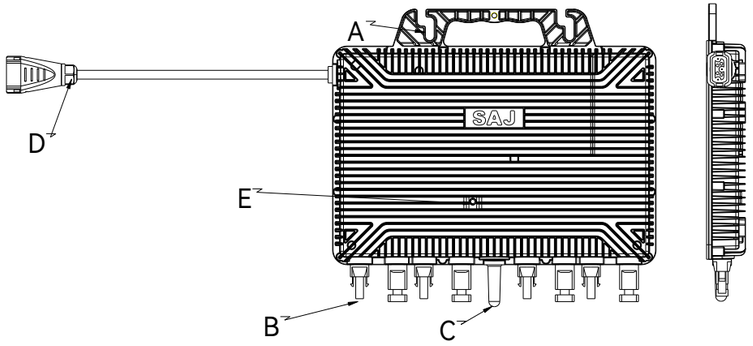


Figure 2.3. Electrical interfaces (rear view)

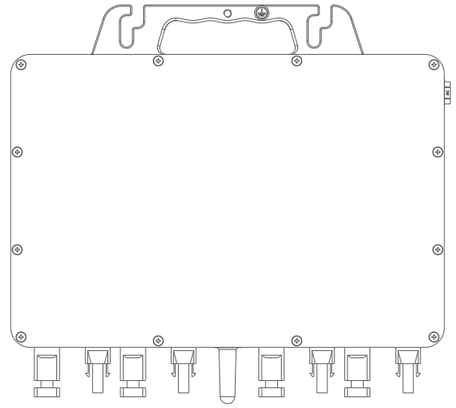
Callout	Description
A	Mounting Hole
B	DC Cables
C	Antenna
D	AC Cables
E	LED Indicators

Table 2.1. Interface descriptions

2.5. Datasheet

Model	M2-1.8K-S4	M2-2K-S4	M2-2.2K-S4	M2-2.25K-S4
Input Data (DC)				
Recommended PV Module Power (STC) Range [Wp]	400-700+			
Peak Power Tracking Voltage [V]	35-50			
Operating Voltage Range [V]	16-55			
Maximum Input Voltage [V]	60			
Maximum Input Current [A]	20 x 4			
Back-Feed Current [A]	0			
Overvoltage Category	II			
Output Data (AC)				
Maximum Output Power [VA]	1800	2000	2200	2250
Nominal Output Current [A]	7.82	8.7	9.56	9.78
Rated AC Voltage/Range [V]	L+N+PE, 220, 230, 240/180-280			
Rated Output Frequency/Range [Hz]	50: 44–55; 60: 54–65			
Power Factor [cos ϕ]	> 0.99 default 0.8 leading to 0.8 lagging			
Overvoltage Category	III			
Total Harmonic Distortion [THDi]	<3%			
Maximum Units per 10AWG Branch	4	3	3	3
Efficiency				
Peak Efficiency	97.00%			
CEC Efficiency	96.00%			
Mechanical Data				
Operating Temperature Range	-40℃ to +60℃ (45℃ to 60℃ with derating)			

Communication	Wi-Fi / Bluetooth
Cooling Method	Natural convection
Ambient Humidity	0-100% non-condensing
Altitude [m]	2000
Noise [dBA]	< 20
Ingress Protection	IP67
Dimensions (W*H*D) [mm]	333*225*40
Weight [kg]	5.8
Warranty [Year]	12
Applicable Standard	EN62109-1/2, EN61000-6-1/2/3/4, EN50438, EN50549, C10/11, IEC62116, IEC61727, RD1699, CEI 0-16, CEI O-021, AS4777.2, NBR16149, NBR 16150, VDE-AR-N 4105, VDE 0126-1-1, RoHS



3.

INSTALLATION INSTRUCTION

3.1. Safety Instructions

DANGER

· Danger to life due to potential fire or electricity shock.
· Do not install the inverter near any inflammable or explosive items.
· This inverter will be directly connected with HIGH VOLTAGE power generation device; the installation must be performed by qualified personnel only in compliance with national and local standards and regulations.

NOTICE

· This equipment meets the pollution degree II.
· Inappropriate installation environment may jeopardize the life span of the inverter.
· Installation directly exposed under intensive sunlight is not recommended.
· The installation site must be well ventilated.

3.2. Pre-installation Check

3.2.1. Check the Package

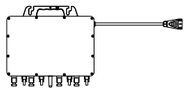
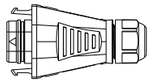
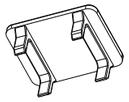
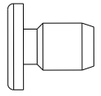
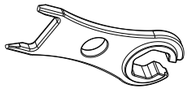
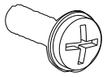
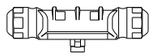
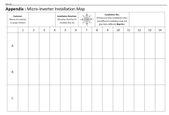
Although SAJ's inverters have thoroughly tested and checked before delivery, the products may suffer damages during transportation.

1. Check the outer packing package for any damage, such as holes and cracks.
2. Check the equipment model.

If any serious damage is found or the model is not what you requested, do not unpack the product, and contact your dealer as soon as possible.

3.2.2. Scope of Delivery

c

			
Microinverter x1	Branch male connector (optional)	AC trunk connector unlock tool (optional)	AC trunk end cap (optional)
			
AC trunk port disconnect tool (optional)	AC trunk port cap (optional)	Mounting bracket (optional)	DC extension cable (optional)
			
M8*25 bolts (optional)	AC trunk cable (optional)	AC trunk connector (optional)	Microinverter SN label x1
			
Monitoring SN label x1	Installation map x1	Documents	

3.3. Determining the Installation Method and Position

1. The equipment employs natural convection cooling, and it can be installed indoor or outdoor.
2. Mount the equipment horizontally on the rail or vertically on the mounting bracket and face the cover toward the solar panels.
3. Carry the microinverter by holding its handle. Do not lift the AC cable to carry the microinverter.

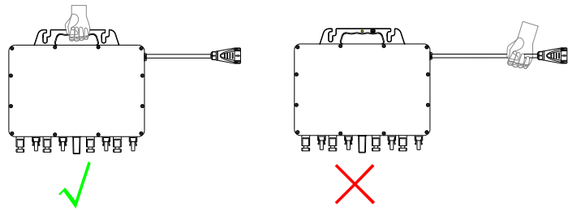


Figure 3.1. Carrying the microinverter

4. Wen mounting the inverter, make sure that the wall or the mounting rail can bear the weight of the inverter and all the accessories. Ensure that the mounting bracket is mounted tightly.

Installation Environment Requirements

- The installation environment must be free of inflammable or explosive materials.
- Install the device away from any heat source.
- Do not install the device at a place where the temperature changes extremely.
- Keep the device away from children.
- Do not install the device in the bedroom, toilet, or bathroom.
- When installing the device at the garage, keep it away from the driveway.
- Keep the device from water sources such as taps, sewer pipes and sprinklers to prevent water seepage.
- Install the product at a location with easy monitoring and maintenance.

Note: When installing outdoors, the height of the device from the ground should be considered to prevent the device from soaking in water. The specific height is determined by the site environment.

3.4. Mounting Procedure

3.4.1. Installation Tools

Installation tools include but are not limited to the following recommended ones. Use other auxiliary tools on site if necessary.

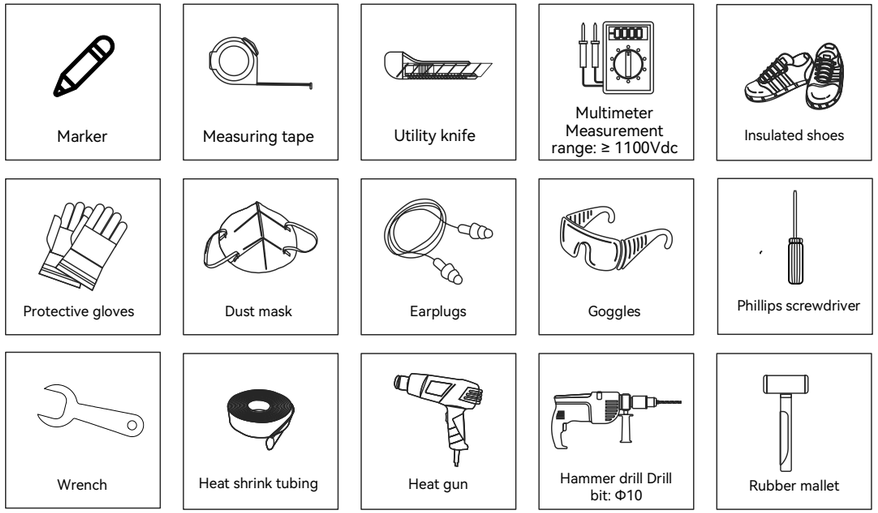


Figure 3.2. Suggested installation tools

3.4.2. Mounting Procedure

Step 1. Mark the position of each microinverter on the rail. Secure the two screws to the rail according to the markings.

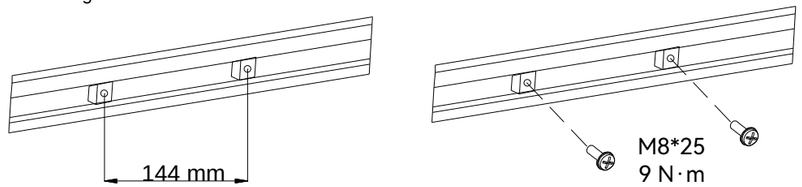


Figure 3.3. Marking the mounting positions

Step 2. Hang the microinverter on the screws with the cover facing towards the PV arrays. Tighten the screws.

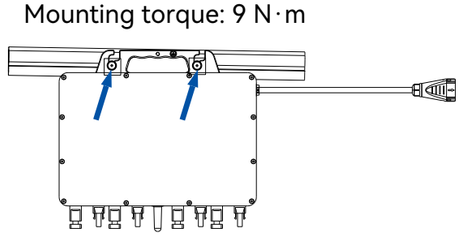


Figure 3.4. Mounting the microinverter

Step 3. (optional) If external grounding is required, secure the grounding cable to the grounding port on the microinverter handle with an M6 grounding screw.

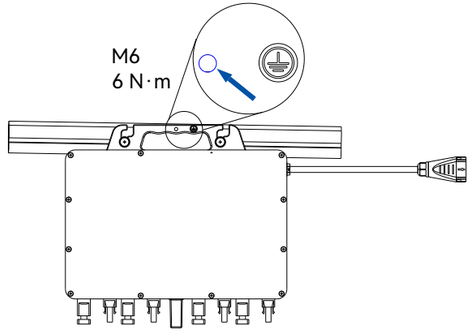


Figure 3.5. Installing the grounding cable

4.

ELECTRICAL CONNECTION

4.1. Safety Instruction

Electrical connection must only be carried out by professional technicians. Before connection, necessary protective equipment must be employed by technicians including insulating gloves, insulating shoes and safety helmet.

DANGER

· Danger to life due to potential fire or electricity shock.

· The wiring and connection of the inverter should be carried out by qualified technicians in accordance with local and national electrical standards and regulations.

WARNING

· When the photovoltaic array is exposed to light, it supplies a DC voltage to the inverter.

· Ensure that all AC cables are correctly wired and that none of the wires are pinched or damaged.

NOTICE

· Electrical connection should be in conformity with proper stipulations, such as stipulations for cross-sectional area of conductors and ground protection.

4.2. Electrical Connection Diagram

The following figure shows the system connections of single-machine deployment:

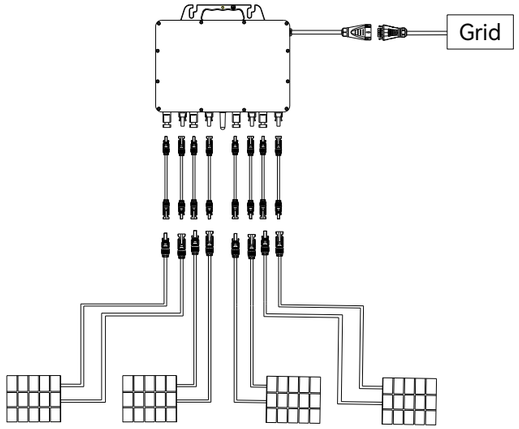


Figure 4.1. Single machine system connections

The following figure shows the system connections of multiple microinverters deployment:

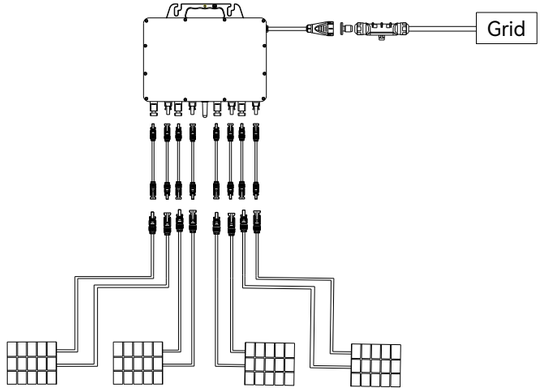


Figure 4.2. Multiple machines system connections

4.3. AC-side Cable Connection

Before you start

1. Plan the AC cable connection according to the actual requirement of the power grid of the customer.
   - When the microinverter is connected to 120/240V split-phase power grid, connect the microinverter live line to grid L1, and connect the microinverter neutral line to grid L2. In this case, grid L2 works as the N line.

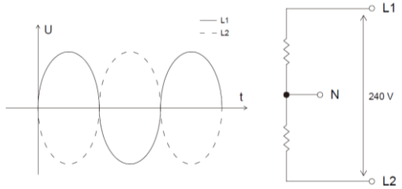


Figure 4.3. Connecting to split-phase power grid

   - When the microinverter is connected to 230/400V three-phase WYE power grid, connect the microinverter live line to grid L1, L2, or L3, and connect the microinverter neutral line to grid N line.

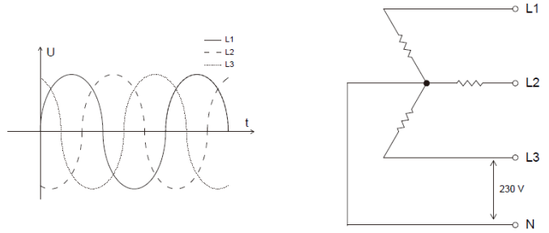


Figure 4.4. Connecting to three-phase WYE power grid

   - When the microinverter is connected to 127/220 V three-phase power grid, connect the microinverter live line to grid L1, L2, or L3, and connect the microinverter neutral line to another grid live line.

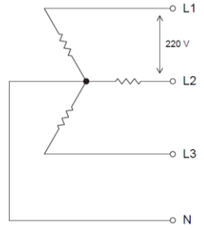
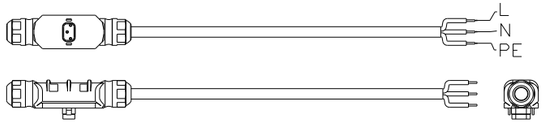


Figure 4.5. Connecting to three-phase power grid

2. For multi-machine system connections, prepare the AC connector and trunk cables according to the cable specification below.



Wire	Color
L	Red or Brown
N	Black or Blue
PE	Green-yellow

Figure 4.6. AC connector and trunk cables

Type	Cross-sectional area	Conductor material
Standard outdoor three-core AC cable	10 AWG / 6 mm^2	Copper

Table 4.1. Trunk cable specification requirement

One AC branch with the 10 AWG cable can connect with the following number of microinverters at maximum:

Model	Maximum number of microinverters
M2-1.8K-S4	4
M2-2K-S4 M2-2.2K-S4 M2-2.25K-S4	3

Table 4.2. Microinverters per AC branch

Procedure

Take the following steps to connect the AC cables for **single-machine** system:

Step 1. Before wiring, use a Phillips screwdriver to remove the screws from the uppermost baffle.

Step 2. Insert the AC cable into the body shell, crimp the inner wires, and insert the wires into the terminals according to the L, PE, and N marks. Tighten the screws.

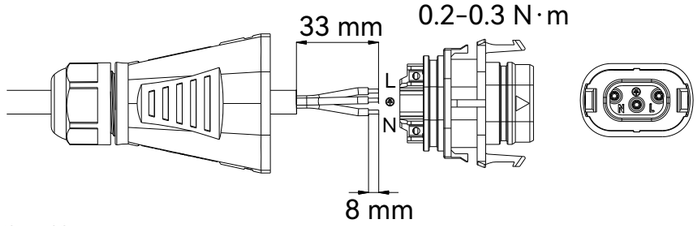


Figure 4.7. Crimping and inserting the cables

Step 3. Press the terminal block into the shell until you hear a "click" sound.

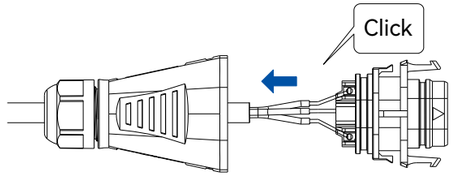


Figure 4.8. Connecting to the shell

Step 4. Put the nut back into the port and tighten the nut.

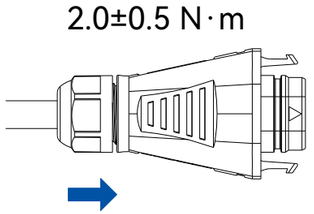


Figure 4.9. Tightening the nut

Step 5. Insert the branch cable connector on the output side into the male branch connector until you hear a "click" sound.

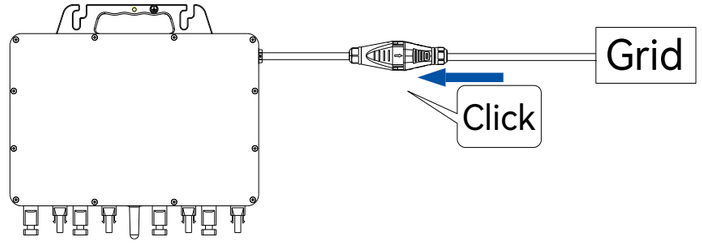


Figure 4.10. Connecting the AC cable

Take the following steps to connect the AC cables for **multi-machine** system:

Step 1. Place the AC trunk connector unlock tool to the backside of the AC trunk and align with the four buckles of the front lid. Press the unlock tool towards the front lid evenly to remove the lid.

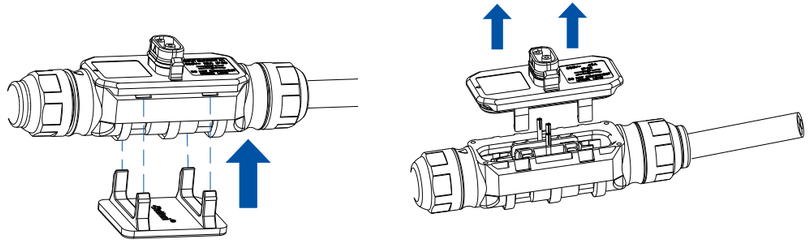


Figure 4.11. Removing the front lid

Step 2. Insert the main cable into the body shell, crimp the inner wires, and secure the wires into the terminals according to the L, PE, and N marks. Fasten the nut back to the AC trunk.

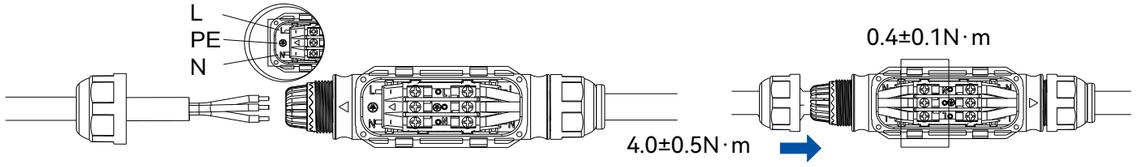


Figure 4.12. Connecting the AC wires

Step 3. Close the lid following the guide arrow until you hear a "click" sound.

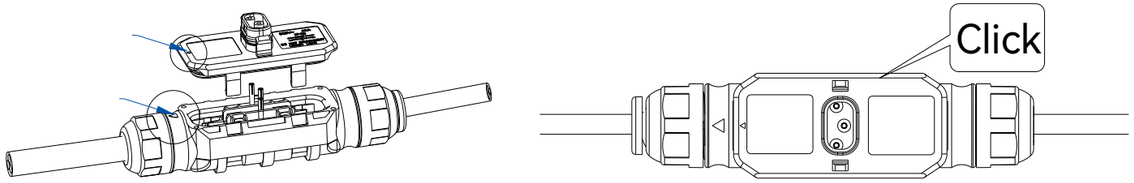


Figure 4.13. Closing the lid

Step 4. Prepare more AC trunk cables and string them in series for backup. See Table 4.2 about the maximum number of microinverters to be connected per AC branch.

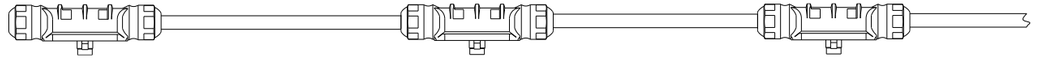


Figure 4.14. Preparing more AC trunk cables

Step 5. Insert the AC trunk end cap to the AC trunk cable. Tighten the end cap and the nut.

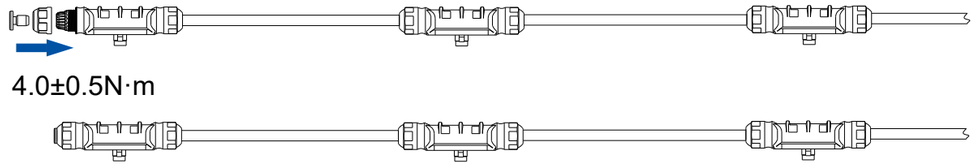


Figure 4.15. Installing the end cap

Step 6. Lay the AC trunk cables on the guide rail and secure the cables with cable ties.

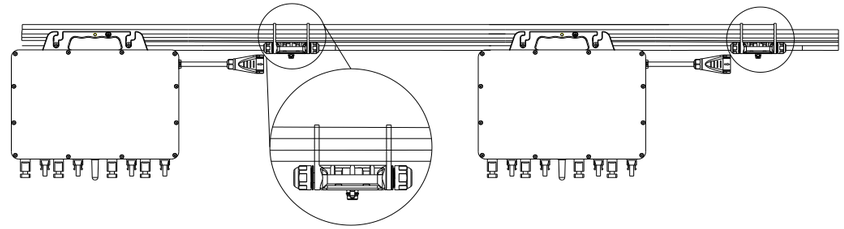


Figure 4.16. Laying the AC cables

Step 7. Insert the branch cable connector on output side into the AC trunk cable until you hear a "click" sound.

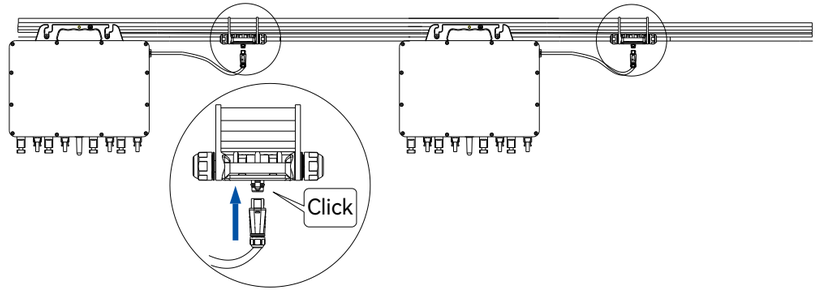


Figure 4.17. Connecting the AC cable

Step 8. Connect the end of the AC cable to the distribution box that connects to the local power grid.

Step 9. If there is an empty port on the AC trunk cable connector, insert the AC trunk port cap onto the AC trunk port cover to ensure that the connector is dustproof and waterproof.

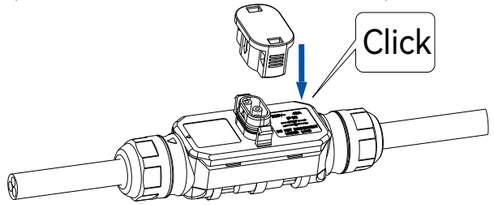


Figure 4.18. Inserting the port cap

Note: If you need to remove the output-side AC connector of the microinverter from the AC trunk cable, insert the branch connector unlock tool into the AC branch cable connector.

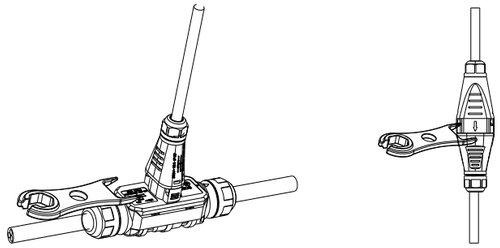


Figure 4.19. Disconnecting the AC connector

4.4. Make an Installation Map

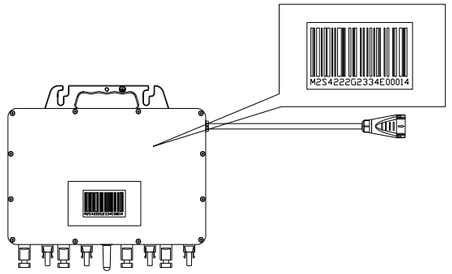
NOTICE

· If there is more than one installation site, make the installation map separately and give a clear description about the installation site.

· The row of the table corresponds the shorter side of PV module and the column of the table corresponds to the longer side of PV module. The direction on the upper left corner means the actual installation orientation.

· The microinverter SN label start with “T”. The monitor SN label start with “R”.

Peel off the SN label on the microinverter and attach the SN label to the installation map as follows:



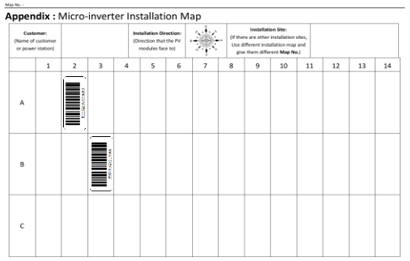


Figure 4.20. Making an installation map

4.5. DC-side Cable Connection

Install the microinverters under the PV arrays. Connect the DC output cable of PV arrays to the DC input side of the microinverters according to the following diagrams.

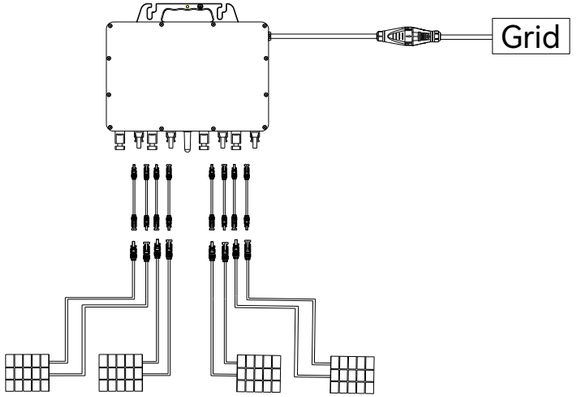


Figure 4.21. Single-machine connection

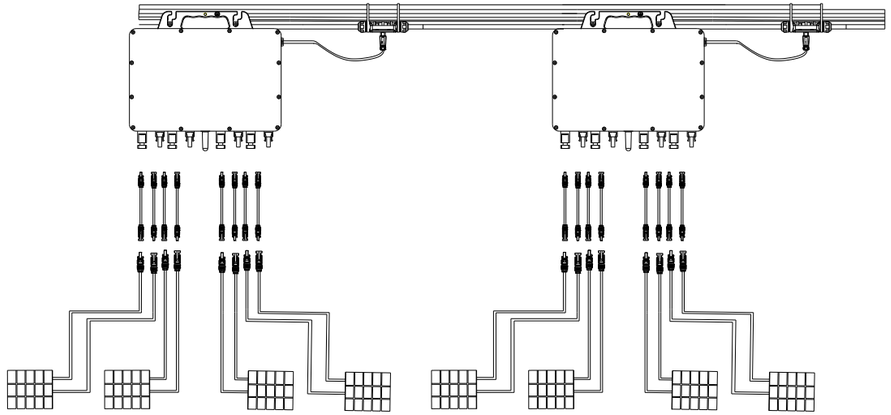


Figure 4.22. Multi-machine connection

ATTENTION: The DC cable length from the PV array to the inverter must be smaller than 3 meters to meet relevant regulatory requirements. Ensure that the DC cables are correctly connected. For details, consult your local electric power operator and refer to local regulatory requirements.

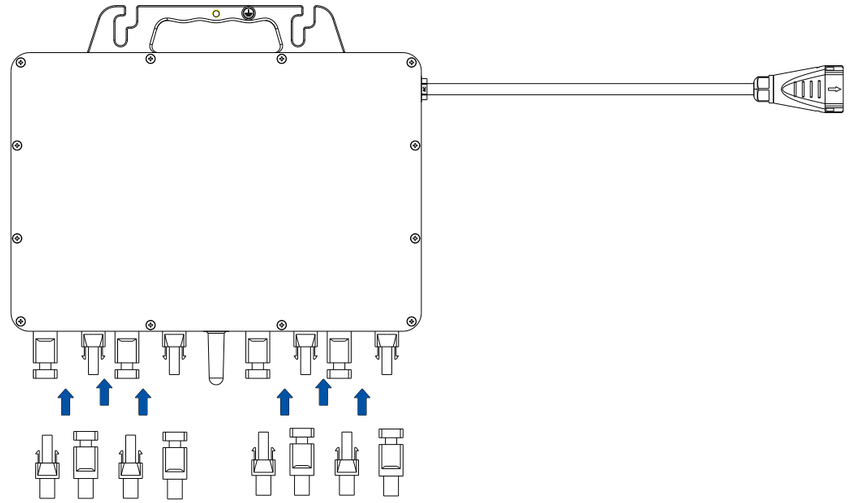


Figure 4.23. Connecting the DC cables

5.

COMMISSIONING

5.1. Start up the Microinverter

Step 1. Turn on the AC circuit breaker of the main utility grid to connect the microinverters to the grid.

Step 2. Wait for two minutes for the system to start up. The LED will flash green and red at startup.

5.2. Shut down the Microinverter

Disconnect the microinverter from the PV arrays.

The LED indicator will light off and the system will shut down.

5.3. LED Indicator Introduction

The definition of LED is shown as below.

Status		Description
Green	Solid	Working normally.
Green	Breathing	Standby/Waiting.
Red	Flashing	Failed to connect.
Red	Solid	Faulty.
Red	Breathing	Upgrading.
Red and Green	Off	Not working.

Note: 1. One breathing cycle is 6 seconds.

5.4. App Connection

5.4.1. Download the App

The elekeeper App (used to be called eSAJ Home) can be used for both nearby and remote monitoring. It supports Bluetooth, 4G and Wi-Fi to communicate with the device.

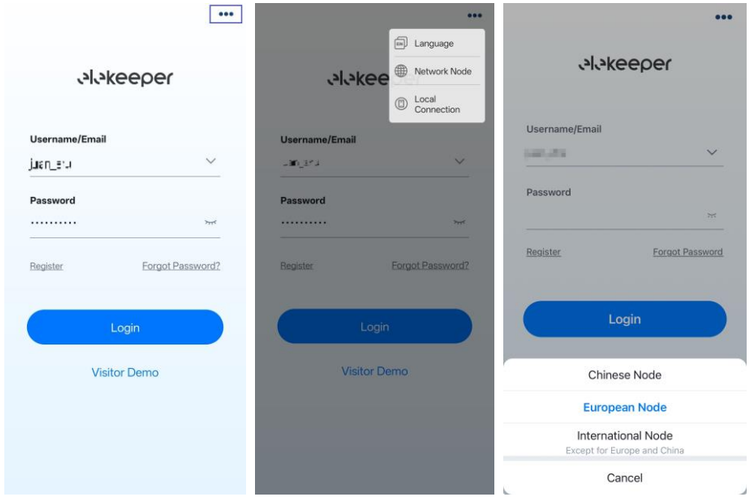
On your mobile phone, search for "**elekeeper**" in the App store and download the App. You can also scan the following QR code to download the App:

5.4.2. Log in to the App

Procedure

Step 1. Open the App and click on the three-dot icon on the top right corner.

Step 2. Set the **Language** to **English** and **Network Node** to **European Node** or **International Node** depending on the microinverter site location.



Step 3. If you do not have an account, register first.

a. Click **Register**. Choose whether you are an owner or an installer or distributor.

b. Follow the instructions on the screen to complete the registration.

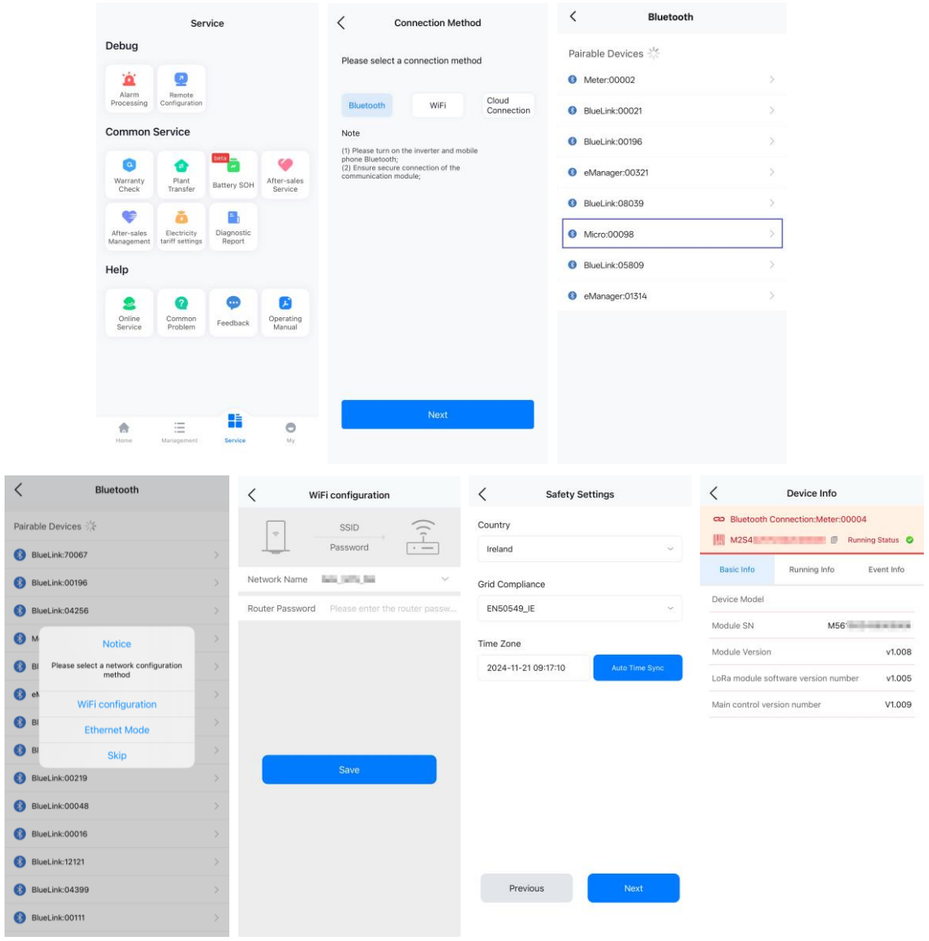
Step 4. Use the account and password to log in to the App.

Step 5. On the **Service** page, select **Remote Configuration**. Tap **Bluetooth** to connect to the device.

Step 6. Enable the Bluetooth function on your mobile phone.

5.4.3. Complete the Initialization Settings

Follow the instructions on the screen.



5.4.4. Configure 4G Connection (Optional)

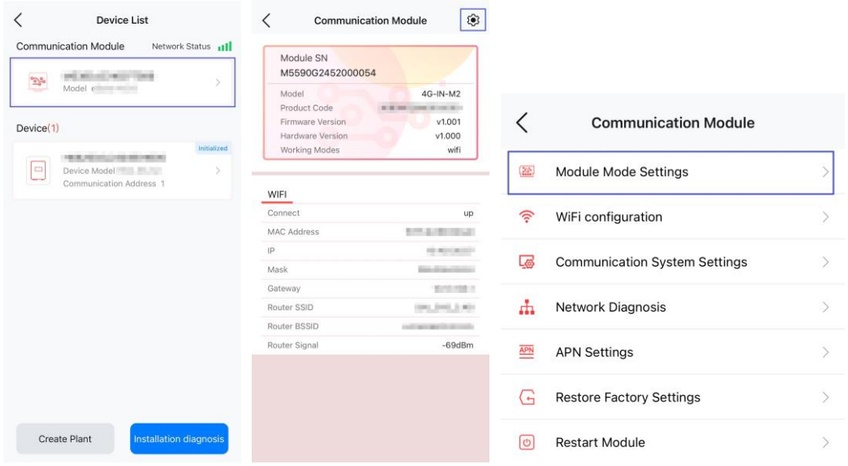
This procedure is only applicable to M2 microinverters equipped with the 4G communication function.

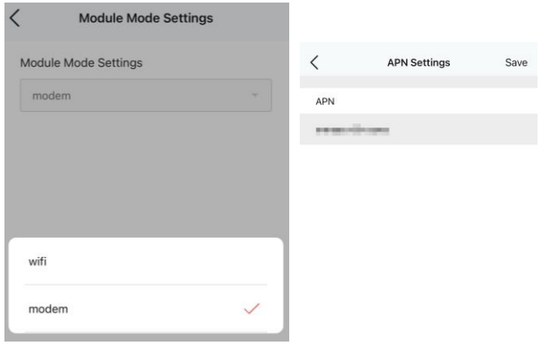
Step 1. Connect to the microinverter through Bluetooth connection.

Step 2. On the **Device List** page, select the communication module.

Step 3. On the **Communication Module** page, tap the settings icon on the upper right corner. On the **Communication Module** page, select **Module Mode Settings**.

Step 4. Select **modem** to enter the **APN Settings** page. Set the APN of the customer's 4G operator.





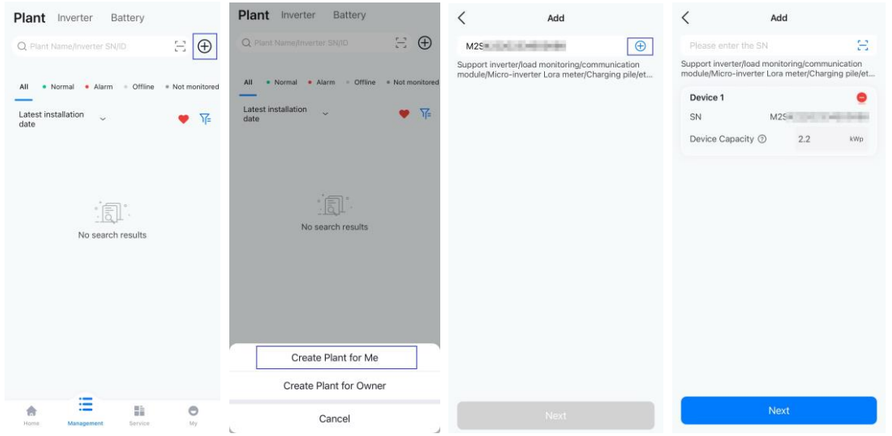
5.4.5. Create a Plant

Step 1. Enter the **Management** page, tap the **+** button in the upper right corner and then tap **Create Plant for Me**.

Step 2. Fill in the inverter SN, tap the **+** button to read the device information, and then tap **Next**.

Step 3. On the **Complete site information** page, fill in the plant basic information, and tap **Create Plant**.

Step 4. On the **Plant** page, select the newly created plant to check and monitor the energy statistics.



6.

FAULT CODE & TROUBLESHOOTING

6.1. Troubleshooting

For any errors reported as below, contact the after-sales for service support. The operations and maintenance must be performed by authorized technicians.

Error Code	Error Message	Troubleshooting Actions
1	Master Bus Voltage High	Disconnect the AC switch for 5-10 minutes, and check whether the fault disappears. Restart the inverter. If this fault appears continuously, please contact the SAJ service.
2	Master Bus Voltage Low	Restart the inverter. If this fault appears continuously, please contact the SAJ service.
3	Master Islanding Error	Please check whether the power grid is powered off, whether the grid-connected box switch is tripped, and whether the AC cable of the inverter is connected firmly. After the above inspections and there is no power failure or disconnection, or insecure connection, please close the AC switch and re-connect to the grid. If this fault appears continuously, please contact the SAJ service.
4	Master Adc Sample Error	Disconnect the AC and DC switch for 5 minutes, and then restart the inverter. If this fault appears continuously, please contact the SAJ service.
5	Frequency Config Error	Please check whether the safety regulations are selected correctly. Disconnecting the AC and DC switch for 5 minutes, and then restart the inverter. If this fault appears continuously, please contact the SAJ service.
6	Master EEPROM Error	Restart the inverter. If this fault appears continuously, please contact the SAJ service.
7	Master Temperature High Error	Please check whether the heat dissipation shell of the inverter is wrapped or covered by other items. Please check whether the inverter is installed in a place exposed to direct sunlight. Please check whether the installation environment is well-ventilated. If this fault appears continuously, please contact the SAJ service.
8	Master Temperature Low Error	Please check whether the ambient temperature at the inverter installation location is too low. If this fault appears continuously, please contact the SAJ service.

Error Code	Error Message	Troubleshooting Actions
9	ISO Error	Disconnect the AC switch, and please check whether the ground wire of the AC output terminal is firm, and whether the AC wiring is correct. Please check whether the AC and DC cables are damaged, whether they are soaked in water, and whether the battery board is soaked in water. After the above checks are confirmed, please close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
10	Output Current Dci High	Disconnect the AC switch for 5 minutes and then restart the inverter. If this fault appears continuously, please contact the SAJ service.
12	Master HW Inv Current High	Disconnect the AC switch and check whether the AC cable is firmly connected; After the above checks are confirmed, please close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
13	Master SW Inv Current High	
14	Grid Voltage 10Min High	Please check whether the grid voltage is too high, whether the AC output cable of the inverter is connected firmly and whether the grid-connected cable is too thin. Please check whether the grid-connected safety regulations of the inverter are selected correctly. If this fault appears continuously, please contact the SAJ service.
15	Grid Voltage High	
16	Grid Voltage Low	Please check whether the grid voltage is too low. Please check whether the AC output cable of the inverter is firmly connected. Please check whether the grid-connected safety regulations of the inverter are selected correctly. If this fault appears continuously, please contact the SAJ service.
17	Master Grid Frequency High	Please check whether the grid-connected safety regulations of the inverter are selected correctly. After disconnecting the AC switch for 5 minutes, close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
18	Master Grid Frequency Low	Please check whether the grid-connected safety regulations of the inverter are selected correctly. After disconnecting the AC switch for 5 minutes, close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
19	Master No Grid Error	Please confirm whether the power grid is powered off, whether the grid-connected box switch is tripped, and whether the AC cable of the inverter is connected firmly. After the above inspections confirm that there is no power failure or disconnection, or insecure connection, please close the AC switch and re-connect to the grid, If this fault appears continuously, please contact the SAJ service.
20	Master PV1 Voltage High Error	Please check whether the open-circuit voltage of each battery panel exceeds the maximum input voltage of the inverter. After the above checks are confirmed, please close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
21	Master PV2 Voltage High Error	
22	Master PV3 Voltage High Error	
23	Master PV4 Voltage High Error	
24	Master HW PV1 Current High	Please check whether the positive and negative poles of the battery board are reversed. After the above checks are confirmed, please close the AC switch and restart the inverter. If this fault appears continuously, please contact the SAJ service.
25	Master SW PV1 Current High	
26	Master HW PV2 Current High	
27	Master SW PV2 Current High	
28	Master HW PV3 Current High	
29	Master SW PV3 Current High	
30	Master HW PV4 Current High	
31	Master SW PV4 Current High	
32	Master Relay Error	Automatic recovery, the recovery wait time is 10 minutes, and it will not recover 4 times in total. If this fault appears continuously, please contact the SAJ service.

7.

APPENDIX

7.1. Recycling and Disposal

This device should not be disposed of as residential waste. An Inverter that has reached the end of its life is not required to be returned to your dealer. It must be disposed of carefully by an approved collection and recycling facility in your area.

7.2. Warranty

Visit the SAJ website for warranty conditions and terms: https://www.saj-electric.com/.

7.3. Contact SAJ

Online technical support: Go to https://www.saj-electric.com/services-support-technical to check FAQs or send your message or product enquiry.

Call for assistance: For SAJ support telephone numbers, see https://www.saj-electric.com/locations for your region support details.

Head Quarter: Guangzhou Sanjing Electric Co., LTD.

Address: SAJ Innovation Park, No.9, Lizhishan Road, Guangzhou Science City, Guangdong, P.R.China.

Tel: +86 20 6660 8588

E-mail: service@saj-electric.com

Website: https://www.saj-electric.com/

7.4. Trademark

SAJ is the trademark of Sanjing.