

## Smart Gateway

SP1-Zigbee-GW-W

Quick installation manual

# 1. Must Read Before Installation

## ⚠ CAUTION

When carrying out various operations of this product, the relevant equipment precautions and special safety instructions provided by SolarPilot Energy must be strictly observed.

It is strictly forbidden to open the case, disassemble and repair the product without authorization to ensure the safety of personnel. In case of such necessary services, find a trained or qualified professional technician to do it.

The operators should comply with local regulations.

## ⚠ WARNING

Installation or maintenance operations must follow the sequence of steps of the task, and do not change the structure and installation order of the equipment without the manufacturer's permission.

The installation, electrical connection, maintenance, troubleshooting, and replacement operations of the optimizer must be carried out by a professional electrical technician.

## ⚠ DANGER

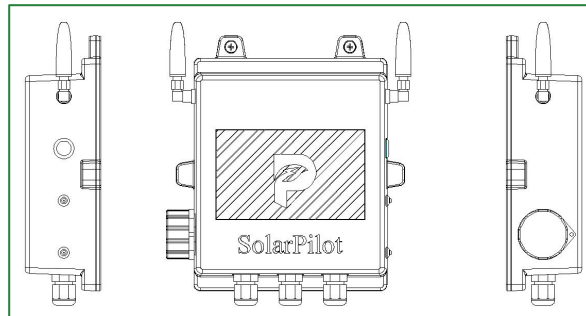
Installation, electrical connection, maintenance, troubleshooting, and replacement operations of the gateway must be carried out by a professional electrical technician.

It is forbidden to install the gateway in a location where the water can be submerged for a long time.

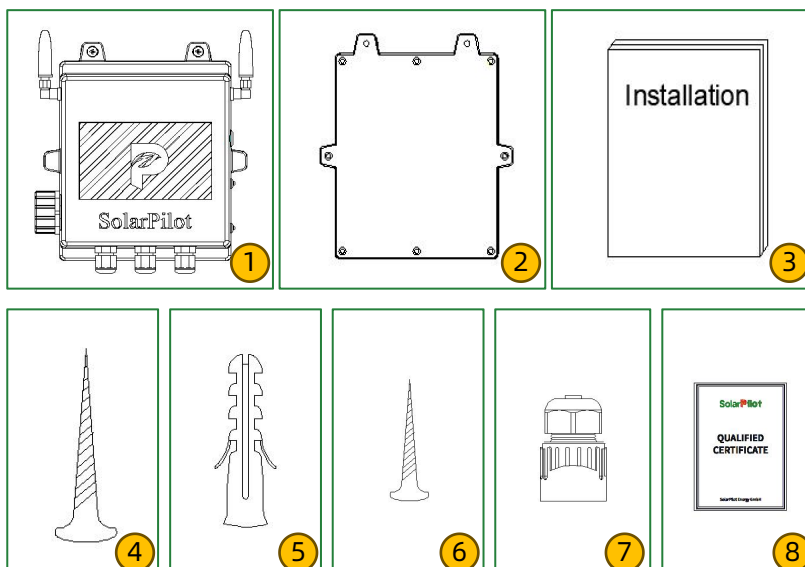
Malpractice or improper work during installation or operation might cause fire. DO NOT store flammable and/or explosive materials surrounding the areas where the gateway are installed.

## 2. Product Introduction

SP1-Zigbee-GW series products are SolarPilot Data Acquisition products. They use a 2.4G Zigbee solution to collect information and data from field optimizers and send data to SolarPilot Cloud Computing Platform through Ethernet, Wi-Fi. Through SP1-Zigbee-GW, users can obtain module-level data and alarms, and achieve remote and local shutdown. Remote operation and maintenance of photovoltaic systems can be realized anytime and anywhere on the SolarPilot data platform. SP1-Zigbee-GW works with SP1/SP2/SP3 series optimizers.

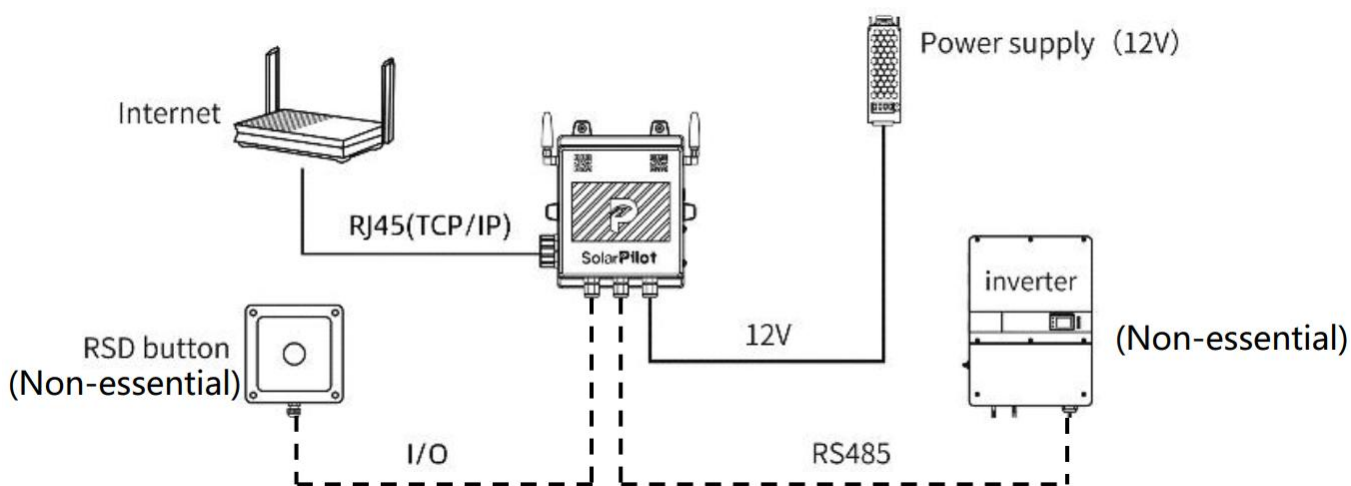


## 3. Scope of Supply



Number	Description
1	Gateway
2	Back panel
3	Quick installation manual
4	M3.5*30 self-tapping nails
5	Plastic swells
6	3*8 self-tapping nails
7	RJ45 waterproof plug
8	Certificate

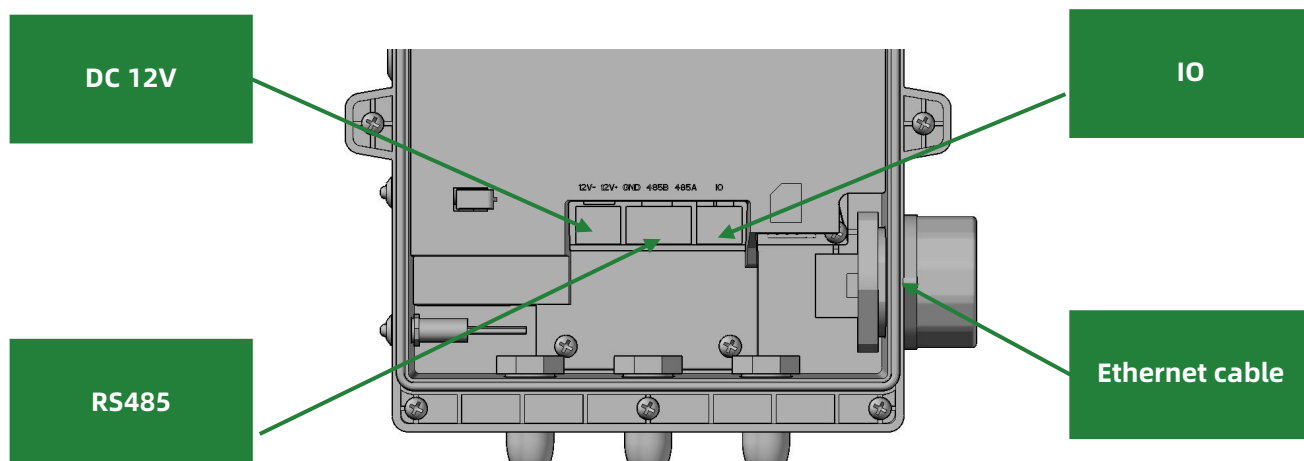
## 4. Topology of The Gateway System



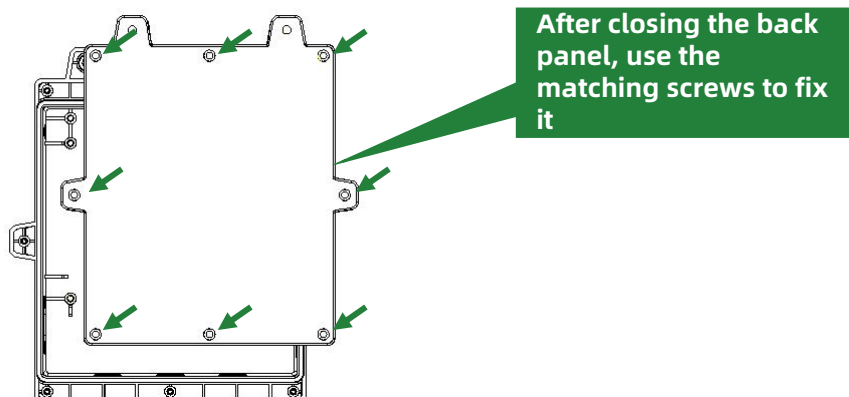
## 5. Installation Steps

### ① Connect cables

- (1) Connect to DC12V power supply;
- (2) Connect to Inverter RS485 (If not needed, you can leave it unconnected);
- (3) Connect to quick break button (If not needed, you can leave it unconnected);



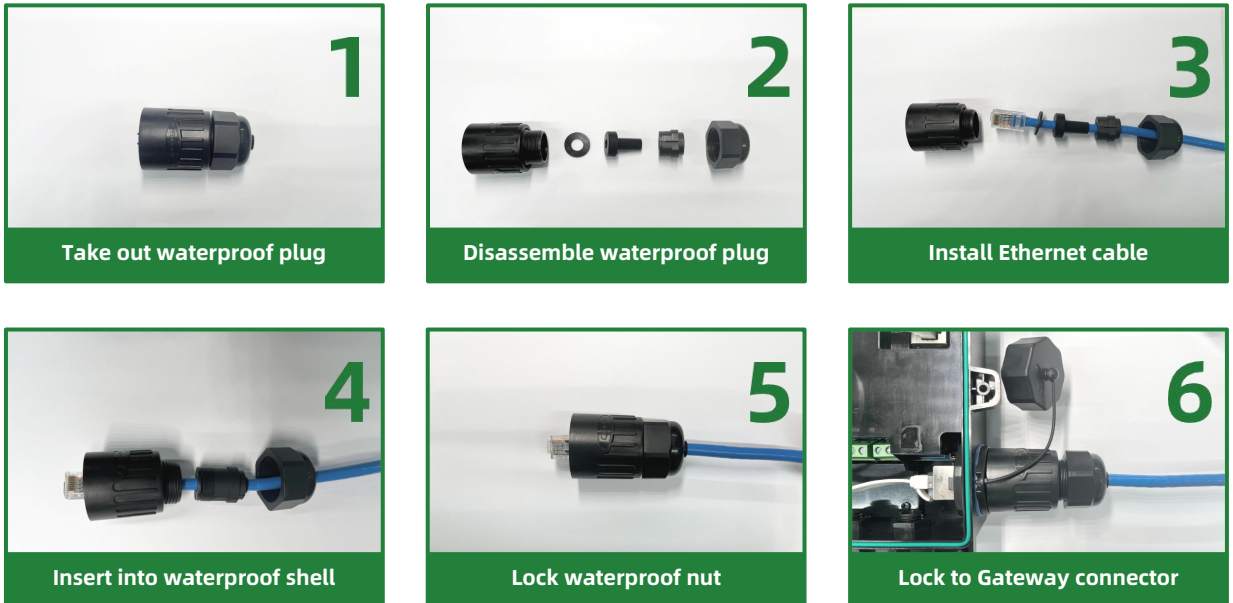
### ② Install back panel



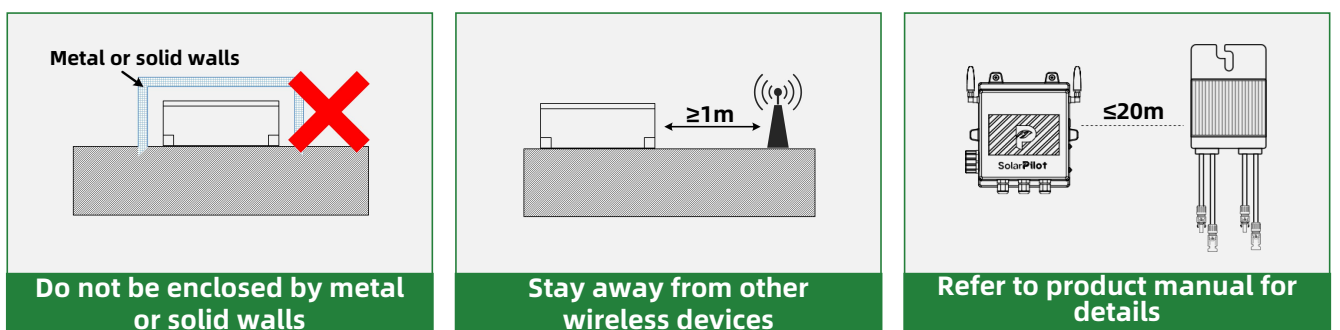
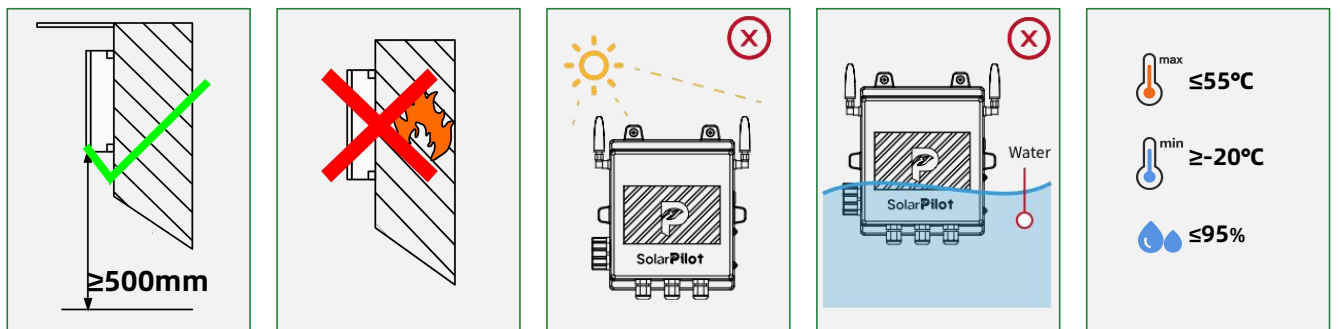
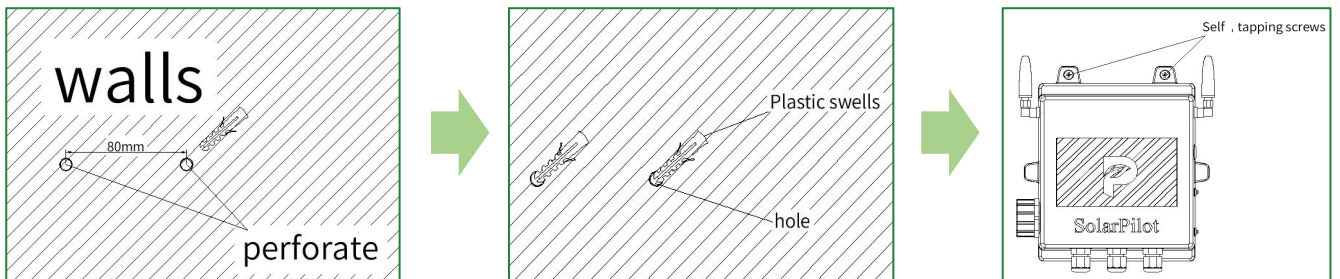
### ③ Connect Ethernet cable

**NOTES:**

If you use the AP distribution network method, this steps can be ignored.  
Refer to [Configure the gateway]→[Method2: AP distribution network]



### ④ Install gateway



# 6.APP Operation Guide

## ① Download the app

Method 1:

Search "SolarPilot Energy" in the App Store, Google Play or other application market on smart phone;



SolarPilot Energy APP icon

Method 2:

Scan the QR code to download the APP in right hand.

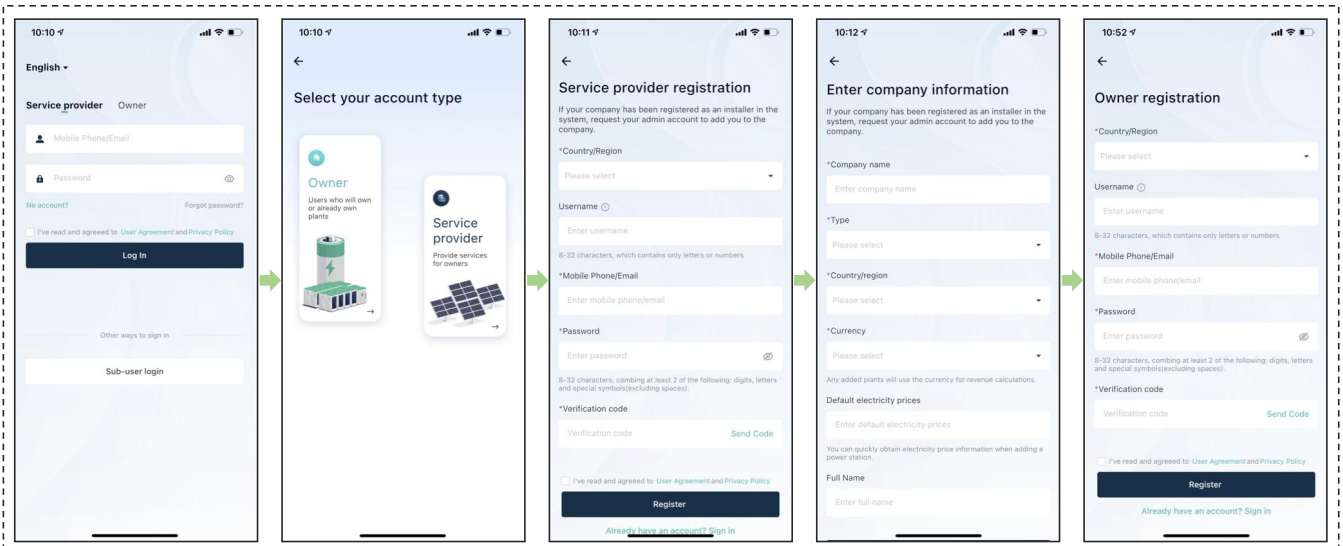


QR code for Android



QR code for IOS

## ② Registration and Login



## ③ Create a power plant

### Plant management

Log in to the account you just registered, click [Me] -> [Plant Management] -> [+] to add a new power plant. Follow the prompts to improve the basic information of the plant.

### Add Gateway

Method1

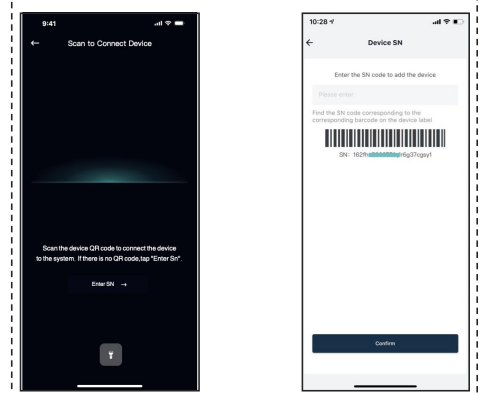
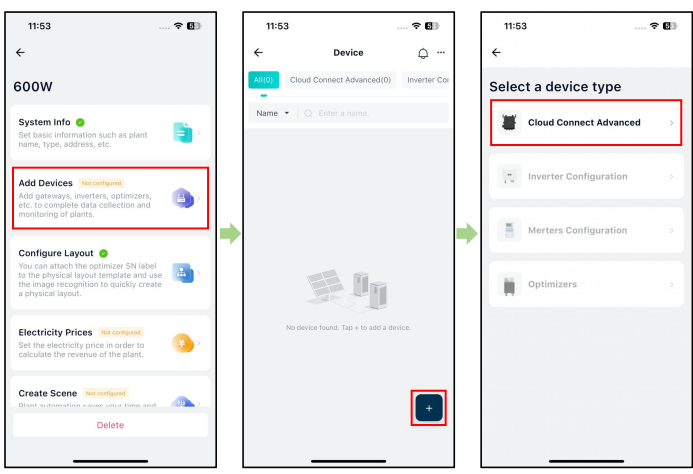
Method2

Method1: Directly add gateway after completing the plant information.

Method2: Click [Me] -> [Plant Management] -> Plant->[Add Devices] to add gateway.

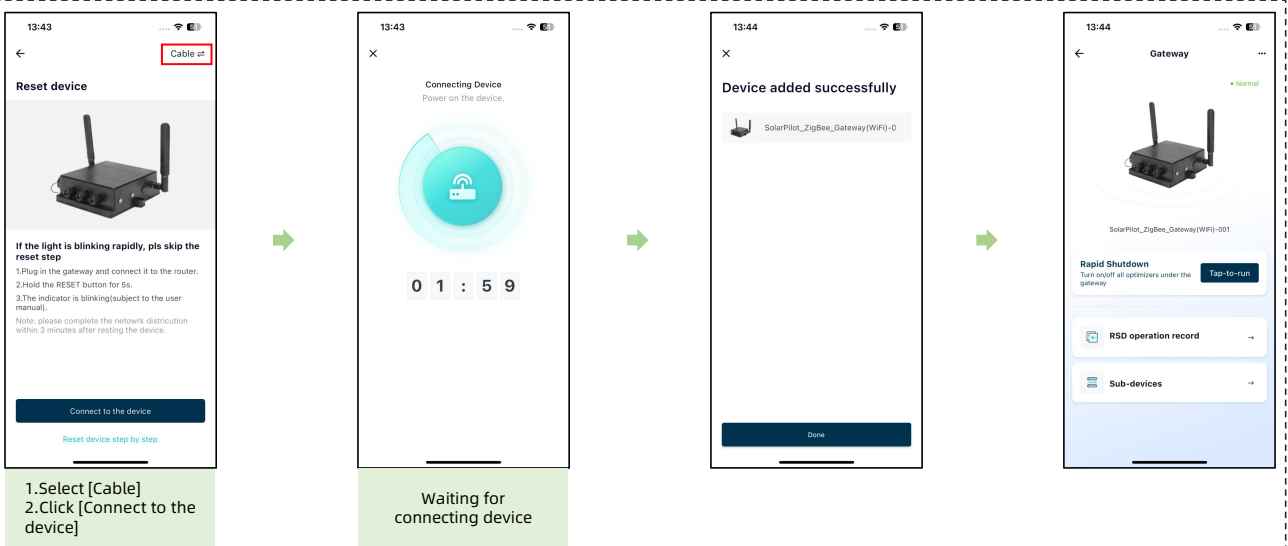
## ④ Configure the gateway

### Scan QR code or enter SN code to add gateway



Scan QR code or enter SN code

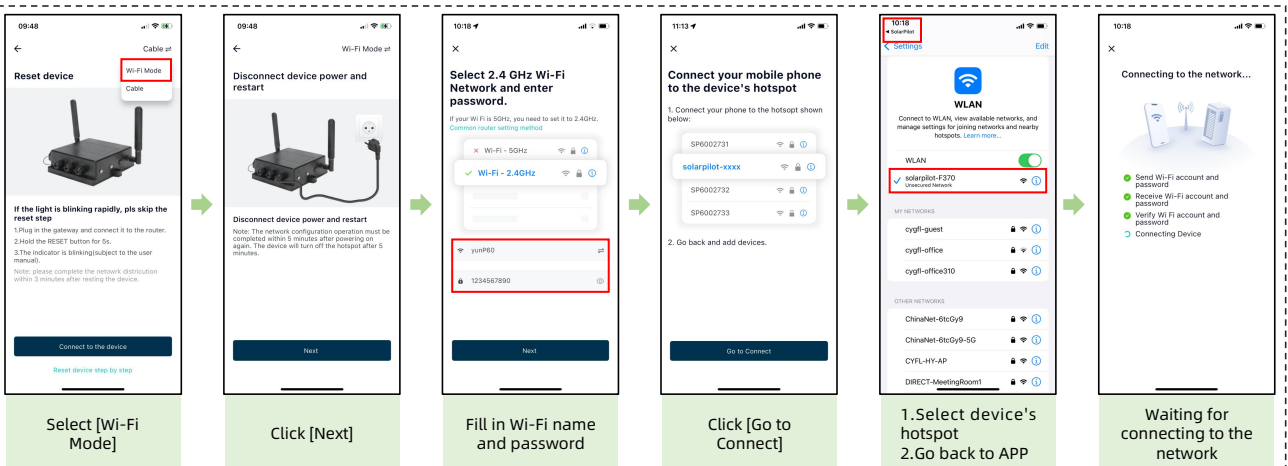
### Method1: Wired distribution network



### Method2: AP distribution network



Press button for 3-10 seconds to activate the AP distribution network mode (LED1 flash slowly)



## ⑤ Add optimizer and generate Layout

### Stick SN Label on the physical layout template



Physical Layout Template

Mark <input type="checkbox"/> for North	Installer	Installation date	Number of optimizers	Note						
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>										
1 label										
2 label										
3 label										
4 label										
5 label										
6 label										

### Add optimizer and generate layout

**Select Plant**

**Click [Configure Layout]**

**Set layout**

**Upload Image**

**Support multiple uploads**

**Generate Layout**

**Add devices**

**Complete**

## ⑥ Other configurations

### Add Owner

Fill in the owner information

### Electricity Prices

Fill in the electricity price

### Automatic shutdown

Create an auto-shutdown scenario

## 7. Execute Recover Output (Very Important)

The optimizer works in RSD mode by default and needs to recover output, otherwise the PV system will work abnormally.

Recover output

All optimizers work normally