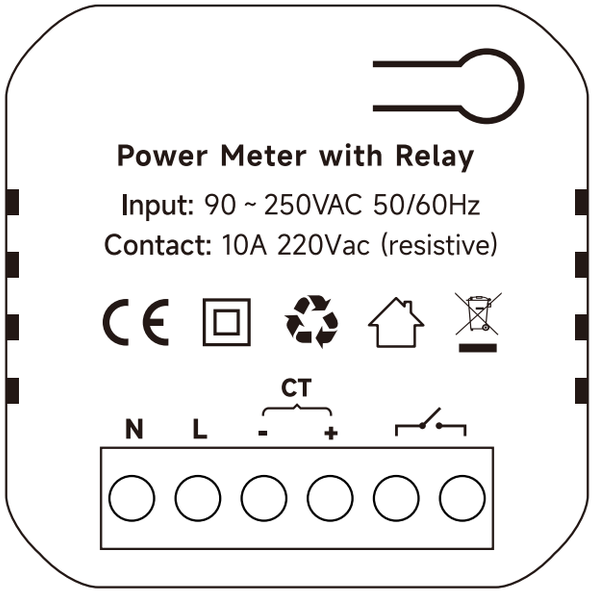
Smart Life App



PC311-R-W-TY

Power Meter with Relay

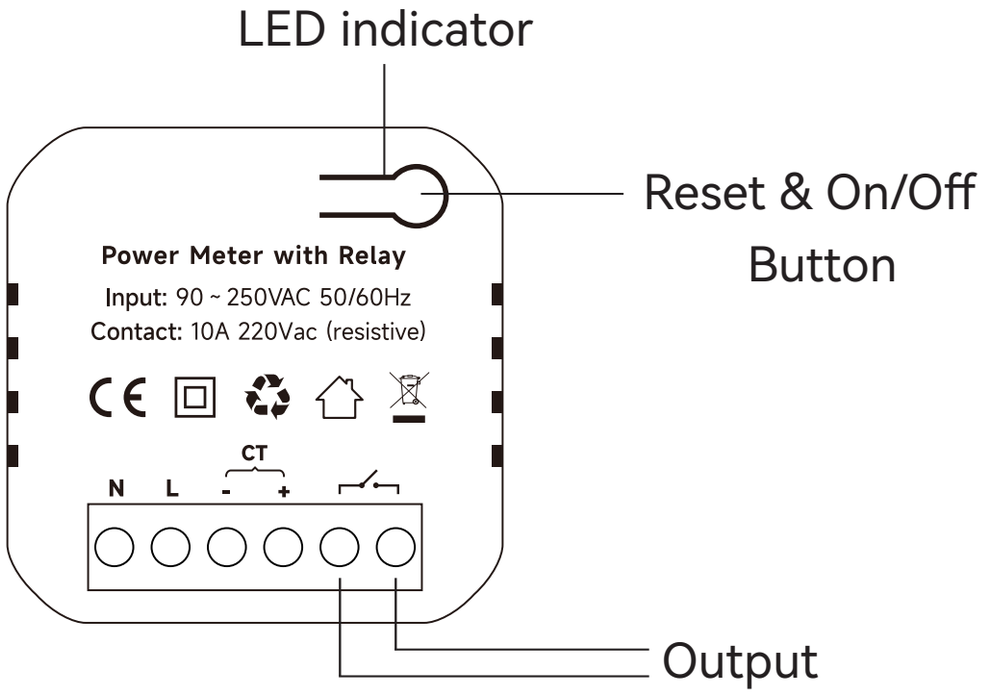
Quick Start Guide

Technical Specifications

Wireless Connectivity	
Wi-Fi	• 802.11b/g/n @2.4GHz
BLE	• Bluetooth 5.2 Low Energy
RF Characteristics	• Operating frequency: 2.4GHz • Internal antenna
Physical Specifications	
Operating Voltage	• 90~250 Vac 50/60 Hz
Calibrated Metering Accuracy	• ≤ 100W (Within ±2W) • >100W (Within ±2%)
Reporting Cycle	• Energy data: Every 15 seconds • On/Off: Report when status changes immediately
Max. Load Current	• 10A Dry contact
Operating environment	• Temperature: -20 ℃~ +55 ℃ • Humidity: ≤ 90% non-condensing

1 Get to know your device

CT: Current Transformer



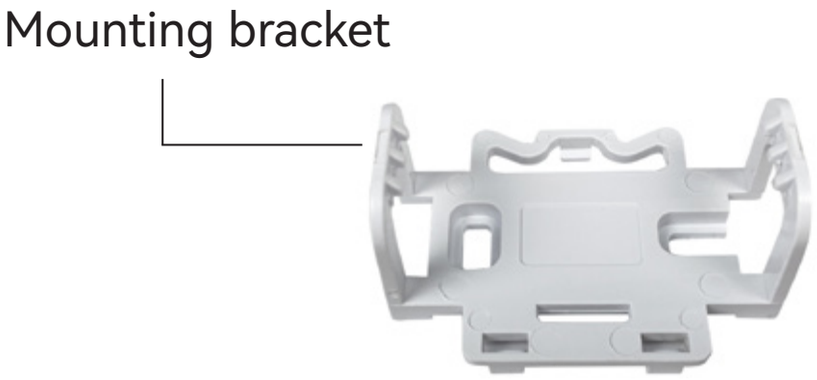
The terminal corresponds to the color of the connected CT

For Split Core CT

-: Connect to Black wire of CT
+: Connect to White wire of CT

For Donut CT

-: Connect to Black wire of CT
+: Connect to Red wire of CT



Reset & On/Off Button

- **Reset.** Press and hold the reset button for 5 seconds until the LED indicator flashes Red 3 times quikly to clear the Wi-Fi information (energy data will not be cleared). After that, the LED indicator will constantly blink and wait for pairing.
- **On/Off.** Press once to switch the relay ON/OFF.

Note: If you want to clear the energy data, please delete the device and wipe data on the app then add it again.

LED indicator

The LED status gives the following information of the PC311-R:

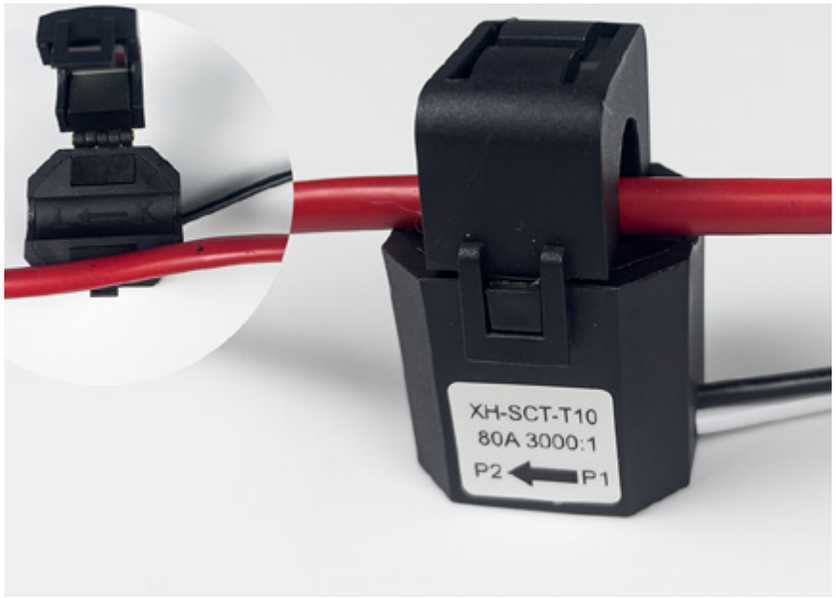
LED color	Status	Relay	Network
Green	Blinking	ON	Wait for pairing.
	Solid on		Device has connected with cloud.
Red	Blinking	OFF	Wait for pairing.
	Solid on		Device has connected with cloud.
Yellow / Green	Rapidly blinking alternately	ON	Device is connected to the router, but failed to connect to the cloud.
Yellow / Red		OFF	
Yellow / Green	Slowly blinking alternately	ON	Wi-Fi has been configured, but failed to connect to router.
Yellow / Red		OFF	

2 Wiring

Please make sure the main breaker is off before installing!

1. Check the direction of CT

For Split Core CT: Open the clamp to see the arrow (P1→P2) or (K→L) or you can find it on the sticker on the outside of the clamp. This is the direction of CT. The CT support bi-directional sensing.



For Donut CT: The direction is from the concave surface of the CT to the flat surface. The CT support bi-directional sensing.

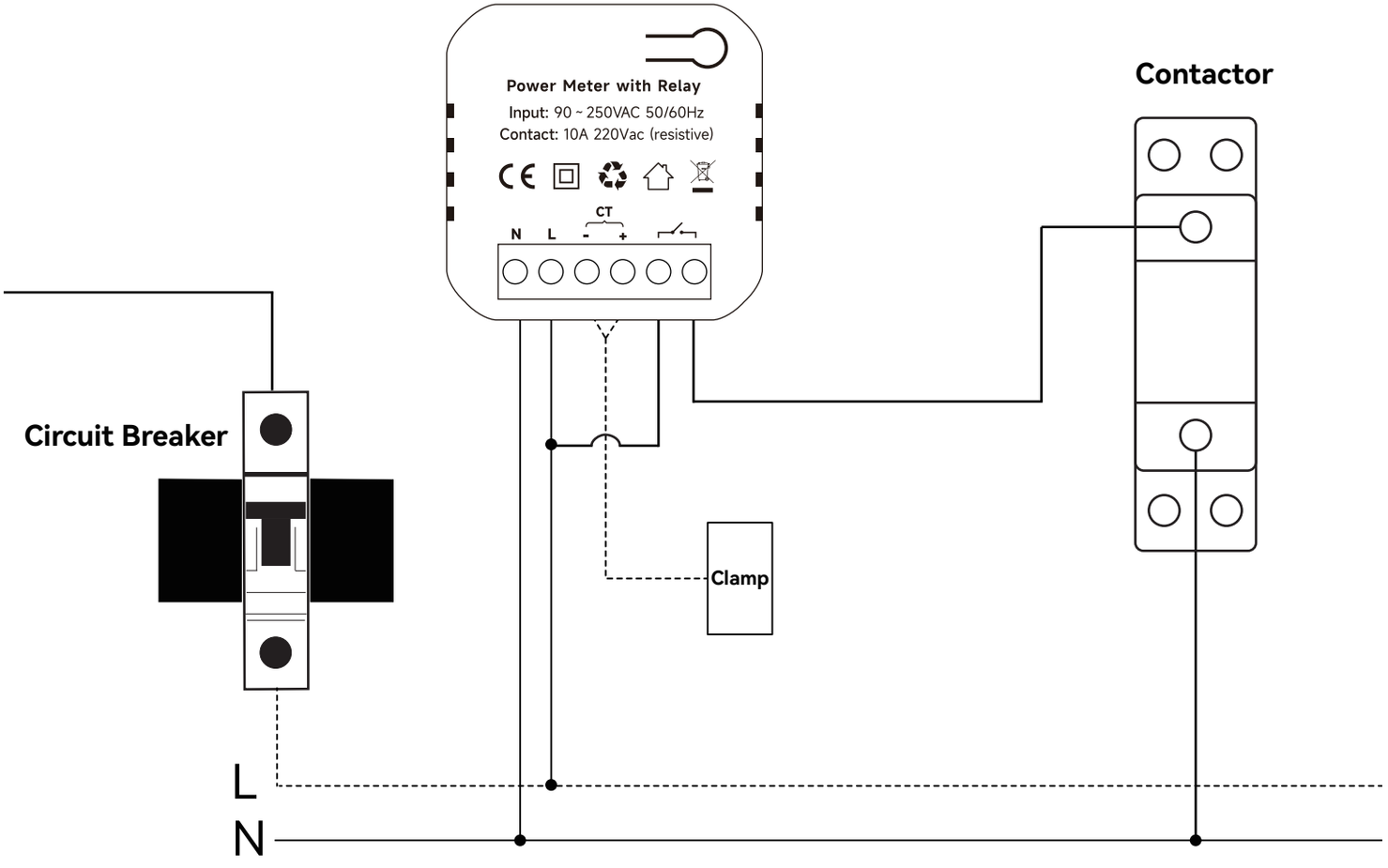


2. Connect AC Input cable to a socket near the Electrical Box to power on the PC311-R according to the wiring diagram. And apply the CT on the electric cable and ensure the direction of CT is correct.

3. To measure energy consumption, the direction of the CT should be consistent with the direction of the electricity current flows. The power will be positive.

To measure energy production, the direction of the CT should be opposite to the direction of the electricity current flows. The power will be negative.

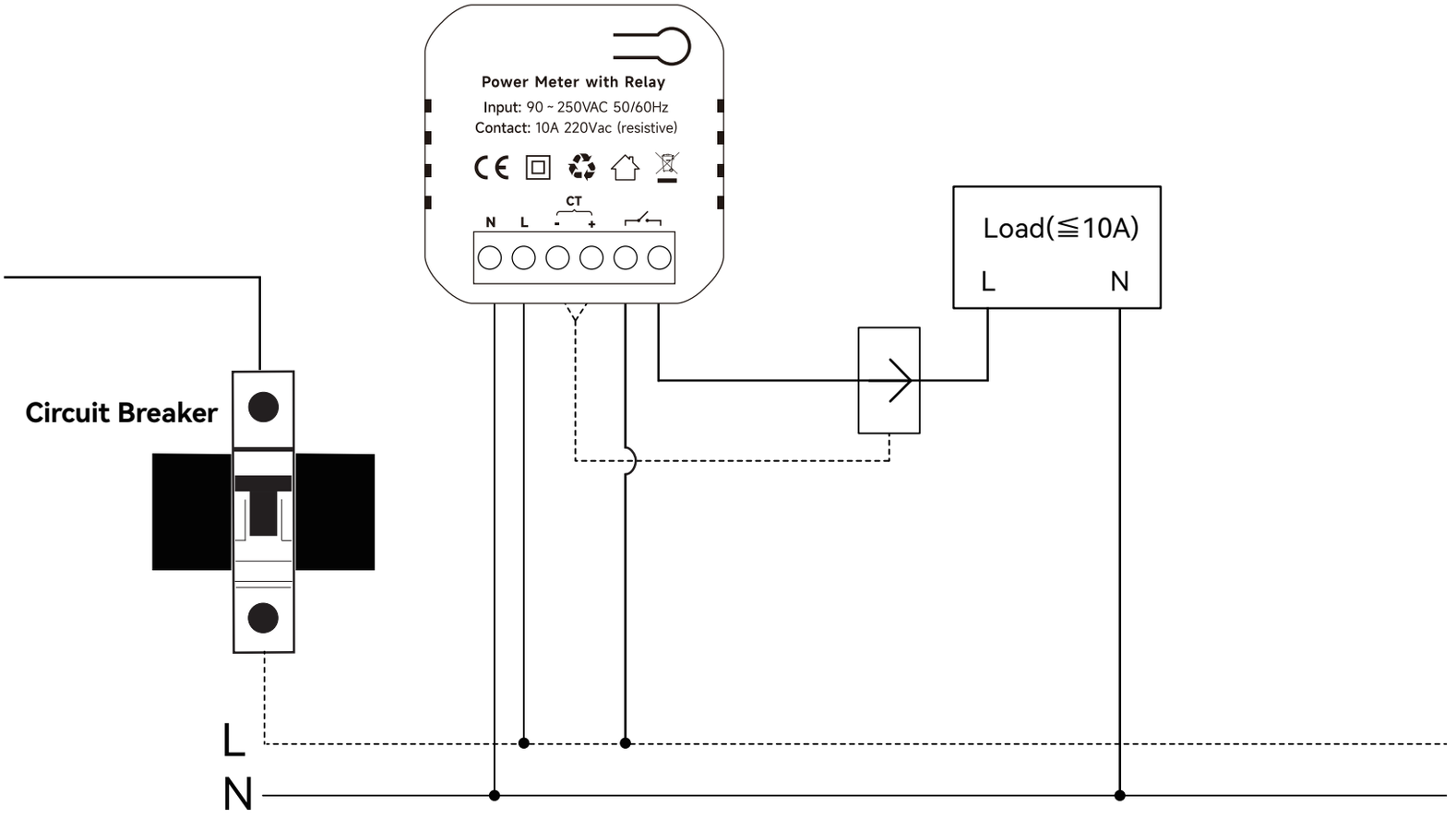
Scenario 1: Contactor control



Wiring diagram

Note: When installing, please ensure that the circuit measured by CT is in the same phase as the circuit powered by PC311-R.

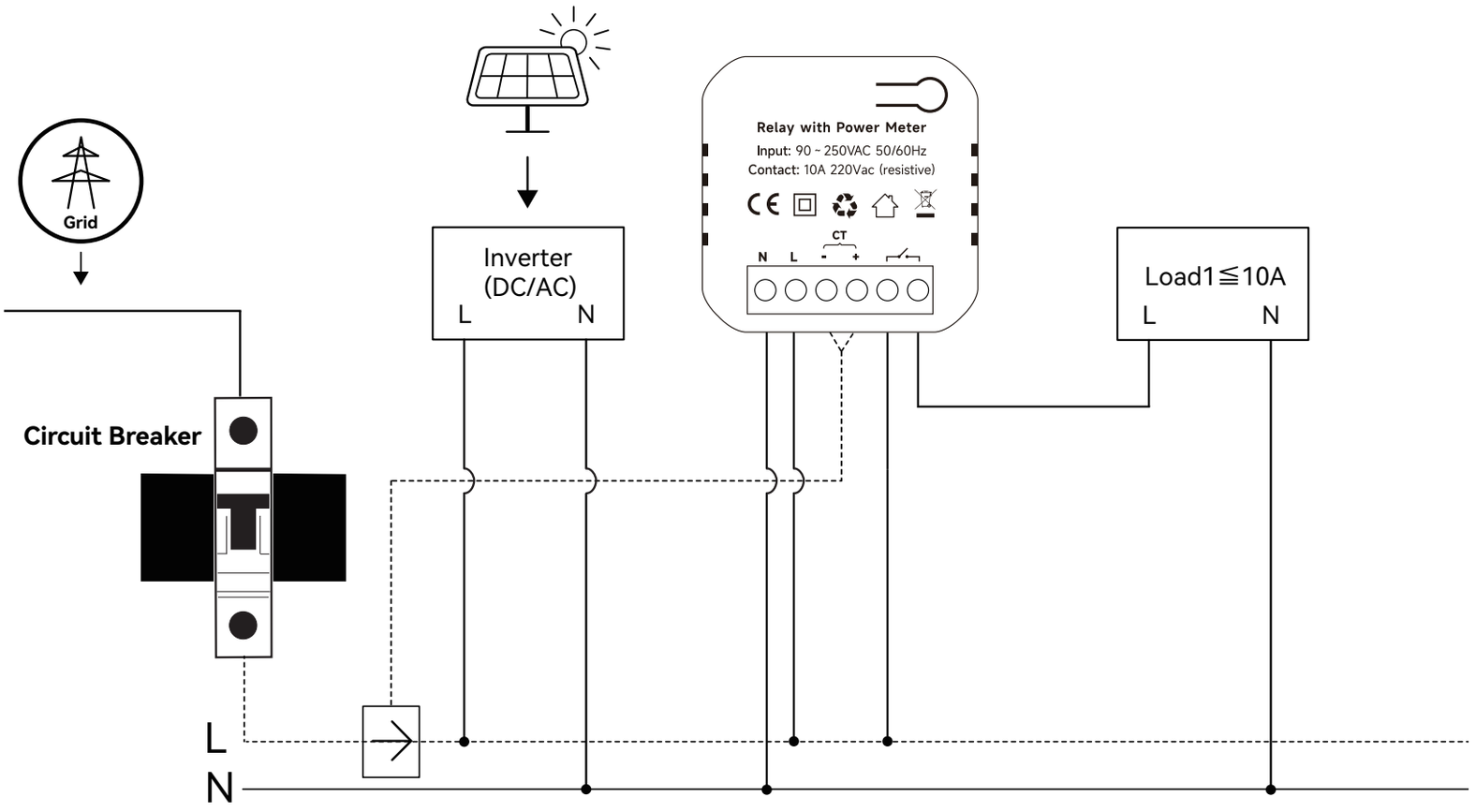
Scenario 2: Metering on the same load to trigger the relay



Wiring diagram

Note: When installing, please ensure that the circuit measured by CT is in the same phase as the circuit powered by PC311-R.

Scenario 3: Metering on the different load to trigger the relay



Wiring diagram

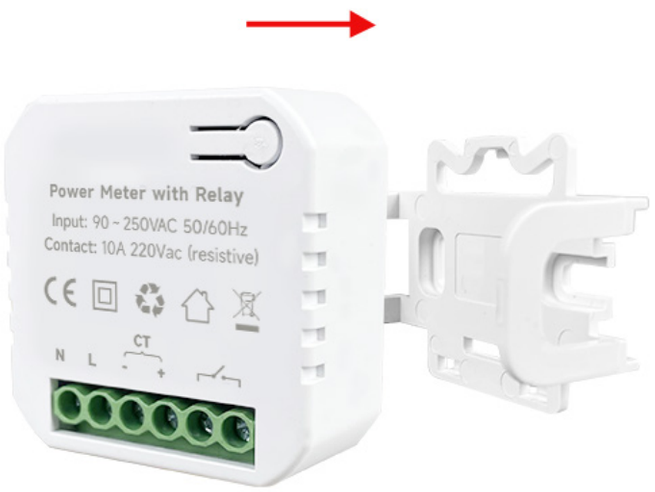
Note: When installing, please ensure that the circuit measured by CT is in the same phase as the circuit powered by PC311-R.

3 Mounting

The PC311-R has a mounting bracket for mounting purposes. You can choose the following two mounting methods:

- Use the mounting bracket as template to mark the two holes on the wall for installing screws. Screw the mounting bracket onto the wall according to marked location. Install wall plugs if necessary.
- Sliding the mounting bracket through one end of the Din-Rail if you want to fix on the Din-Rail.

After the bracket is installed, snap the PC311-R onto the bracket.

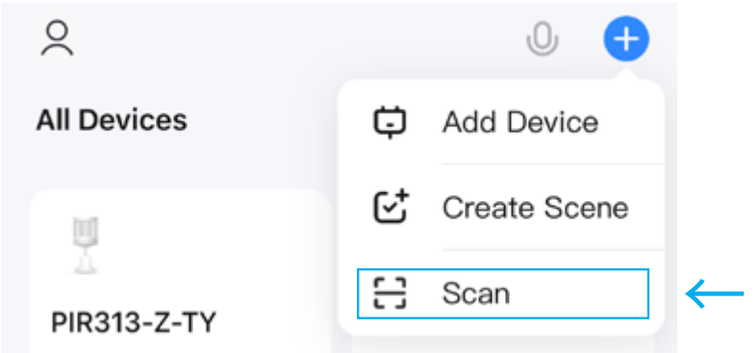


4 Configure Network

Download App

Please download the application: **Smart Life** from App Store or App Market. Also you can scan below QR code to download and install.

1. Open **Smart Life** app and click the 'Scan' button in the upper right corner of the App Home page.



2. Scan the following QR code to configure the network.

5 FAQ

Overcurrent and overvoltage protection

Conditions:

1. When the continuous value detected by the device exceeds 25% of the rated voltage (Can be set on the App) or 15% of the rated current (Can be set on the App) within 5 seconds, the device will cut off the power supply to the load.

2. When the continuous value detected by the device exceeds 50% of the rated current (Can be set on the App) within 1S, the device will cut off the power supply to the load.