# Microinverter User Manual

Mango Power S
Mango Power S Pro




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MANGO POWER

# Preface

## Overview

This document primarily introduces the functional features, electrical parameters, product structure, and installation of microinverters.
The images in this document are for reference only, and the actual product shall prevail.

## Intended Audience

- This document is mainly intended for:
- Technical personnel responsible for the installation, operation, and maintenance of this microinverter.
- Sales engineers.
- Technical support engineers.

## Symbol Definitions

The following symbols are used in this manual, with their meanings defined as follows:

| | |
|---|---|
| Danger | Indicates a high-risk hazard that may cause death, severe injury, or fire. |
| Warning | Indicates a medium-risk hazard that may result in moderate injury or equipment damage. |
| Caution | Indicates a low-risk hazard that could lead to minor injury or equipment damage. |
| Note | Provides supplementary explanations for key information in the text. "Note" is not a safety warning and does not pertain to hazards involving personnel, equipment, or environmental damage. |


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# Safety Precautions

The MANGO POWER S-series microinverters have passed international safety standard certifications and possess high safety performance. However, to ensure personal and equipment safety, the following safety instructions must be observed.

## 1.1 General Safety Instructions

- When performing any operations on this product, strictly adhere to the relevant equipment precautions and special safety instructions provided by Mango Power. Personnel responsible for installing, maintaining, or operating Mango Power equipment must undergo rigorous training to understand all safety precautions and master correct operational procedures before performing any work. Mango Power shall not be held liable for any consequences resulting from violations of general safety requirements or equipment safety standards.
- Before starting any operation, carefully read the precautions and operating instructions in this manual to prevent accidents. The "Danger," "Warning," and "Caution" notices in this manual do not cover all safety requirements but serve as supplementary safety reminders for various operations.
- Operators must comply with local laws and regulations. The safety precautions in this manual are only supplementary to local safety standards.
- Do not operate the equipment or cables during thunderstorms.
- Only use specialized insulated tools during operations.
- Use a torque wrench to fasten screws and implement a dual-check system with red and blue markings:
- The installer applies blue marking after confirming proper tightening.
- The inspector applies red marking after verification.
- Failure to tighten screws/bolts to the specified torque may cause equipment detachment.
- Installation and maintenance must follow the prescribed sequence. Do not modify the device structure or installation order without manufacturer approval.
- Installation must strictly comply with the Quick Guide requirements.
- This product can cause current with a d.c. component. Where a residual currentoperated protective (RCD) or monitoring (RCM) device is used for protection in case ofdirect or indirect contact, only an RCD or RCM of Type Bis allowed on the supply sideof this product.

## 1.2 Personnel Requirements

- Installation, electrical connection, maintenance, troubleshooting, and replacement of microinverters must be performed by qualified electrical technicians.
- Operators must receive professional training.
- Operators must read this manual thoroughly and understand all relevant safety precautions.
- Operators must be familiar with electrical safety regulations.
- Operators must fully understand the structure, working principles, and local standards of the PV grid-connected power system.
- Operators must wear personal protective equipment (PPE).
- The PIPV output shall only be connected to a designated PIPV receptacle installed by a qualified person in accordance with NEC (NFPA 70). Do not use plugs, receptacles or connectors not specified by the manufacturer.
- The PIPV device shall be the only equipment connected to the dedicated branch circuit. All circuit components shall be rated for bidirectional current flow. Circuit breakers shall be suitable for reverse current flow.


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## 1.3 System Installation

- Before connecting the microinverter to the grid, consult the local power utility. Only connect the microinverter to the grid after obtaining approval.
- The microinverter input must only connect to a single PV module.  Do not connect batteries or other power sources directly.
- Maintain sufficient clearance between the microinverter and surrounding objects to ensure proper installation spacing and heat dissipation.

## 1.4 Electrical Connections

Danger

- Before electrical connection, ensure the microinverter is undamaged—otherwise, electric shock or fire may occur.
- All electrical connections must comply with local/national electrical standards.
- Cables used in the PV grid-connected system must be securely connected, well-insulated, and of appropriate specifications.

## 1.5 Operation

Danger

- The output terminals and AC cables of an operating microinverter carry high voltage, which may cause electric shock, severe injury, death, or property damage. Follow all safety instructions in this manual and related documents strictly.
- The microinverter becomes hot during operation—do not touch to avoid burns.
- All operations must comply with local laws and regulations.
- Do not stand, walk, sit, lean, hang from, or play on the PIPV system. Do not immerse in liquid. Do not expose to concentrated light. Do not operate damaged equipment. Surfaces may become hot during sun exposure.

## 1.6 Maintenance and Replacement

Danger

- Before performing any maintenance, power off the microinverter—the output and AC cables remain hazardous and may cause electric shock, severe injury, or death. Follow all safety instructions in this manual strictly.
- Only qualified professionals with proper tools and testing equipment should service the microinverter.
- During maintenance, restrict unauthorized personnel access and use temporary warning signs or barriers for isolation.
- Do not re-energize the microinverter until all faults are resolved, or further damage may occur.
- Follow electrostatic discharge (ESD) protection measures and wear anti-static gloves during maintenance.
- Where permitted, connection shall be made only to a modified branch circuit installed by a qualified person in accordance with NEC

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## 1.7 Warranty Disclaimer

Mango Power reserves the right to void the warranty under the following conditions:

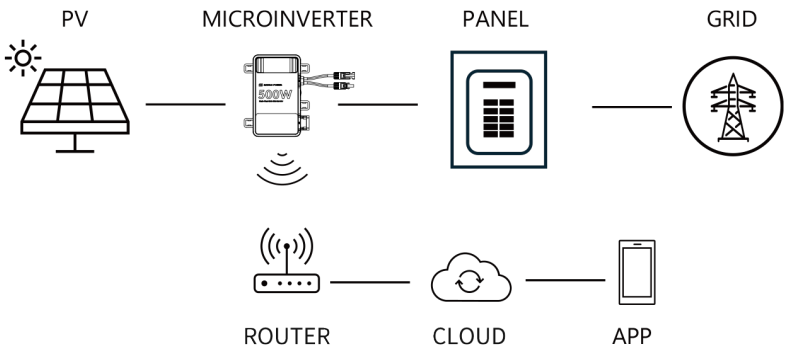
- Damage during transportation.
- Damage due to improper storage conditions (not meeting product documentation requirements).
- Incorrect installation or usage.
- Installation/operation by unqualified personnel.
- Failure to follow operational instructions or safety warnings in the product documentation.
- Operation in harsh environments beyond product/documentation specifications.
- Operation outside specified technical parameter limits.
- Unauthorized disassembly, modification, or firmware tampering.
- Damage caused by natural disasters (force majeure, e.g., lightning, fire, storms).
- Expired warranty period without an extended service agreement.
- Installation/operation conditions exceeding relevant international standards.

# Product Introduction

## 2.1 Product Overview

### Microinverter Introduction

The microinverter is a device that converts the direct current (DC) generated by PV modules into grid-compliant alternating current (AC) and feeds the electricity into the grid.
Equipped with a built-in MPPT (Maximum Power Point Tracking) system, this product ensures each PV module operates at its optimal efficiency, significantly improving power generation.
With an IP68 outdoor protection rating and a 25-year warranty, this microinverter delivers exceptional stability and reliability.
To form a photovoltaic power generation system, the micro-inverter needs to connect to your home router via its built-in Wi-Fi module to establish a network connection. The micro-inverter will then transmit various data to the monitoring platform, which will subsequently relay the information to the mobile app. The overall system architecture is as shown below:





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This series of micro-inverters utilizes Wi-Fi for communication. It primarily features the following:

- Gateway-Free Design: By leveraging your home router and the distributed architecture of the micro-inverters, the system eliminates the need for a traditional gateway, reducing deployment costs for the user.
- Self-Healing Network: The network operates without manual intervention. Nodes can automatically discover and join the network. If a node fails or drops off the network, the system automatically rebuilds the routing path, ensuring seamless communication and high reliability.
- Flexible Expansion & Boundless Coverage: The network scale can be easily adjusted. Relying on the distributed Wi-Fi architecture, deployment is more flexible, reducing dependency on the main router's signal strength.

## Product Models

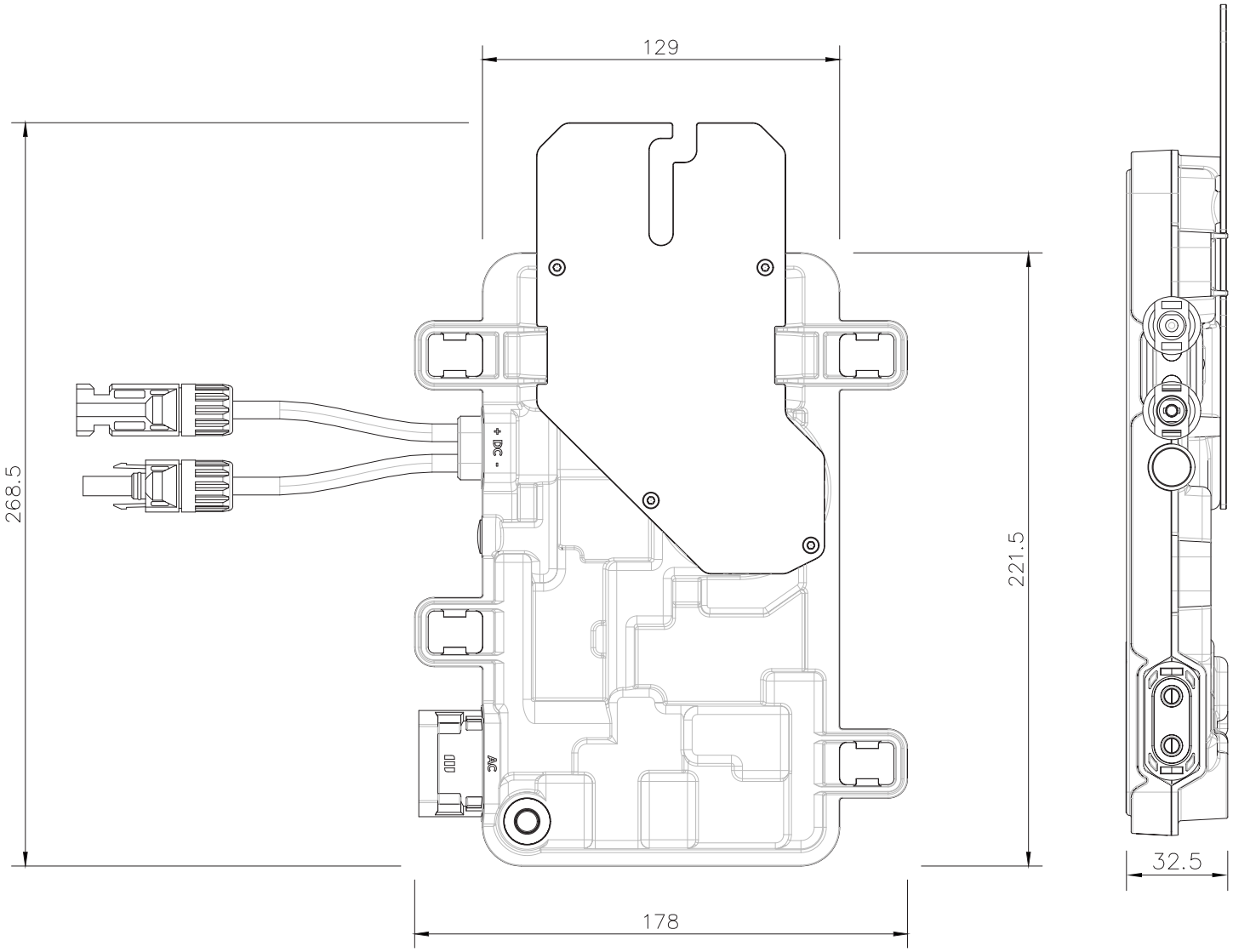
This manual covers the following product models:

- LBZ-PV-500
- LBZ-PV-400

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## 2.2 Product Structure

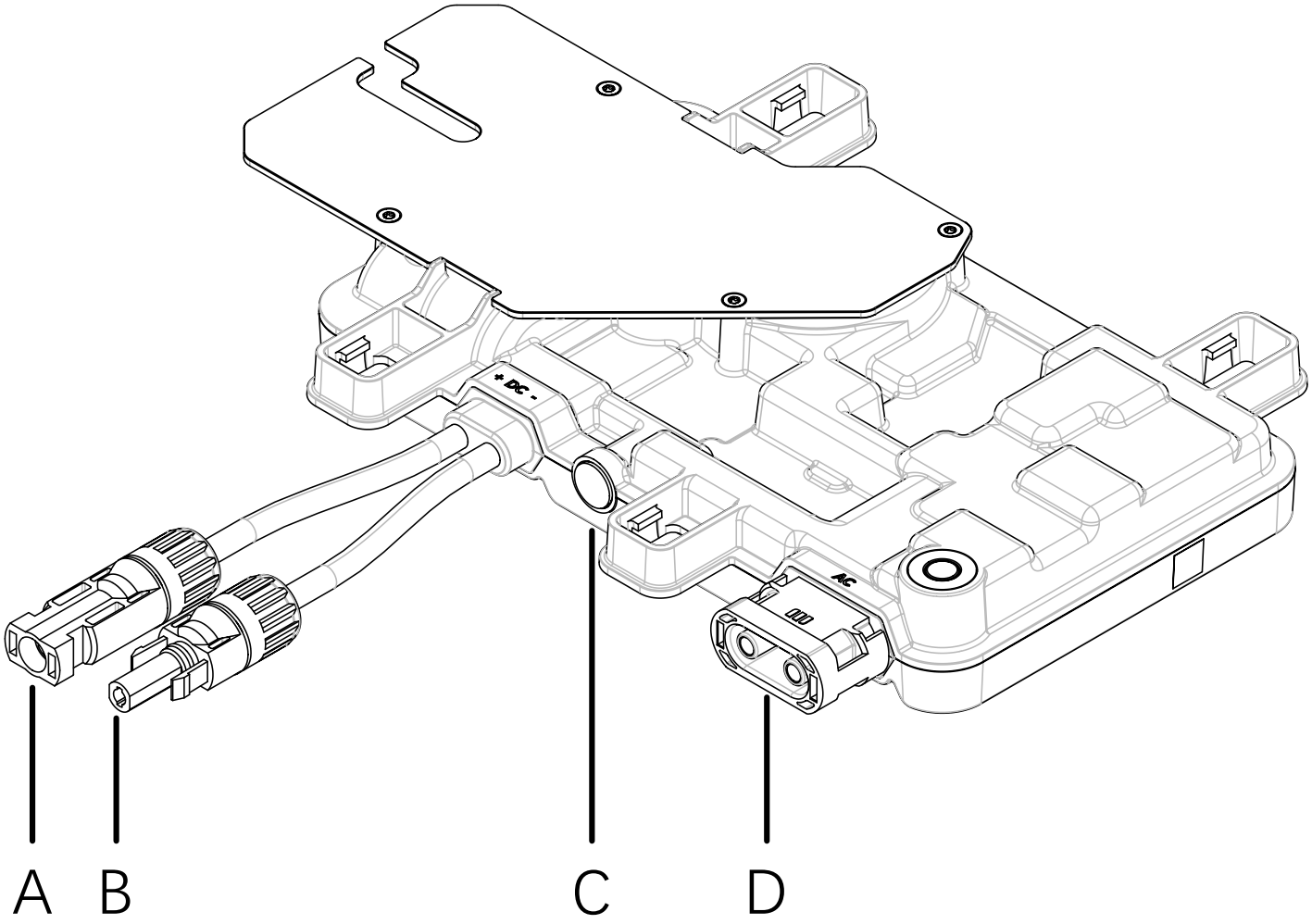
Product Appearance & Dimensions





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## Microinverter Connection Interfaces




A. DC Connector +  B. DC Connector -  C. LED  D. AC Connector

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# Installation Instructions

## 3.1 Installation Preparation

### Pre-Installation Inspection

- Packaging check. Before unpacking the product, inspect the outer packaging for visible damage such as holes, cracks, or any signs that may indicate internal damage. Verify that the microinverter model number is correct. If any packaging abnormalities are found or if the microinverter model does not match, do not open the package and contact your distributor immediately.

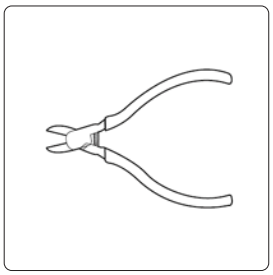
Note

It is advised to remove the outer packaging no more than 24 hours prior to installing the microinverter.

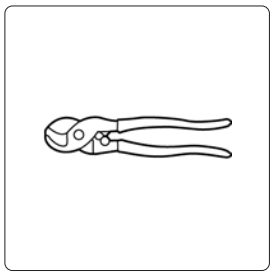
- After unpacking the microinverter, inspect all delivered components for completeness and any obvious external damage. If any items are missing or damaged, contact your distributor.

## Required Installation Tools

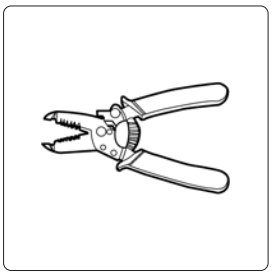
**Installation Tools**



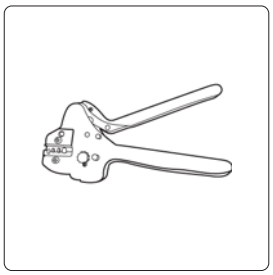
Lineman's pliers



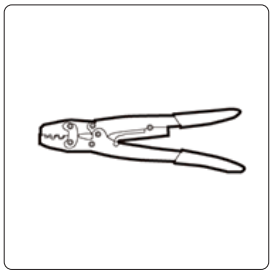
Wire cutters



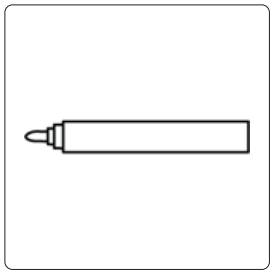
Wire cutters



Wire crimper



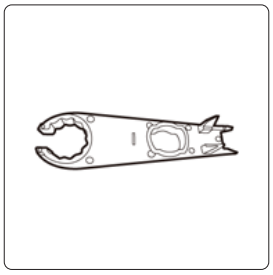
OT terminal crimping tool



Marker pen

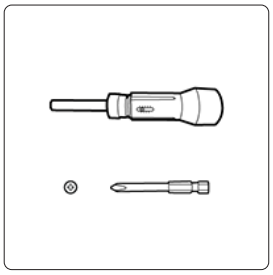


Socket wrench set

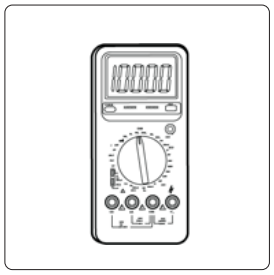


Custom disassembly tool

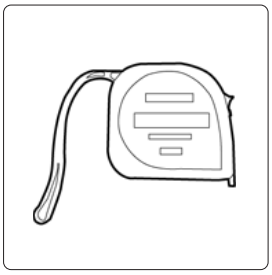

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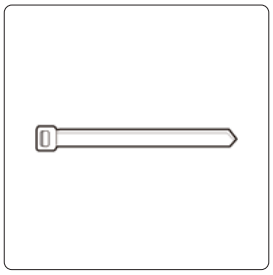
Custom removal tool



Multimeter

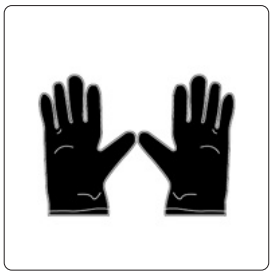


Steel tape measure



Cable tie

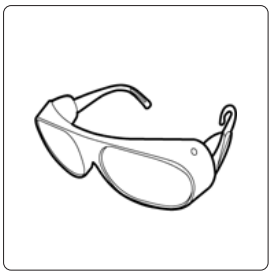
### Protective Tools



Safety gloves



Dust mask



Safety goggles



Safety shoes

## Installation Location Requirements

- Environmental conditions must comply with the protection rating, temperature, humidity, altitude and other requirements specified in the "Technical Specifications" section of the microinverter.
- During operation, the microinverter's casing becomes hot. Do not install in easily accessible locations.
- Do not install within children's reach.
- Do not install microinverters on flammable building materials.
- Microinverters must be installed below PV modules to avoid direct sunlight, rain exposure, or water accumulation.
- Install with the microinverter's label facing downward, opposite to the PV module.
- After installation, maintain at least 2cm clearance around the microinverter casing for heat dissipation.
- Before installation, ensure the entire system is electrically disconnected and PV modules are covered or isolated.
- Avoid installation in areas with strong electromagnetic interference as this may affect normal operation of electronic equipment.
- For PIPV systems, the following requirements must still be strictly observed during installation：

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| Parameter | Specification & Operational Limit |
|---|---|
| Permitted Locations | Ground, balcony railings, patios, decks, and compliant exterior walls |
| Max. Installation Height | Max. 4.0 m (13 ft) above ground level for end-user DIY installation; height > 4.0 m requires professional structural assessment |
| Tilt Angle Range | 0° to 60° adjustable (locking mechanisms must be fully secured at the designated angle) |
| Max. Wind Load | 2400 Pa (resistant to wind speeds up to 130 km/h / Beaufort Force 12) |
| Max. Snow Load | 5400 Pa (equivalent to snow accumulation up to 540 kg/m²) |
| Seismic Limit | Peak ground acceleration ≤ 0.3g (suitable for seismic zones up to Magnitude 8 equivalent) |
| Fire Separation Distance | Minimum clearance of 1.0 m (3.3 ft) from emergency exits, windows, and flammable materials |
| Secondary Retention | Mandatory for elevated/balcony installations; requires an independent ≥ 3 mm 304 stainless steel safety tether locked to the primary structure |

## PV Module to Microinverter Connection Requirements

Connect the PV module's MC4 connectors to the microinverter's DC ports.

Note

The PV module's open-circuit voltage must not exceed the maximum allowable DC input voltage of the microinverter. Exceeding this voltage may cause the microinverter to malfunction.
The "+" and "-" symbols on the microinverter's DC ports indicate port type only (not current direction): "+" denotes male connector, "-" denotes female connector.

## Maximum Number of Microinverters per AC Branch Circuit

The Mango Power S-Series microinverter system provides dedicated 10AWG and 12AWG plug-and-play AC cables. The maximum number of microinverters per AC branch circuit is as follows:

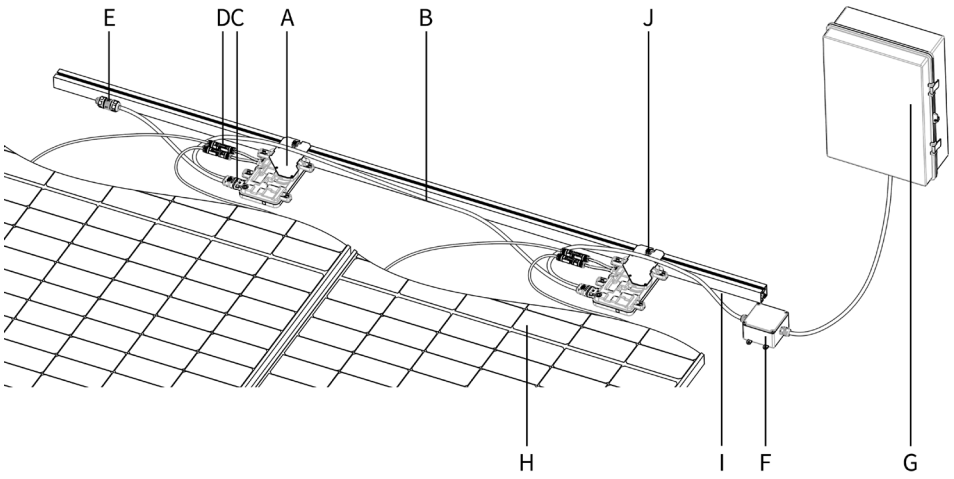
| Model | Power | Maximum Number of Microinverters per AC Branch Circuit (20A) | Maximum Number of Microinverters per AC Branch Circuit (30A) |
|---|---|---|---|
| Mango Power S | 400W | 9 | 13 |
| Mango Power S Pro | 500W | 7 | 11 |

Note

The following section is based on 12AWG (20A) cable specifications. If using 10AWG (30A) cables, the circuit breaker must be replaced with a 30A model.


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## Microinverter Overall Installation Diagram




| | |
|---|---|
| A | Microinverter |
| B | AC Busbar |
| C | AC Connector |
| D | DC Connector |
| E | End Cap |
| F | AC Junction Box |
| G | Combiner Box |
| H | PV Panel |
| I | Mounting Bracket |
| J | T-Bolt |

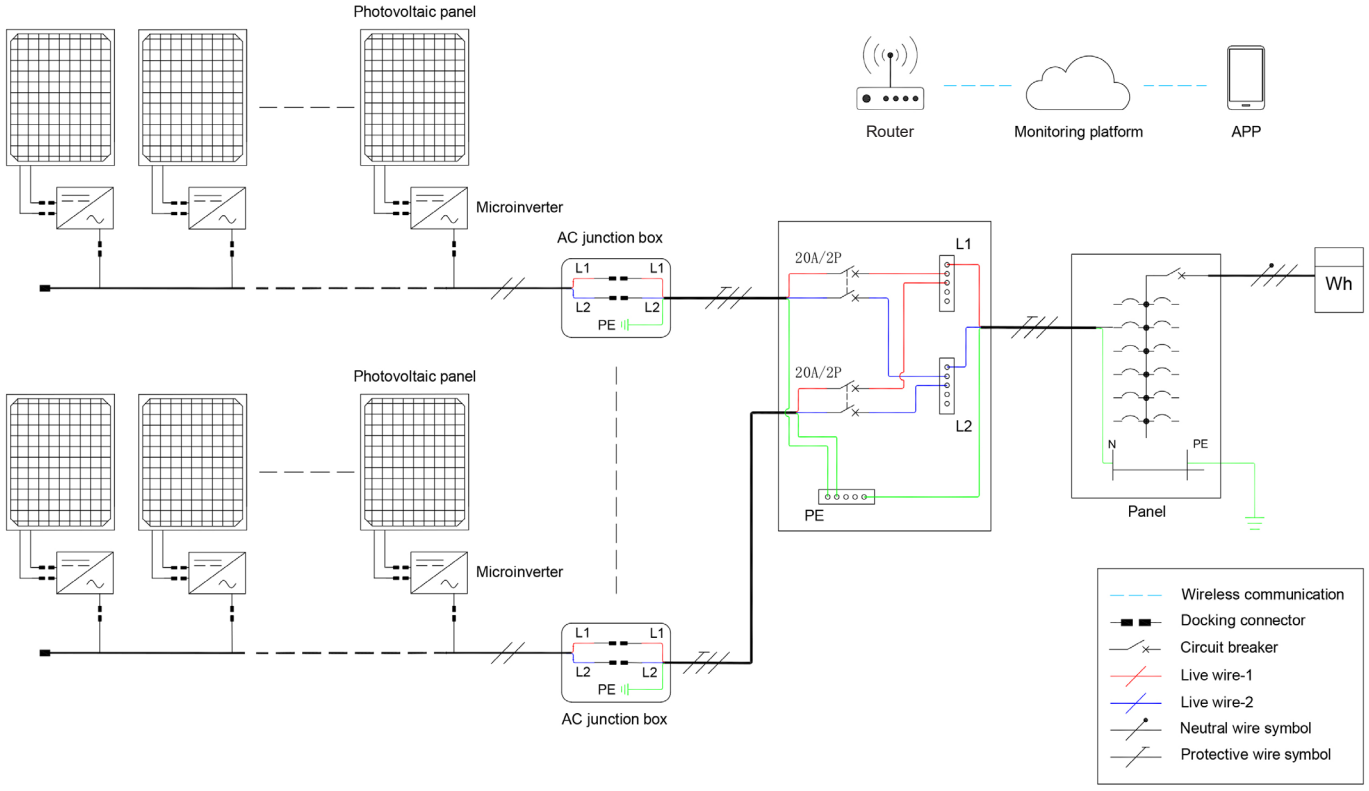
## 3.2 Product Wiring Diagram

The Mango Power S-Series microinverter system can be applied to single-phase or three-phase grids, as shown in the diagrams below.

Note

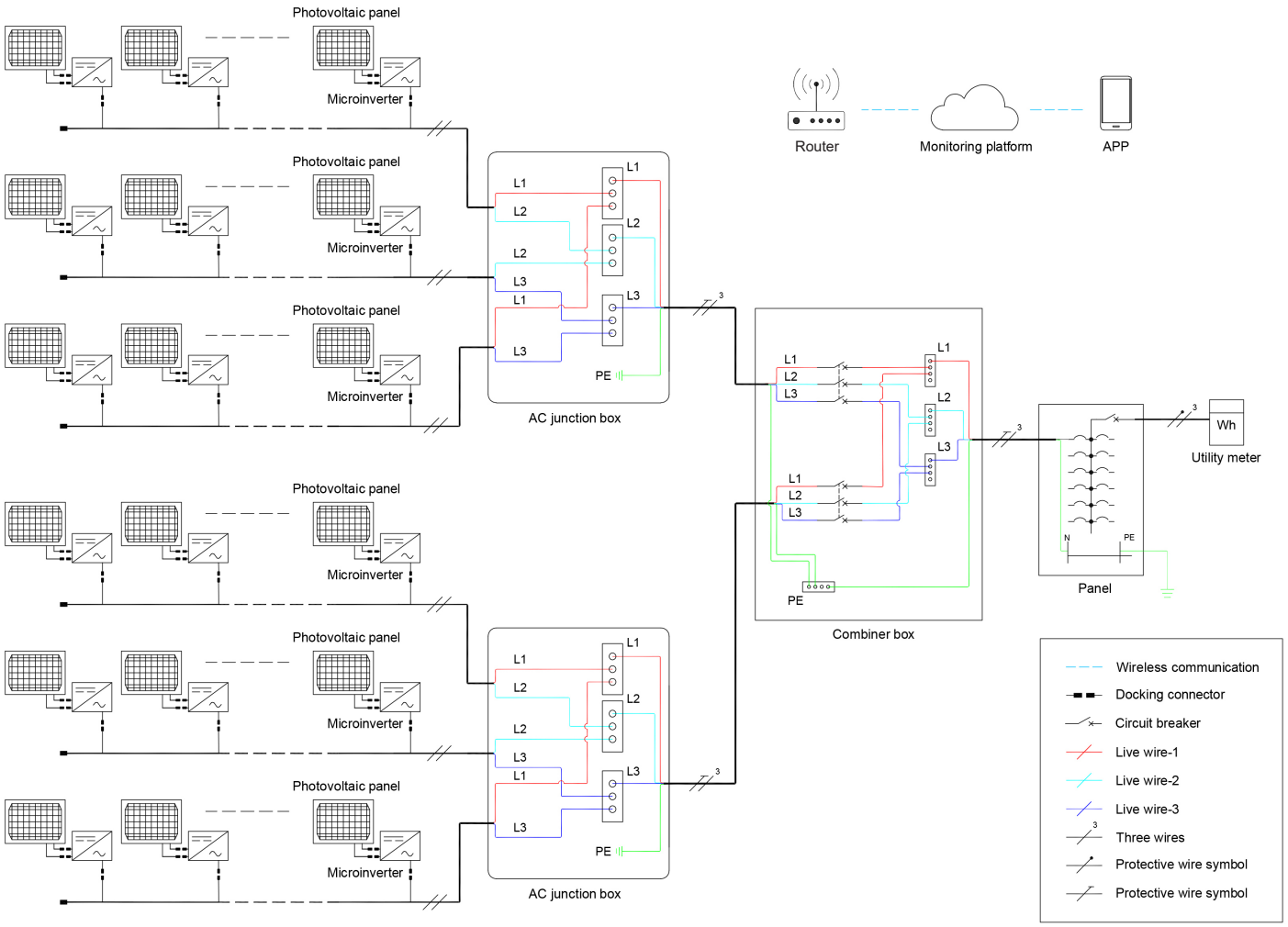
During wiring, measure each branch's voltage to ensure it does not exceed the microinverter's voltage range.

## Single-phase Wiring Diagram




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# Three-phase Wiring Diagram



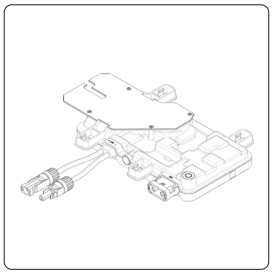
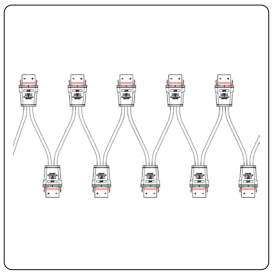
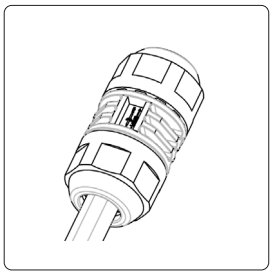
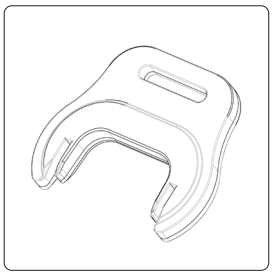


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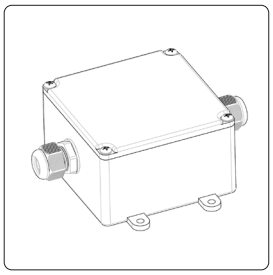
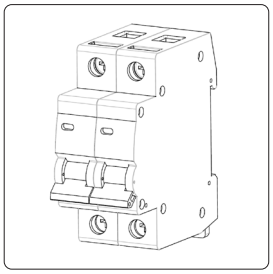
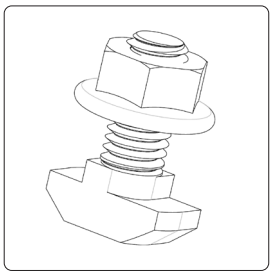
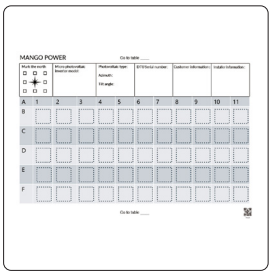
## 3.3 Product Installation

Product & Accessories Checklist

Before installation, verify the following components are included:

| Diagram | Description | Purpose |
|---|---|---|
|  | Microinverter | Core device that converts DC to AC |
|  | AC Branch Busbar* | Cable for combining AC output from multiple inverters |
|  | End Cap* | Protects unused cable ends to prevent leakage |
|  | Connector Removal Tool* | Used to disconnect AC connectors when needed |

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| Diagram | Description | Purpose |
| --- | --- | --- |
|  | AC Junction Box* | Combines and grounds each branch circuit |
|  | 20A Circuit Breaker* | Protects microinverters and household equipment per branch |
|  | T-Bolt M8x20* | Secures the microinverter in place |
|  | SN Map | Records serial numbers and determines installation positions |
|  | Quick Installation Guide | Provides step-by-step installation instructions |


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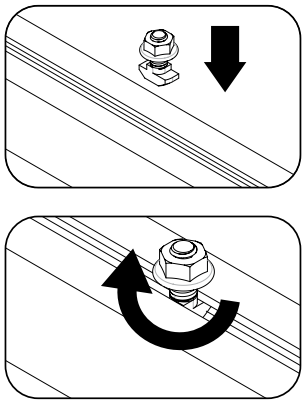
Note

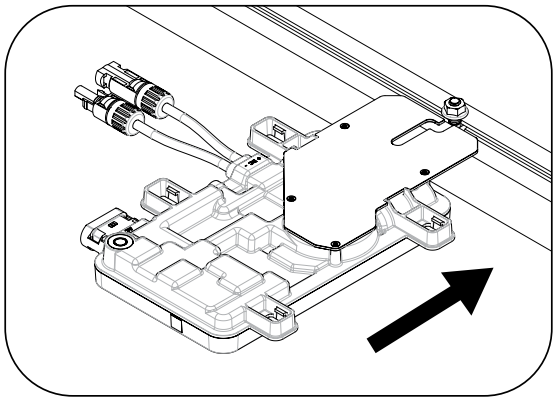
Items marked with * are not included in the microinverter package and must be purchased separately.

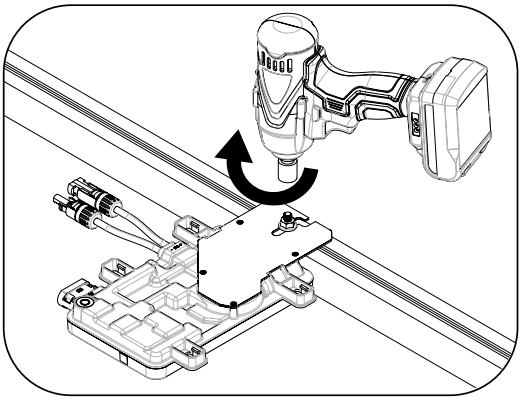
## 1. Installation Steps

### 1. Install Microinverters

1.1 After mounting PV module rails, mark positions for each microinverter on the rails based on panel layout. Recommended: Center-align under each PV module.
1.2 Install M8×20mm screws on the rails.
1.3 Secure microinverters to screws and tighten to 9N·m torque.







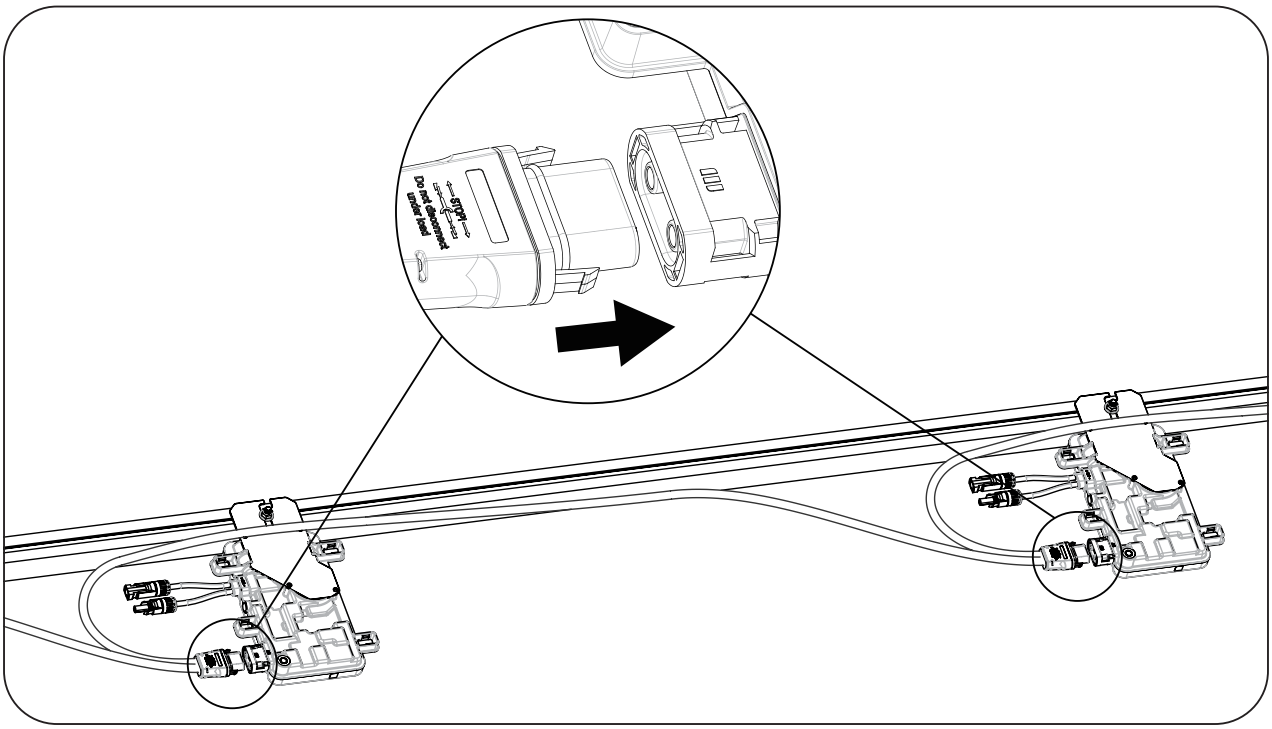
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Caution

- Never pull DC cables of microinverter to move/install microinverters—may damage ports.
- Install under PV modules to avoid direct sunlight, rain, snow, or UV exposure.
- Maintain ≥2cm clearance around microinverters for heat dissipation.
- Use PV extension cables if panel DC cables are too short.

## 2. Connect Microinverters to AC Cables

2.1 Route AC cables along rails, aligning connectors with each microinverter.
2.2 Connect busbar cables to microinverters.



Danger

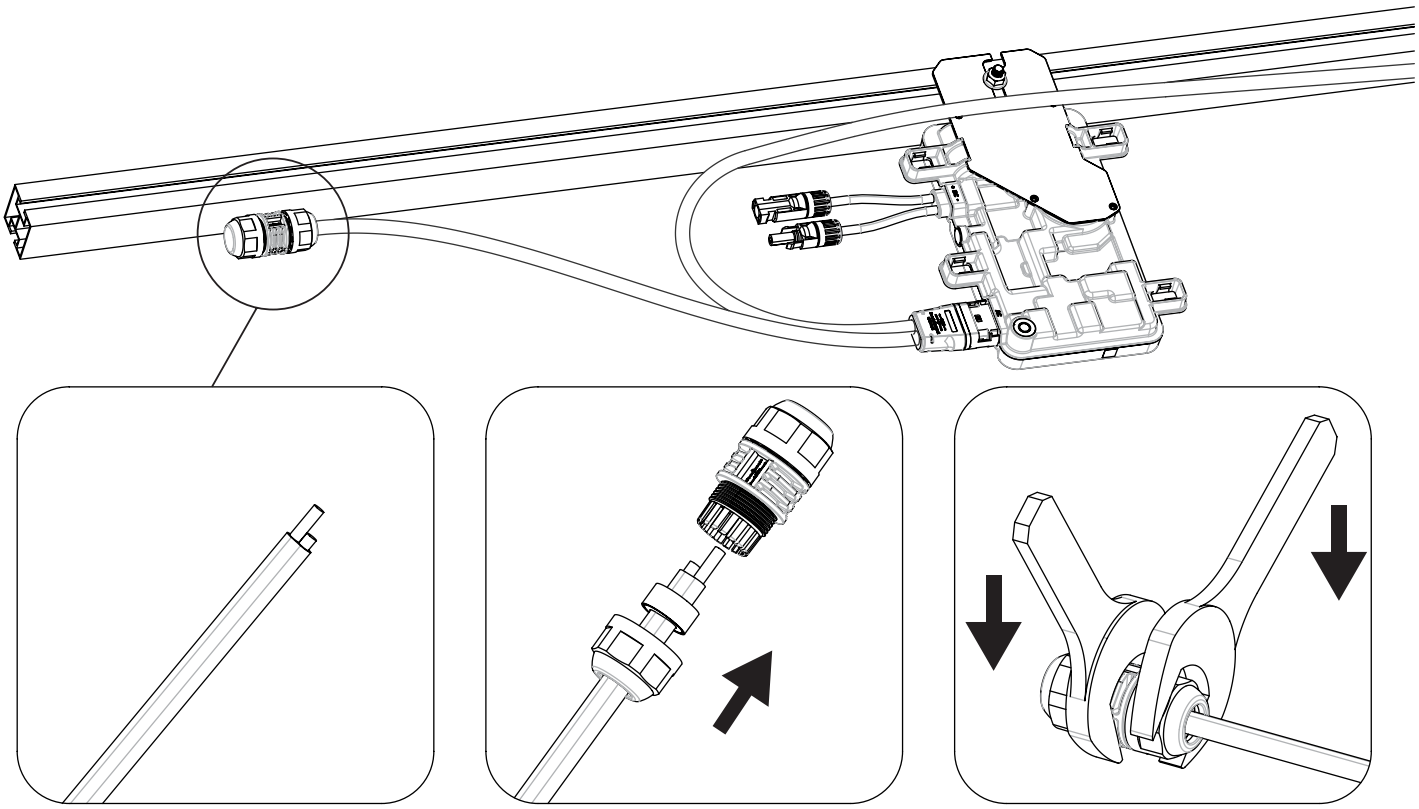
- No maintenance on live AC cables! Risk of electric shock.
- Leave slack in cables to avoid tension; secure to rails with clips.


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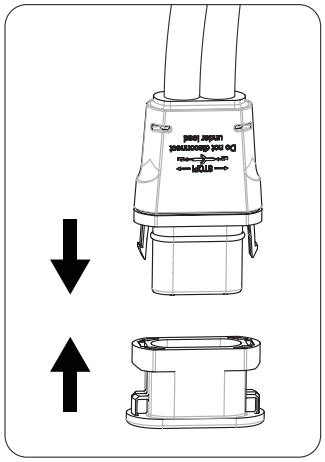
## 3. Seal Unused Cable and AC Ports

### 3.1 Sealing Unused Cable Ends with End Caps.

- Strip cables with 15mm length difference.
- Slide sealing grommet and nut onto cables, then tighten with a wrench.



### 3.2 Sealing Unused Terminals with Seal Caps.



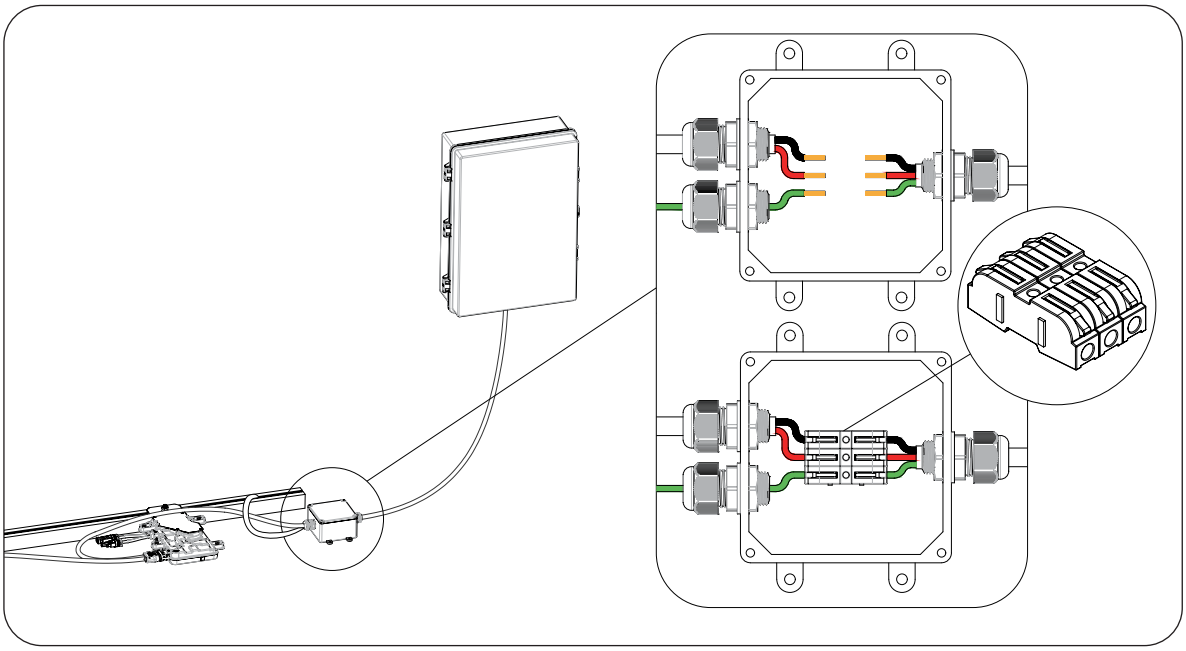
**Danger**

- All exposed conductors must be sealed to prevent shock/fire hazards.

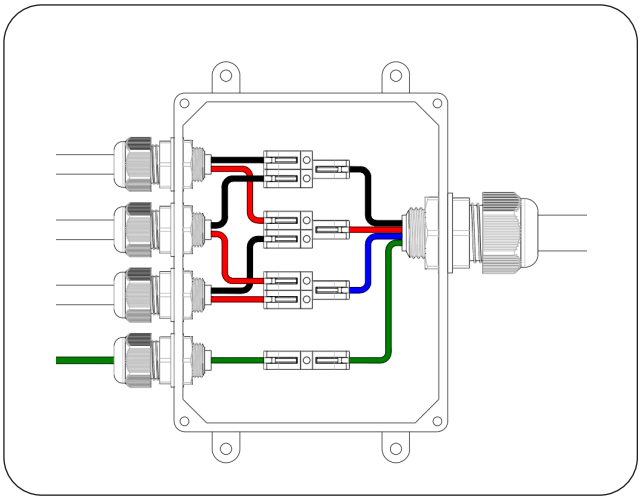
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## 4. Install AC Junction Box

4.1 Strip 25mm cable sheath and 10mm insulation from L/N wires.
4.2 Connect the AC cables to the AC junction box and use the terminal blocks to connect the cables as shown in the diagram below.
4.3 Connect output cables to a 20A breaker combiner box, then to the main household panel.
4.4 Mount the junction box in a dry location.
4.5 Seal covers/interfaces with waterproof adhesive to block moisture.



4.6 For 3-phase systems, use 4-core cables to the combiner box.



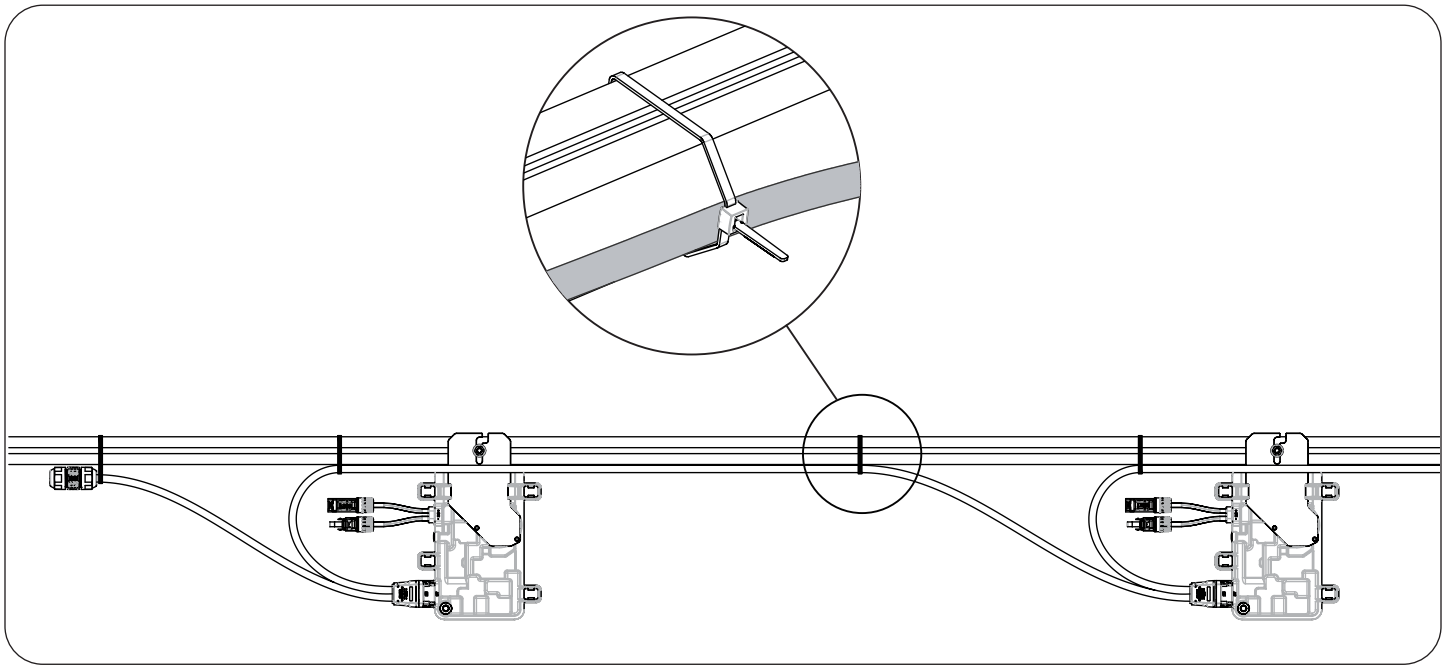
Danger

- It is recommended to use waterproof AC junction boxes. If non-waterproof boxes are used, sealant must be applied to prevent water ingress and potential short circuits.
- During wiring, all exposed conductors must be fully inserted into terminals with no parts exposed to air.


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## 5.Organize AC Cables

5.1 Secure cables to rails with UV-resistant zip ties.
5.2 Bundle excess cables, placing them beneath the photovoltaic modules.

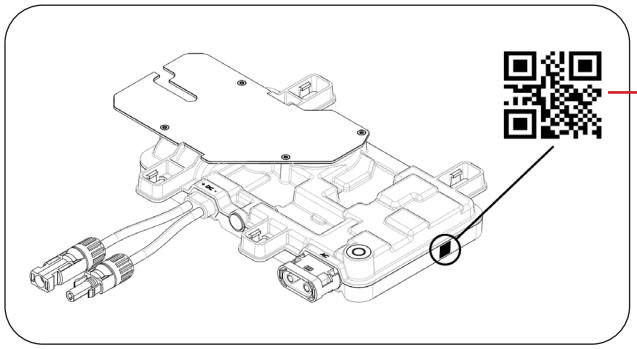


Note

Avoid direct sunlight exposure on zip ties.

## 6.Create Installation Map

Peel SN labels from microinverters and paste them on the map in installation order.



MANGOP OWER Go to table ____

| Mark the north | Micro photovoltaic inverter model: | Photovoltaic type: Azimuth: Tilt angle: | DTU Serial number: | Customer information: | Installer information : |
|---|---|---|---|---|---|

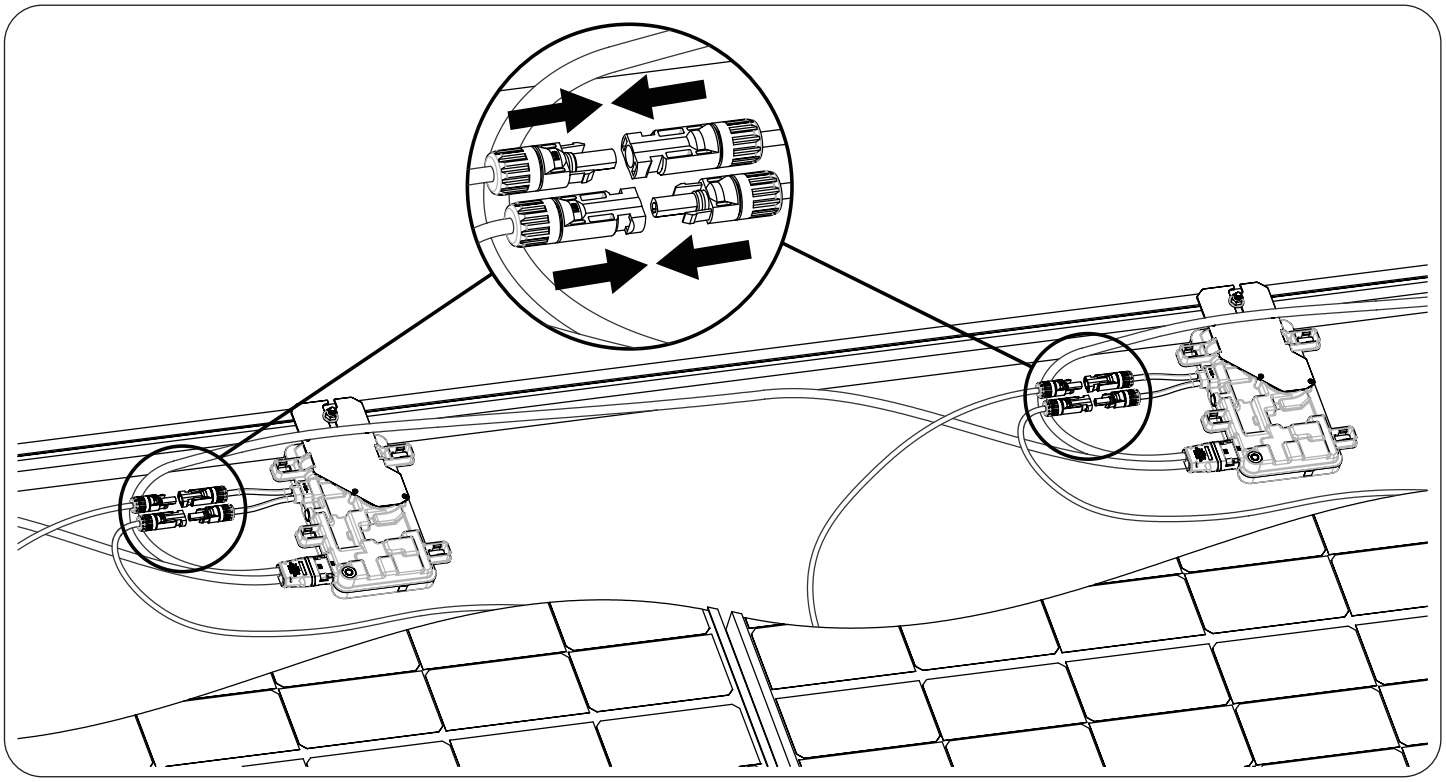
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| B | | | | | | | | | | | |
| C | | | | | | | | | | | |
| D | | | | | | | | | | | |
| E | | | | | | | | | | | |
| F | | | | | | | | | | | |

Go to table ____

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## 7. Connect PV Modules

7.1 Plug PV DC cables into microinverter DC inputs until "click" is heard.
7.2 LED illumination confirms successful connection.
7.3 Mount PV modules onto rails.



Caution

- 1 microinverter per PV module.
- Although the Mango Power S-Series microinverter is compatible with the vast majority of PV modules in the industry, please note that its maximum input voltage must be ≤60V and maximum short-circuit current must be ≤20A. Exceeding these specifications may damage the microinverter.
- Secure excess PV cables with zip ties to rails/microinverter ears.

## 8.Activate System

8.1 Turn on branch circuit breakers first.
8.2 Energize the main household breaker—microinverters will blink green when generating.

Note

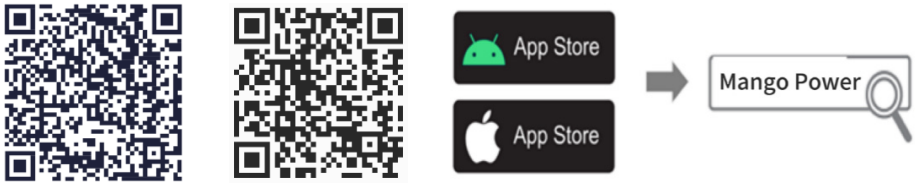
Activate during daylight to verify operation.


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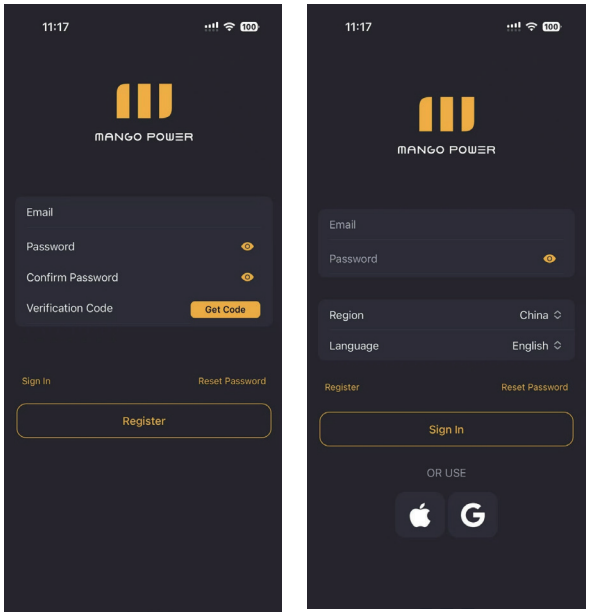
# App Setup & System Commissioning

## 4.1 Download the App

Scan the QR code below to download the MANGO POWER App, or search for "MANGO POWER" in the App Store or Google Play Store.




## 4.2 Register and Log In to the MANGO POWER APP

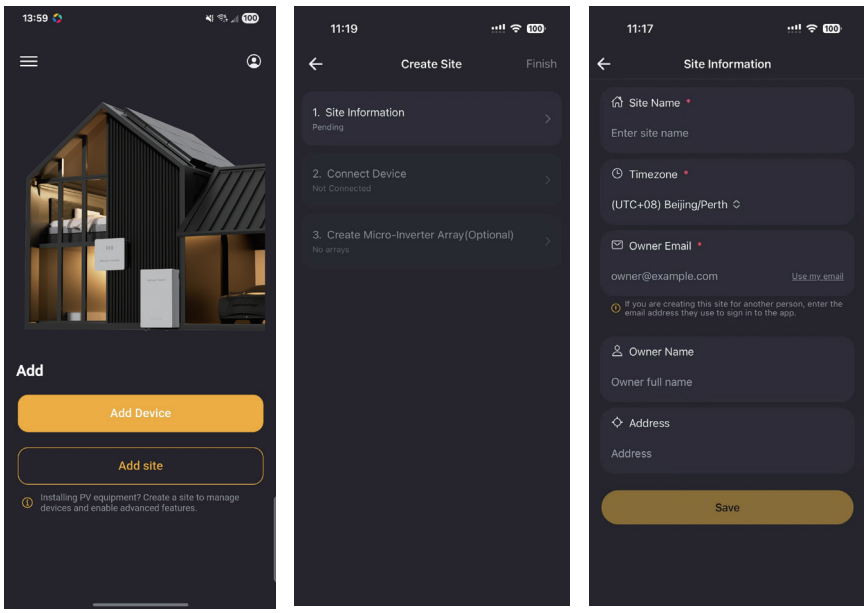



1. Account Registration: Enter a email address → enter the verification code received by email → tap Send Verification Code → tap Register to complete account registration and log in.

Account Login:

1. Email and Password Login: Enter the email address and password, select the region → tap Log In.
2. Third-Party Account Login: Select the region → tap the third-party account icon → confirm authorization to complete registration and login.

## 4.3 Create a Power Station




Tap “Add site”.Enter the basic information of the power station, including the station name, time zone, and owner’s email address.Tap “Save”.

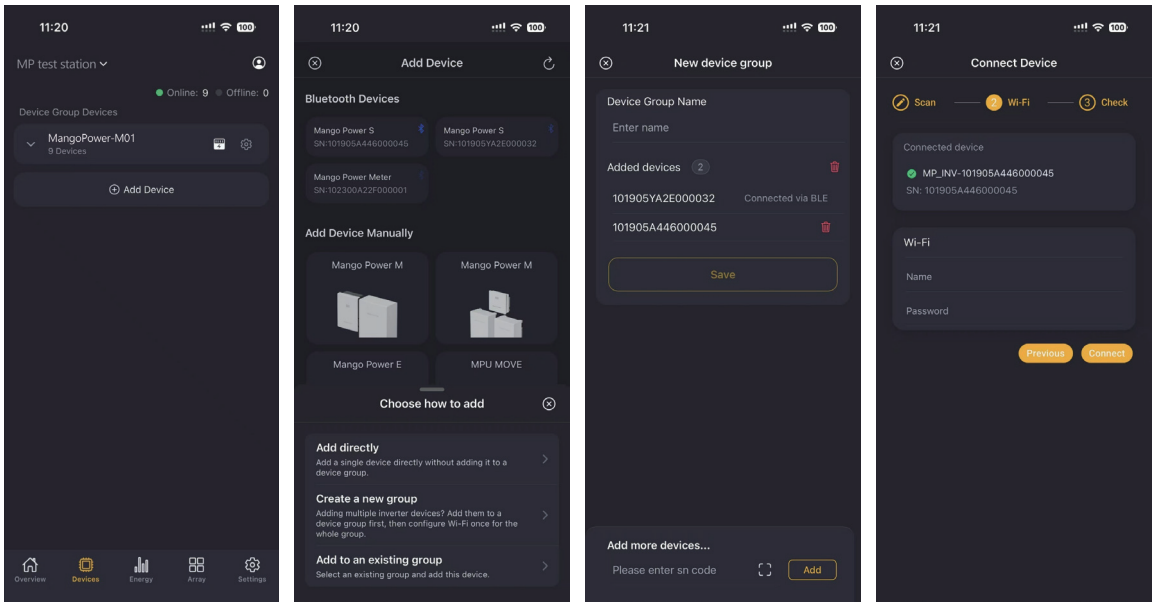
The owner’s email address must be valid. The owner logs in to the APP using this email address to view the power station.

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## 4.4 Create a Device Group

Tap “Add Device” ;
On the pop-up page under “Bluetooth Devices”, select the first device and choose “Create a new group” ;
Enter a custom name in “Device Group Name”, then tap “Save”;
On the power distribution configuration page, enter the SSID and password of the home Wi-Fi network to configure network access for the device group.

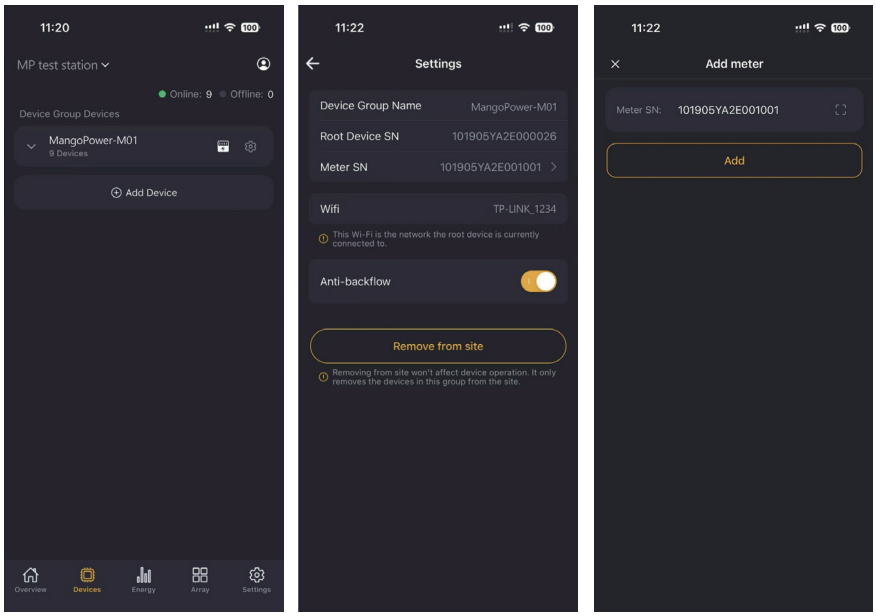
Before performing this step, ensure that Bluetooth on the mobile phone is enabled.




## 4.5A Install and Enable Anti-backflow Meter

Tap the Setting button on the right side of the device group name to enter the device group settings page.
Tap “Anti-backflow”. Scan the QR code or manually enter the meter SN, then tap “Add”.

The anti-reverse current function is enabled by default.



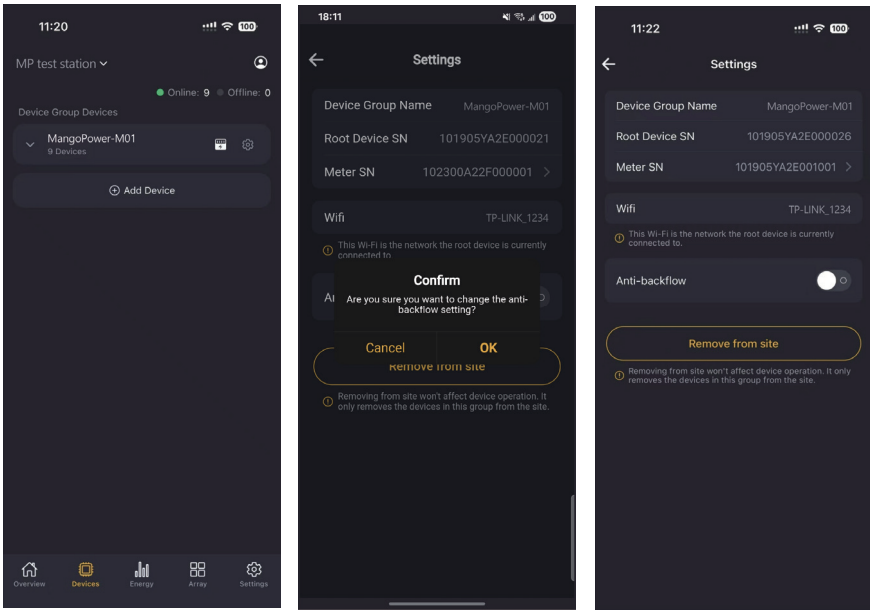


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## 4.5B Disable Anti-backflow Function (Without Meter)

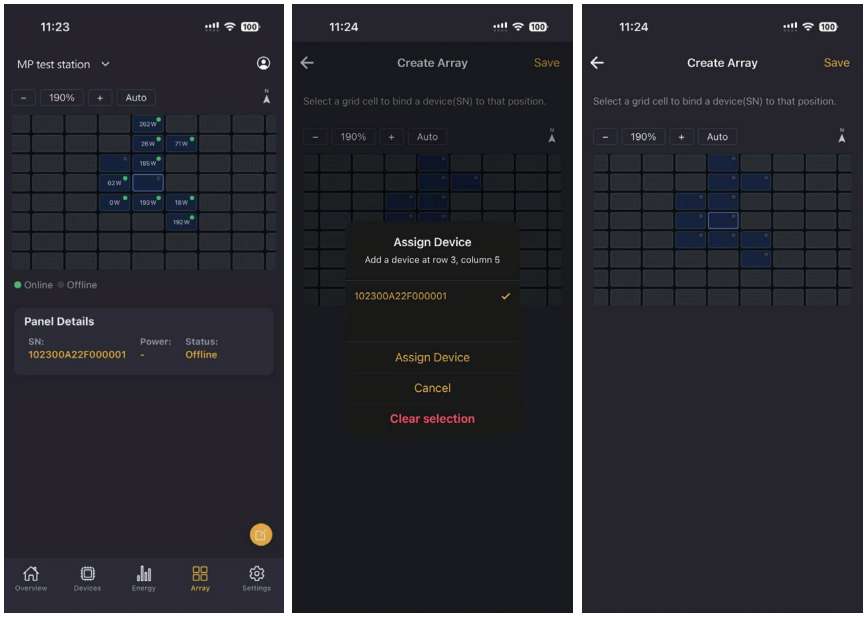
For regions where an anti-reverse current function is not required, the anti-backflow meter does not need to be installed; however, the anti-backflow current function must be manually disabled.

Tap the Setting button on the right side of the device group name to enter the device group settings page.
Tap “Anti-backflow”, then tap “OK” in the pop-up window.
Wait a few seconds until the function is successfully disabled.




## 4.6. Configure Module Layout

On the home page, tap “Array”, then tap “Edit” in the lower-right corner.
Tap any grid cell. In the pop-up window, select the device SN and tap “Assign Device”.
After all devices have been configured, tap “Save” in the upper-right corner.

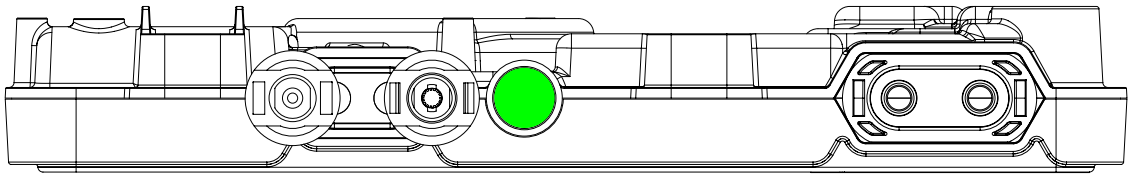



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# Fault Description

## 5.1Microinverter LED Indicator Status

The Mango Power S-Series microinverters are equipped with LED status indicators on the side of the device. The operating status of the microinverter can be determined through these LEDs.



| LED indicator | | | Description |
|---|---|---|---|
| Green Light | Steady Green Light (Duration 5s) | | Microinverter installation environment check in progress |
| | Slow Flashing Green Light (Interval 2s) | | Generating power |
| | Fast Flashing Green Light (Interval 1s) | | Generating power, but microinverter is offline |
| Red Light | Steady Red Light (Duration 6s) | | Microinverter self-check in progress |
| | Slow Flashing Red Light (Interval 2s) | | Abnormal connection with the AC grid |
| | Fast Flashing Red Light (Interval 1s) | | Abnormal connection with the AC grid,microinverter is offline |
| | Steady Red Light | | DC side malfunction |
| Other | Alternating Red and Green Lights (Interval 1s) | | Microinverter is upgrading |
| | No lights on | | PV modules not supplying power |


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## 5.2 Error Codes and Troubleshooting

### Fault List and Handling Methods

Common error codes, their meanings, and recommended solutions are listed in the table below.

| Error Code | Alarm Status | Recommended Solution |
|---|---|---|
| 100 | Microinverter Offline | • Verify the microinverter is functioning normally (check DC voltage and LED status).<br>• Confirm the serial number on the microinverter label matches the one in the monitoring platform.<br>• If frequent alarms persist, contact the local distributor or MP technical support. |
| 102 | Grid Code Misconfiguration | • Restart the microinverter for self-check.<br>• If the issue persists, contact the local distributor or MP technical support. |
| 103 | Remote Shutdown | • Check if the microinverter was manually turned off.<br>• If alarms continue, contact the local distributor or MP technical support. |
| 200 | Device Malfunction | • If occasional alarms occur but the microinverter still works, no action is needed.<br>• If frequent alarms persist, contact the local distributor or MP technical support. |
| 204 | PV Overvoltage | • Ensure the PV module's open-circuit voltage (Voc) does not exceed the maximum input voltage.<br>• If Voc is normal, contact the local distributor or MP technical support. |
| 206 | PV Undervoltage | • Ensure the PV module's Voc meets the minimum input voltage requirement.<br>• If Voc is normal, contact the local distributor or MP technical support. |
| 209 | Wiring Anomaly | • Check if DC connections for Ports 1 and 2 are correct.<br>• Verify AC extension cable wiring. |

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| Error Code | Alarm Status | Recommended Solution |
|---|---|---|
| 300 | Device Malfunction | • If occasional alarms occur but the microinverter still works, no action is needed.<br>• If frequent alarms persist, contact the local distributor or MP technical support. |
| 304 | Grid Overvoltage | • Occasional alarms may indicate temporary grid anomalies. The microinverter will auto-recover once voltage normalizes.<br>• For frequent alarms, check if grid voltage exceeds limits. If so, contact the local utility operator. With their approval, adjust overvoltage protection limits via the MP monitoring platform.<br>• If alarms persist, contact the local distributor or MP technical support to update grid code settings. |
| 306 | Grid Undervoltage | • Occasional alarms may indicate temporary grid anomalies. The microinverter will auto-recover once voltage normalizes.<br>• For frequent alarms, check if grid voltage is below limits. If so, contact the local utility operator. With their approval, adjust undervoltage protection limits via the MP monitoring platform.<br>• If alarms persist, contact the local distributor or MP technical support to update grid code settings. |

Note

If faults occur frequently or remain unresolved, promptly contact the local distributor or Mango Power Technical Support Team.

# Product Maintenance

## 6.1 Routine Maintenance

- Conduct annual inspections of the microinverter PV system, including but not limited to:
  PV modules
  Microinverters
  Cables and connectors
  Ensure all components are in good condition.
- Clean PV modules if significant power generation decline is observed.
- Regularly check and clear obstructions around microinverters to maintain proper ventilation.
- Only authorized personnel may perform maintenance.
- Wear proper PPE during maintenance.


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## 6.2 Product Replacement

### Removal Procedure

For faulty microinverter replacement, contact local distributors or Mango Power Technical Support. Steps:

1. Disconnect the AC branch circuit breaker of the product to be replaced.
2. Cover the corresponding PV module with opaque material.
3. Remove the PV module from rails.
4. Disconnect MC4 terminals between PV module and microinverter using DC disconnect tool.
5. Disconnect AC terminals using AC disconnect tool.
6. Unscrew mounting bolts to remove the microinverter.

### Installation Procedure

1. Record the SN of the new microinverter.
2. Install per Section 3.2, then power on and verify operation.
3. Confirm status via mobile app.

Note

- Use insulated tools and wear dielectric gloves/shoes.
- For multiple replacements, document each SN on the SN map.

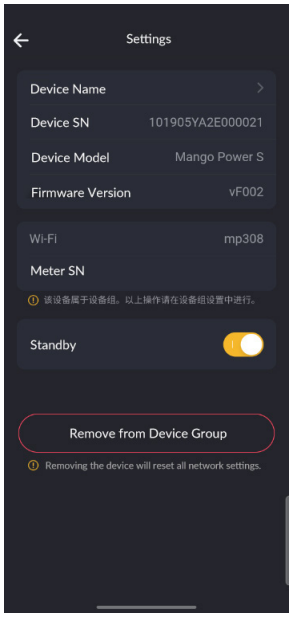
## 6.3 App Operation

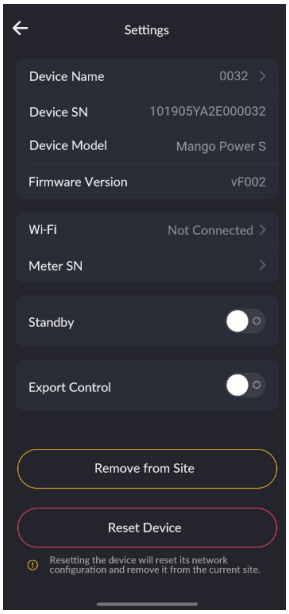
Remove Installed Microinverters from Network.

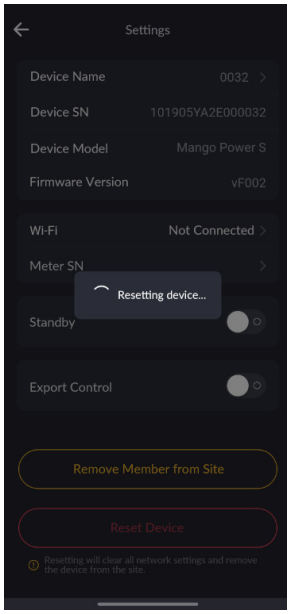
a.Open the device settings page:

- For devices in a group, tap “Remove from Device Group”.
- For devices not in a group, tap “Reset Device”.

b.Wait for the device to reset.



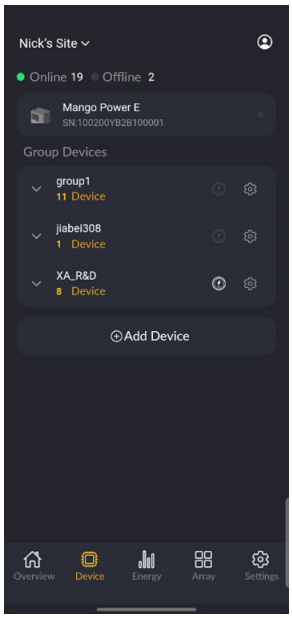




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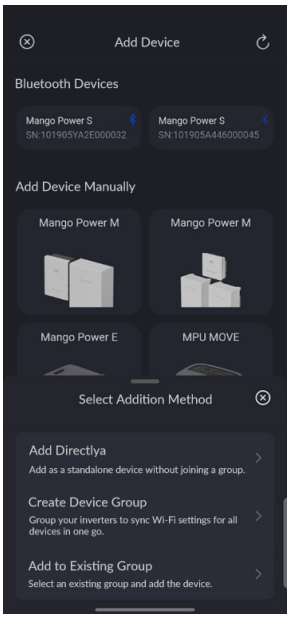
Add New Devices

c. On the device list page, tap “Add Device”.
d. On the Add Device page, tap the device you wish to add.
e. In the pop-up option, select “Add to an Existing Group”.
f. Select the device group and tap “Save”.










Note

- Use insulated tools and wear dielectric gloves/shoes.
- For multiple replacements, document each SN on the SN map.

## 6.4 Post-Replacement

Package removed components and return to Mango Power local warehouse.


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# Technical Specification

| Models | Mango Power S | Mango Power S Pro |
|---|---|---|
| **Input parameters** | | |
| Commonly used module power (W) | 320~540+ | 400~670+ |
| Maximum input voltage (V) | 60 | |
| MPPT voltage range (V) | 16-60 | |
| Peak Power MPPT voltage range (V) | 36-55 | |
| Start-up voltage (V) | 22 | |
| Maximum input current (A) | 16 | |
| Maximum input short circuit current (A) | 25 | |
| Number of MPPTs | 1 | |
| Number of inputs per MPPT | 1 | |
| **Output parameters** | | |
| Nominal output power (VA) | 400 | 500 |
| Maximum continuous output current (A) | 1.67/1.92 | 2.08/2.40 |
| Nominal output voltage/range (V)*1 | 240(L-L)/211-264<br>208(L-L)/183-228 | |
| Nominal frequency/range (Hz) | 60/55-65 | |
| Power factor setting | 0.99 | |
| Power factor (adjustable) | 0.8 leading – 0.8 lagging | |
| Total harmonic distortion | < 3% | |
| Maximum units per branch (12AWG)*2 | 9 | 7 |
| Maximum units per branch (10AWG)*3 | 13 | 11 |

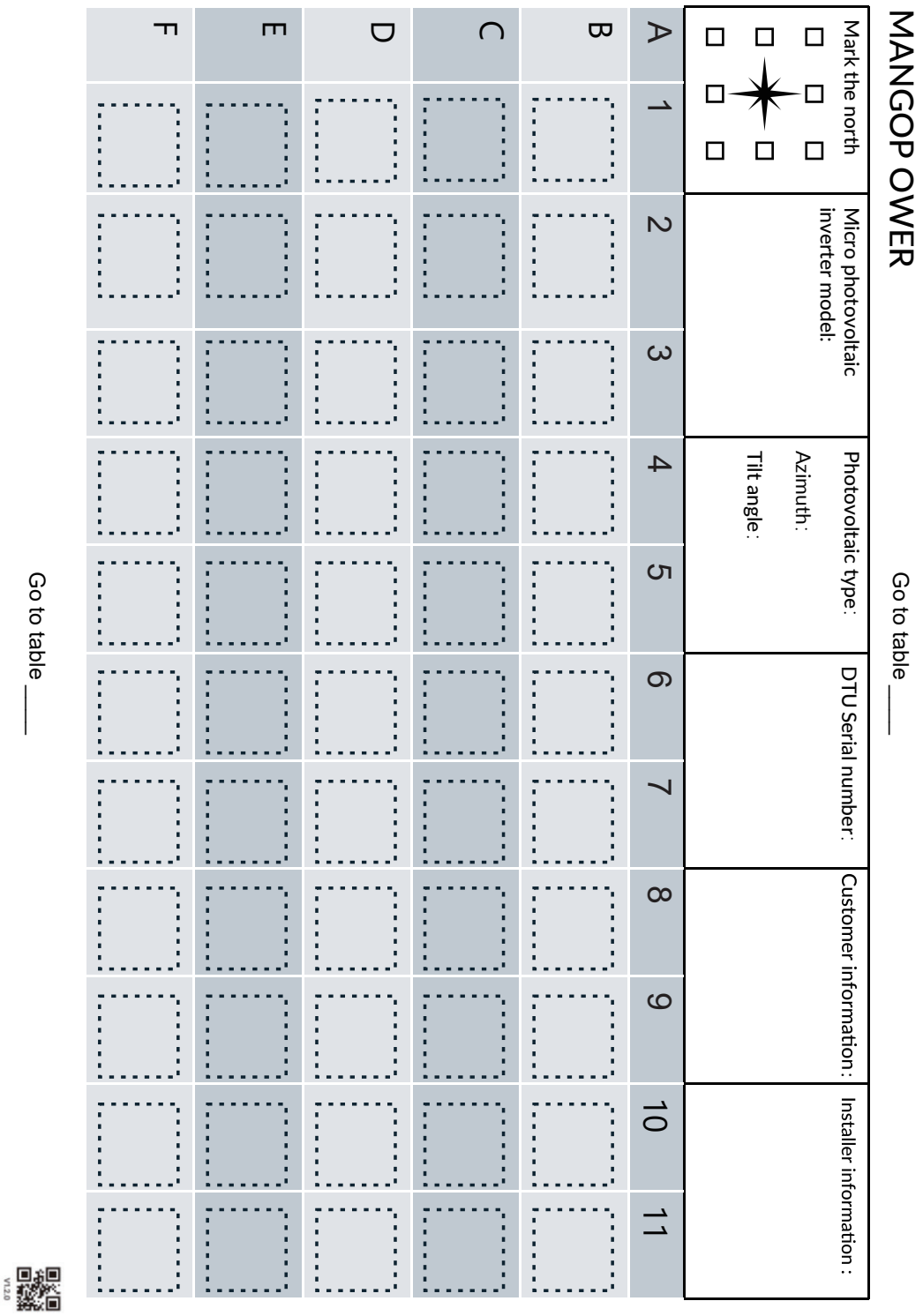
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| | Mango Power S | Mango Power S Pro |
|---|---|---|
| Efficiency parameters | | |
| Peak efficiency | 97.5% | |
| CEC efficiency | 97% | |
| Night power consumption (mW) | <50 | |
| Mechanical parameters | | |
| Operating temperature range (℃) | -40 to +65 | |
| Storage temperature range (℃) | -40 to +85 | |
| Dimensions (L × W × H) [mm] | 221.5 × 129.0 × 32.5 | |
| Weight [without bracket] (kg) | 1.2 | |
| Enclosure rating | NEMA Type 6P /IP68 | |
| Cooling | Natural convection | |
| Pollution degree | III | |
| Enclosure protection class | Class II double-insulated | |
| Altitude (m) | ＜2000（＜6562 ft） | |
| Noise（dB） | ＜25 | |
| Features | | |
| Communication | Wi-Fi Mesh | |
| Indicator | 1 x LED | |
| Warranty | 25 years | |
| Grid Compliance | UL 1741:2023,UL 1741 SA:2021,UL 1741 SB:2021,CSA C22.2 No. 107.1:2021, IEEE 1547:2018,IEEE1547.1:2020,HECO SRD 2.0, FCC Part15 Class B,IEC/EN 61000-6-1/-2/-3/-4,IEC/EN IEC 61000-3-2/-3, This product is UL Listed as PV rapid shutdown equipment and conforms with NEC 2014 , NEC 2017, NEC 2020, NEC 2023 Section 690.12, CEC 2021 Section 64-218 rapid shutdown of PV systems for AC and DC conductors.UL 3700:2025 Ed.1 | |


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# Appendix 1

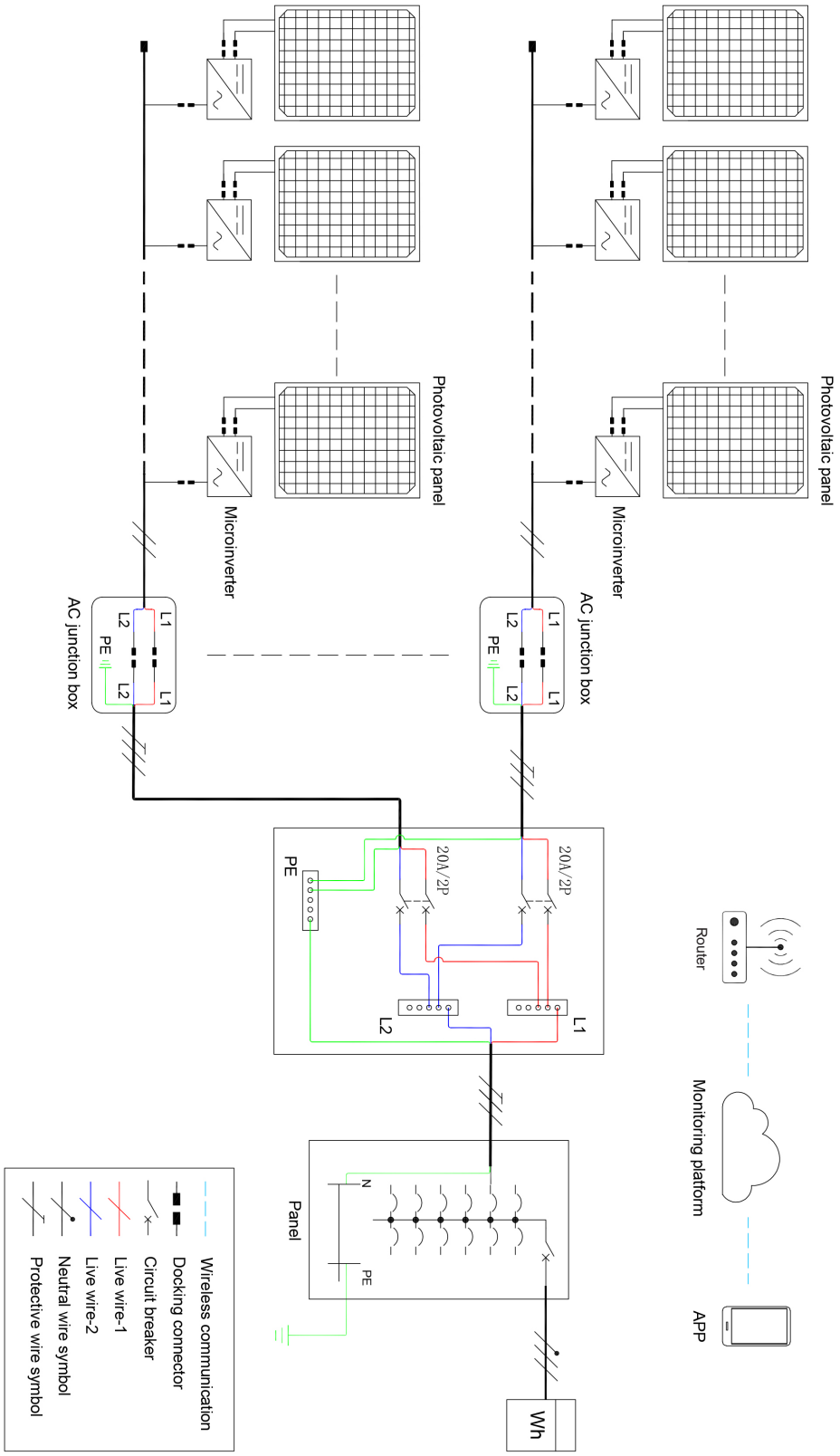
SN Map




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# Appendix 2

Single-phase Wiring Diagram

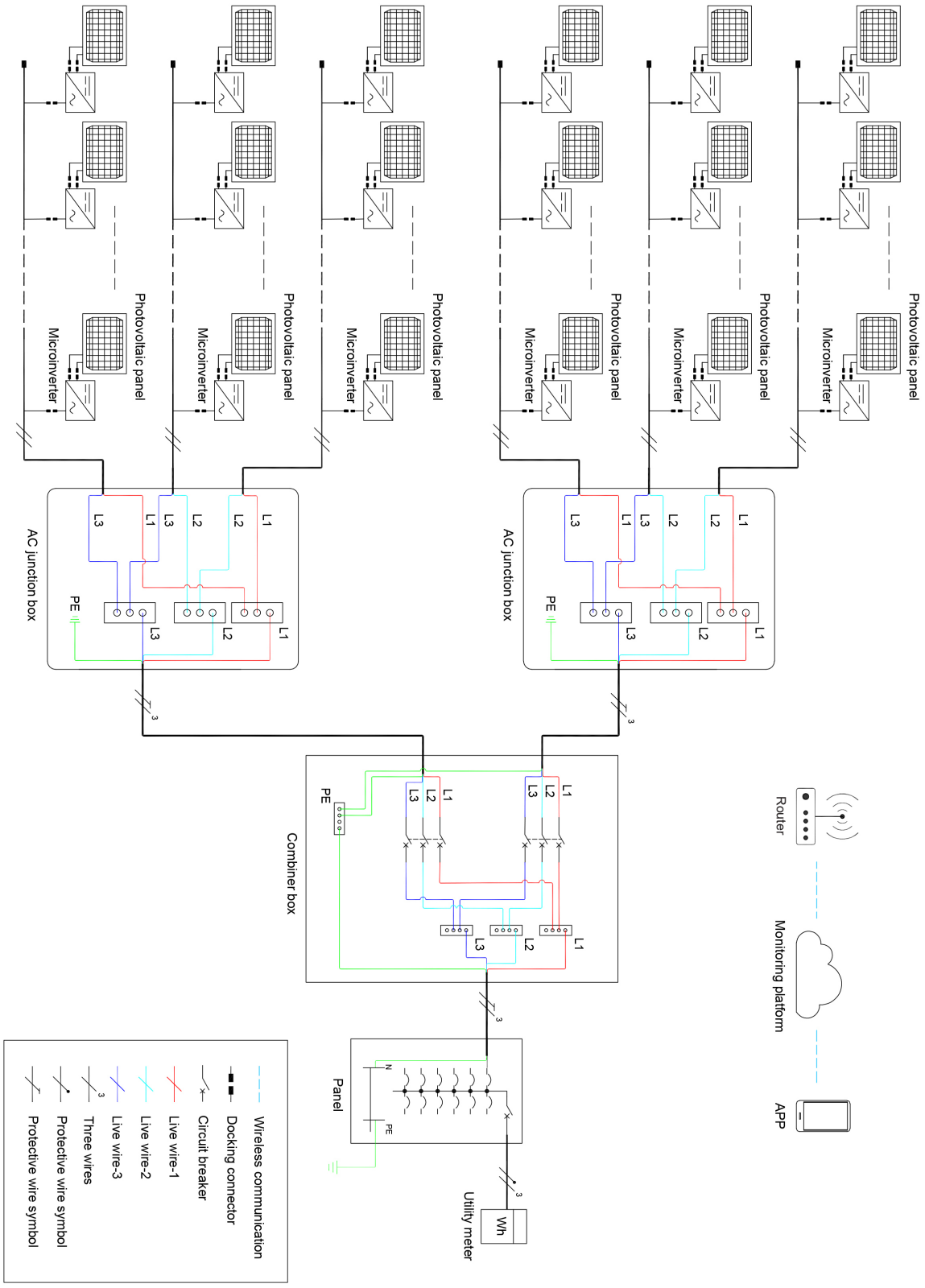





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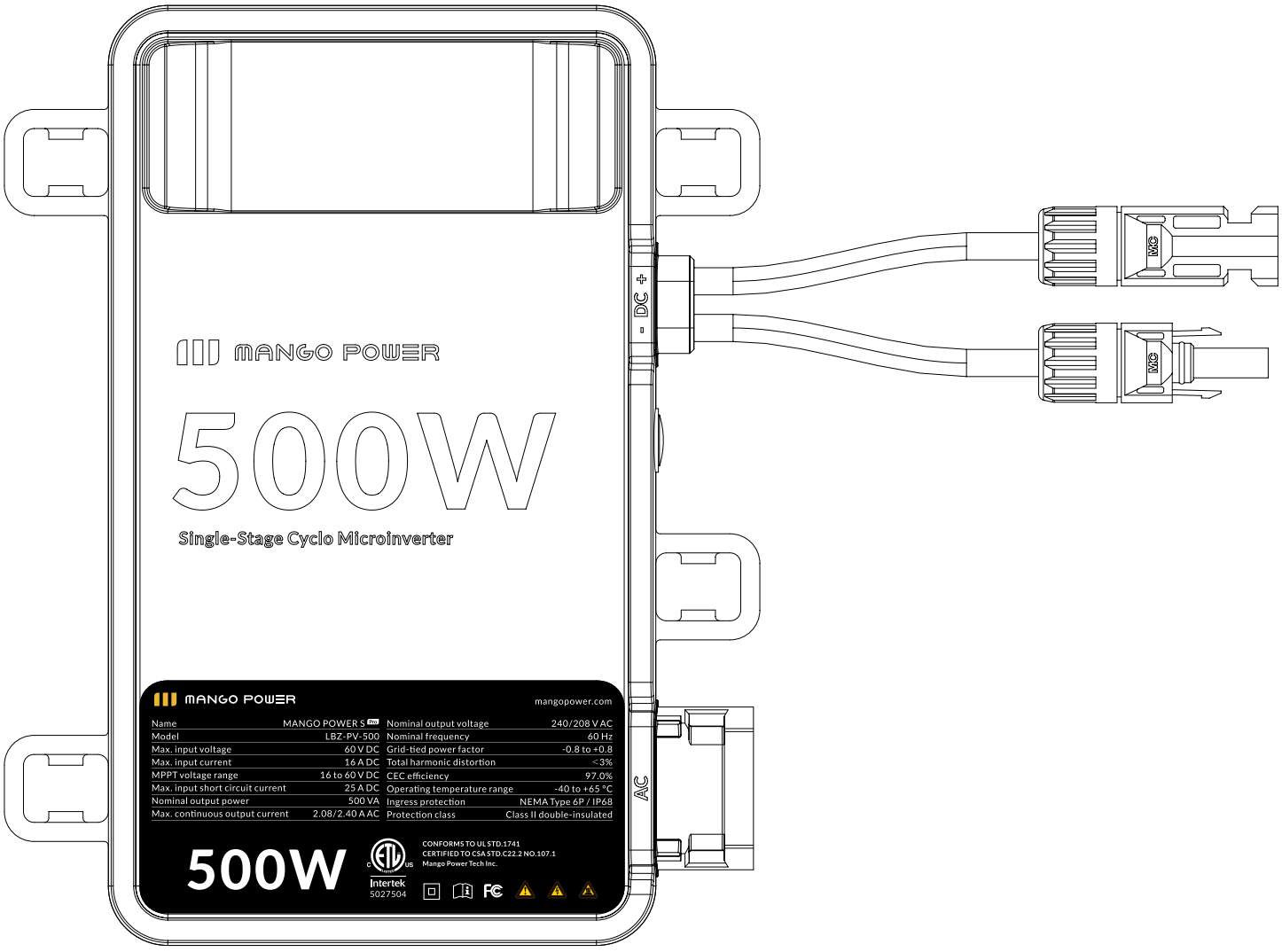
# Appendix 3

Three-phase Wiring Diagram




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Mango Power S
Mango Power S Pro




MANGO POWER