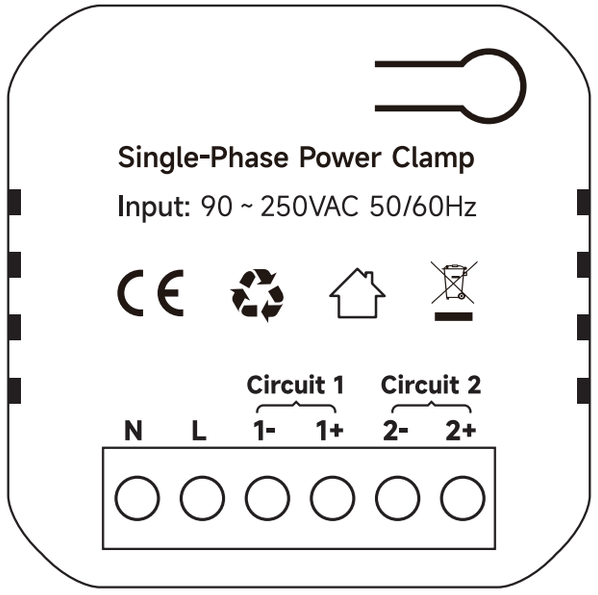
Smart Life App



PC311-Z-TY

Single-Phase Power Clamp

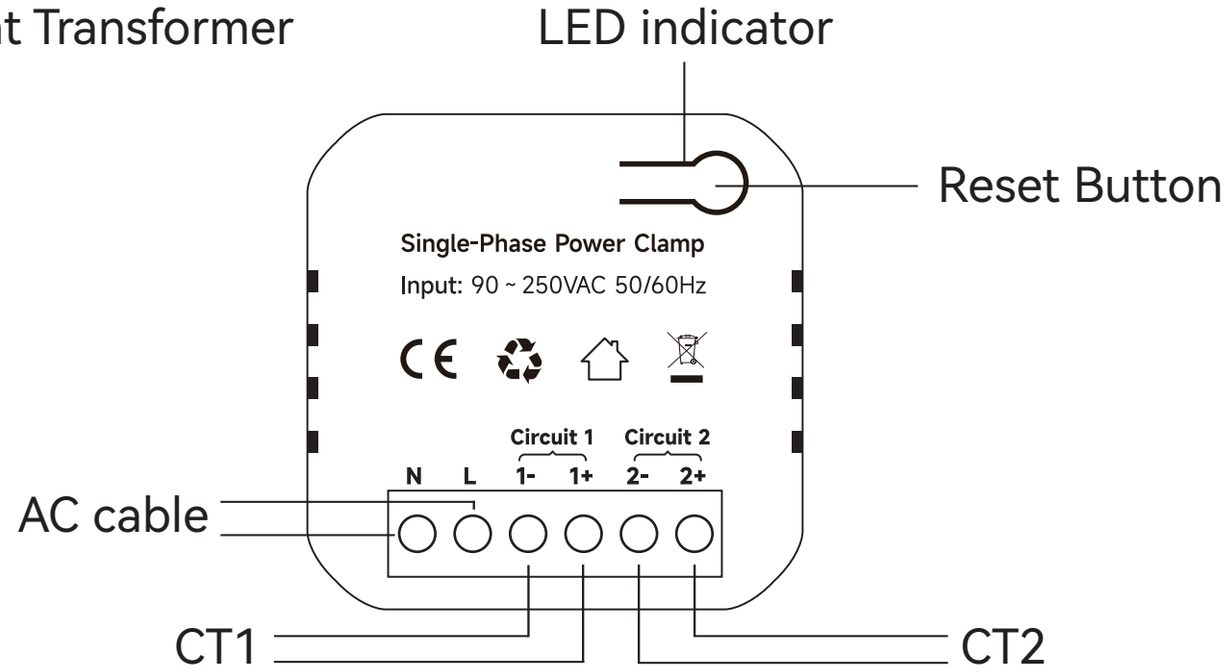
Quick Start Guide

Technical Specifications

Wireless Connectivity	
ZigBee	• 3.0
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	• Every one minute
Operating environment	• Temperature: -20 ℃~ +55 ℃ • Humidity: ≤ 90% non-condensing
Dimension	• 51.6(L) x 23.3(W) x 46(H) mm

1 Get to know your device

CT: Current Transformer



The terminal corresponds to the color of the connected wire

N: Connect to Black wire of AC cable

L: Connect to Red wire of AC cable

1-: Connect to Black wire of CT1

1+: Connect to White wire of CT1

2-: Connect to Black wire of CT2

2+: Connect to White wire of CT2

Mounting bracket

Reset Button

- **Reset.** Press and hold the reset button for 5 seconds until the LED indicator flashes Red 3 times quikly to clear network information (energy data will not be cleared). After that, the LED indicator will blink Red and wait for joining ZigBee network.
- **Clear Energy Data.** Reset the Power Clamps twice consecutively The interval between two reset must be less than 10S. After successful operation, the indicator light will flashe alternately red and green 3 times.

LED indicator

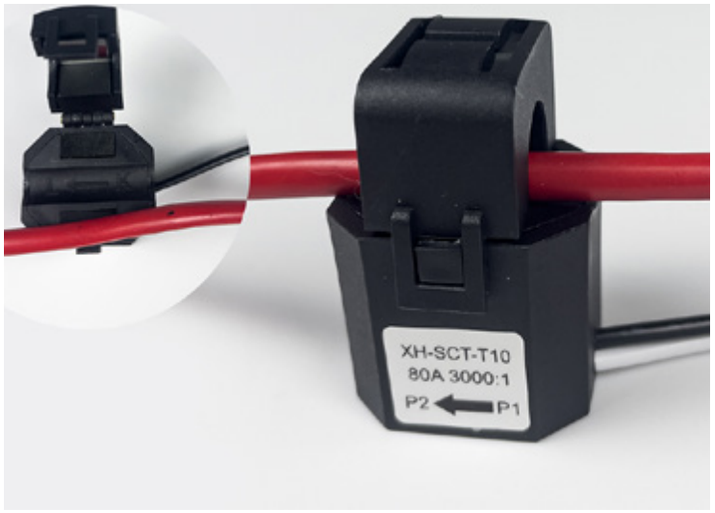
The LED status gives the following information of the power clamp:

LED Status	What it means
Green LED solid on	Device has joined a ZigBee network.
Red LED blinking	Device has not joined a ZigBee network.

Get started:

Please make sure the main main breaker is off before installing!

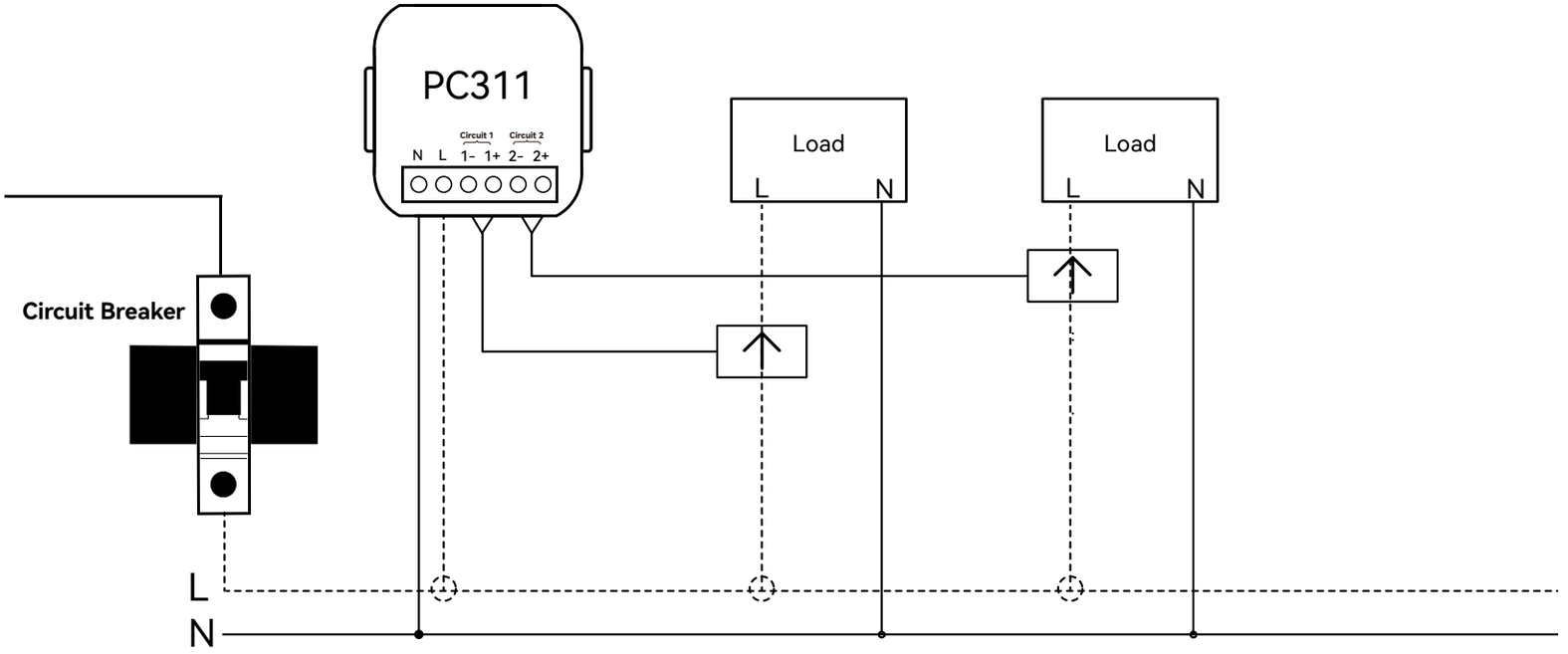
1. Open the clamp to see the arrow (P1→P2) or (K→L) or you can find it on the sticker on the outside of the clamp. This is the direction of CT. The CT support bi-directional sensing. If the direction of the CT is opposite to the direction of the current, the power will be negative.



2. Connect AC Input cable to a socket near the Electrical Box to power on the Power Clamp according to the wiring diagram. And apply the CT on the electric cable and ensure the direction of CT is correct when installing in different scenarios:

- **To measure energy consumption**

The arrow on the clamp should face to the correct direction of the electricity current flows like CT1 in the wiring diagram. In this case, the power will be positive, and the energy consumption will be accumulated.

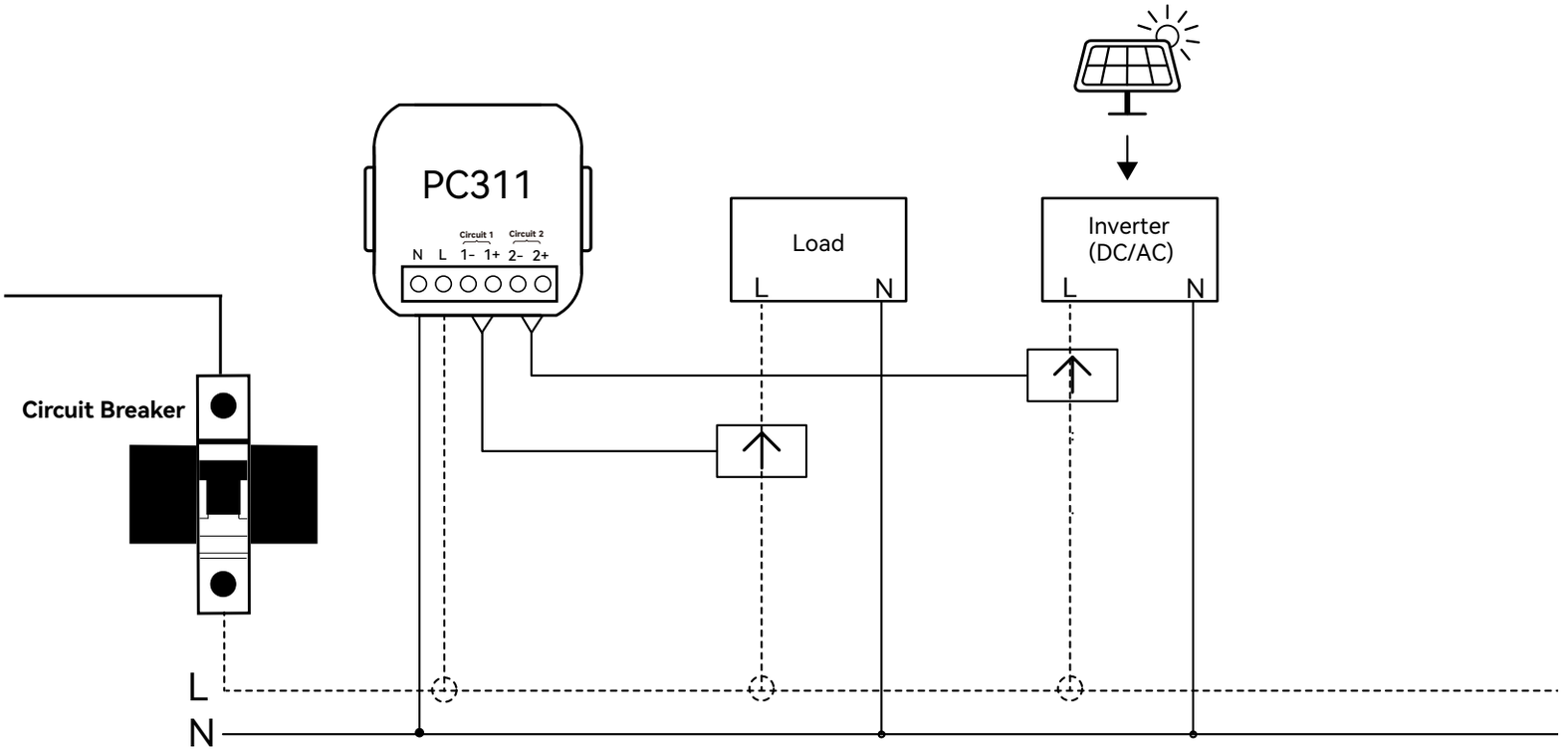


Wiring diagram

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

- **To measure energy generation**

The arrow on the clamp should face to inverter like CT2 in the wiring diagram. In this case, the direction of the current is opposite to that of the CT. The power will be negative, and the energy generation will be accumulated.

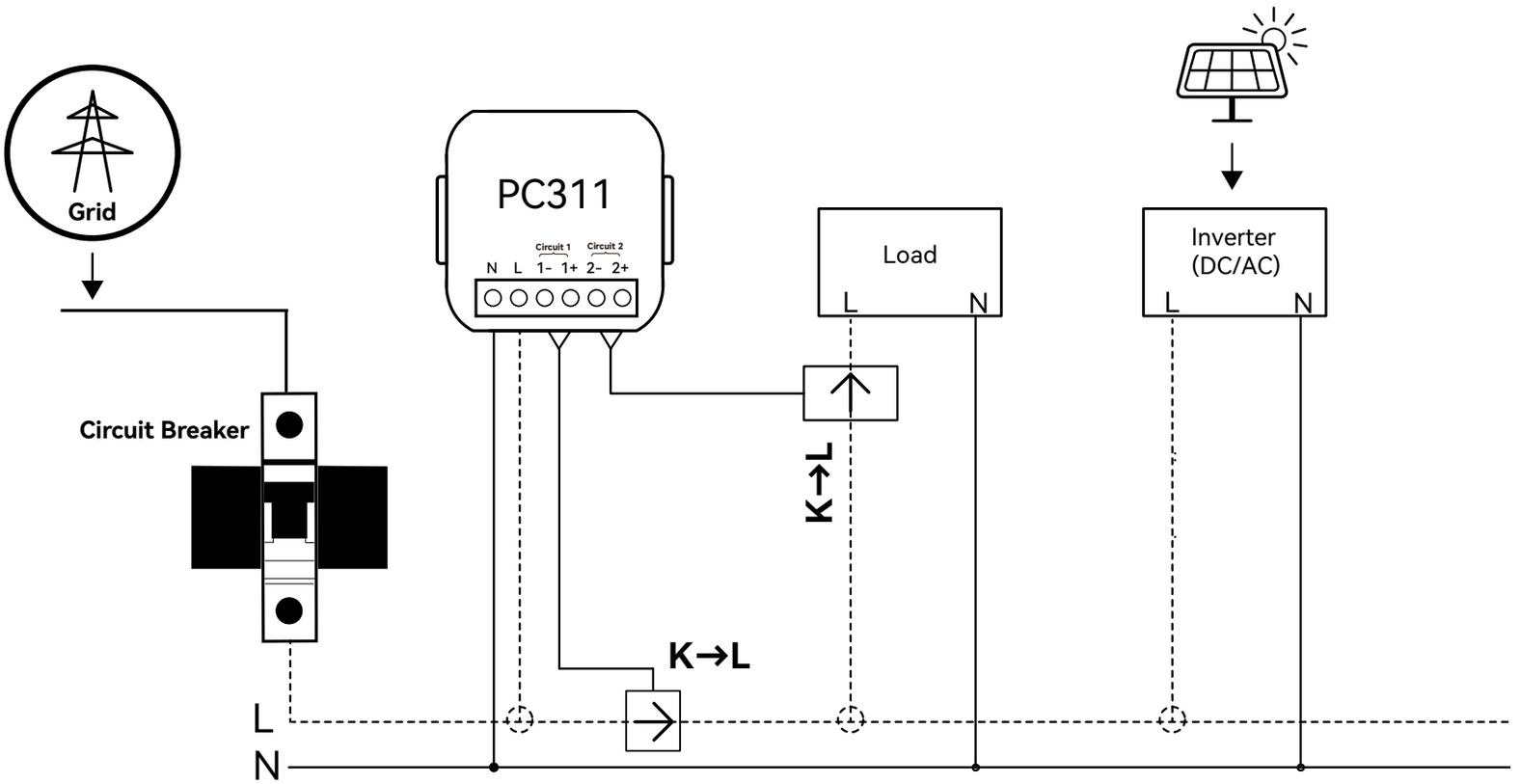


Wiring diagram

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

- **To measure 'From Grid' or 'To Grid'**

To monitor how much energy is pulling from and sending back from the grid, install the CT on the leads coming from your mains like the CT1 below. **Note:** When installing, please ensure that the circuit measured by CT is in the same phase as the circuit powered by PC311.



Wiring diagram

For CT1:

If the measured current direction is K → L, the energy consumption is accumulated as ‘From Grid’ energy.

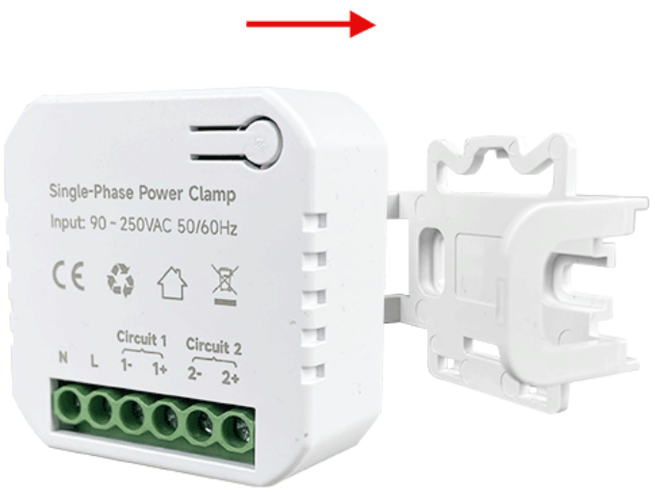
If the measured current direction is L → K, the energy generation is accumulated as ‘To Grid’ energy.

2 Mounting

The Power Clamp 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 Power Clamp onto the bracket.

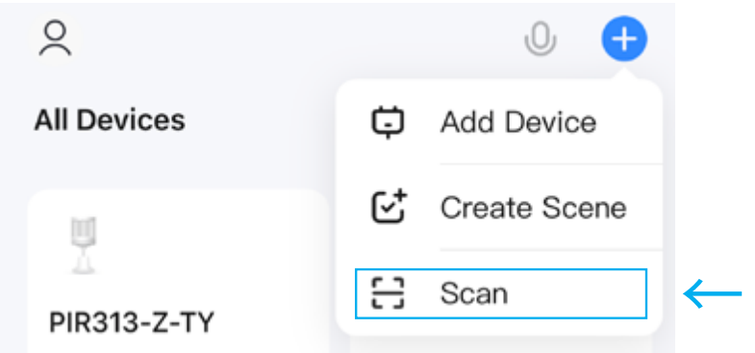


3 Configure Network

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.