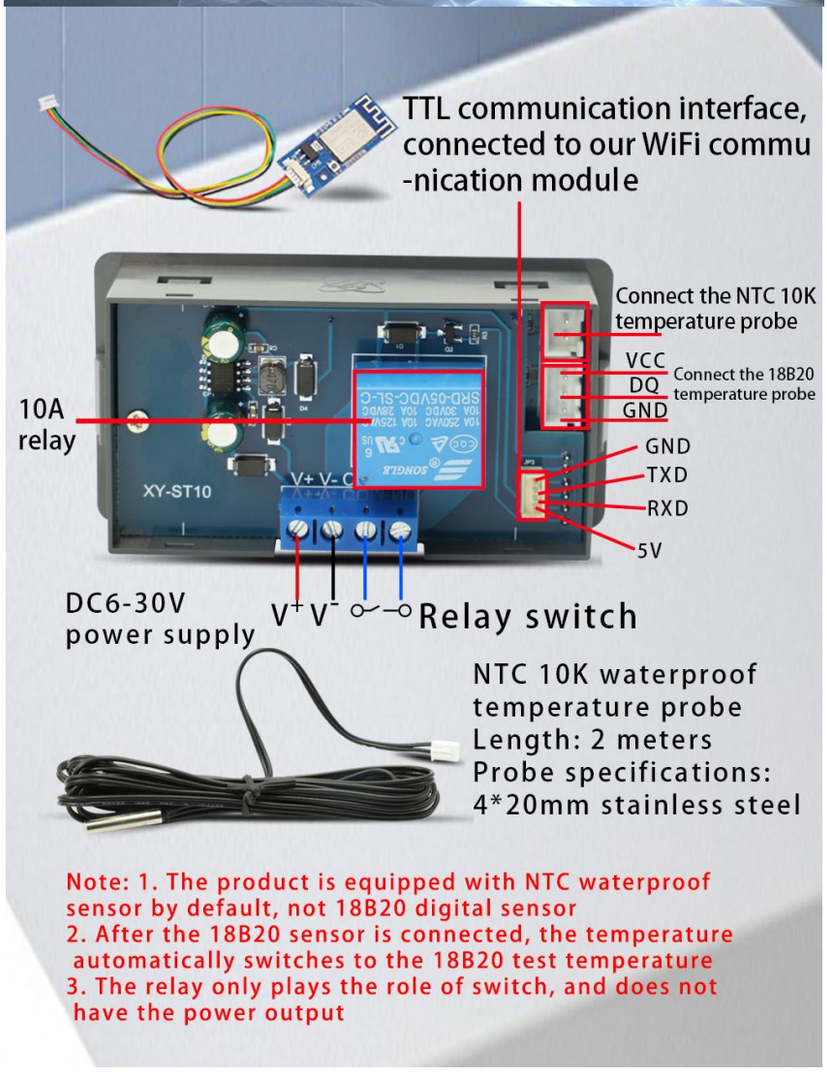
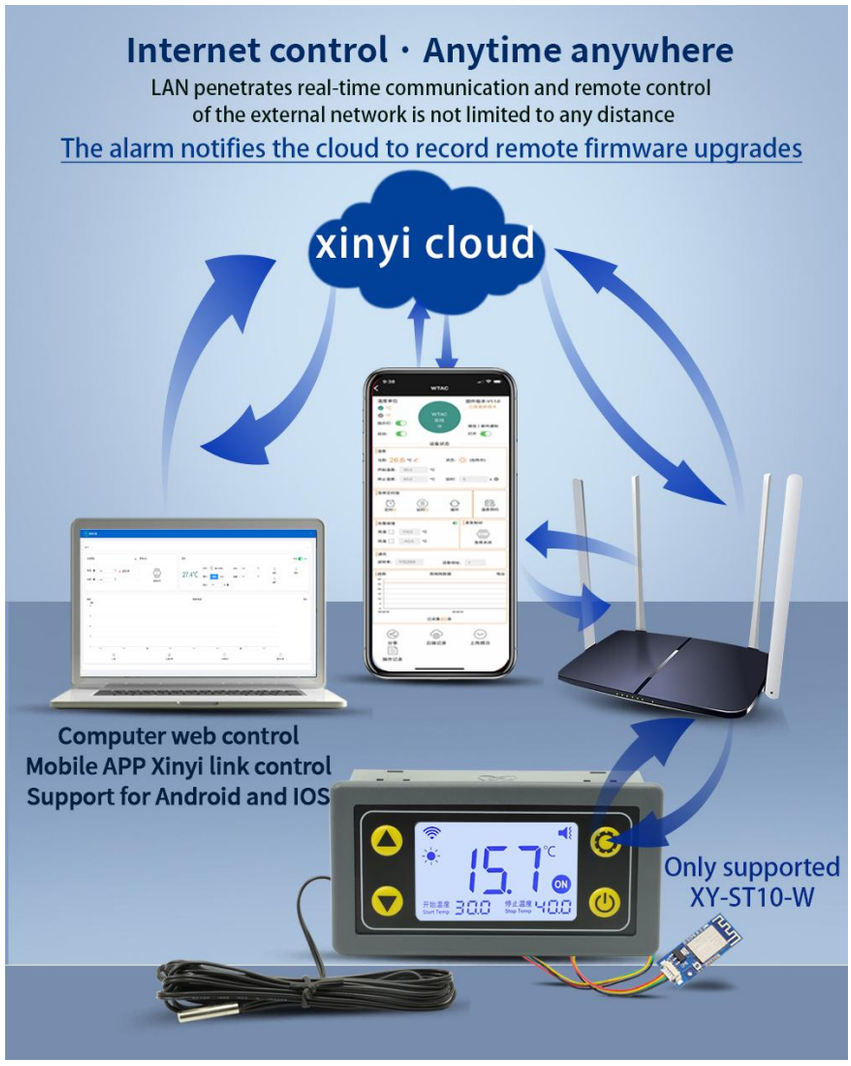
Sinilink ST10/ST30 SA10/SA30 remote thermostat module temperature controller module refrigeration heating high and low temperature alarm




## contents

# 1. Product introduction


Internet control · Anytime anywhere
LAN penetrates real-time communication and remote control
of the external network is not limited to any distance
The alarm notifies the cloud to record remote firmware upgrades
xinyi cloud
Computer web control
Mobile APP Xinyi link control
Support for Android and IOS
Only supported
XY-ST10-W

# Sinilink Wisdom Life

Solve 99% of minor operational problems

1 Q: What if equipment is not allowed to work until 6 a.m. to 5 p.m.?

A Easy, just add an emergency stop timer and turn it off at 6 a.m Emergency stop.
Emergency stop at 5:00 p.m.

2 Q: Can heating to 30° at 6 am and 50° at 4 PM be achieved?

A Easy, just enter the temperature reservation function, add two reservation problems to solve.

3 Q: Only the temperature detection, through the timing control switch can?

A Yes, set the working mode of the product to manual mode, and the intelligent switch of second change detection temperature.

4 Q: Can the product alarm notification to the mobile phone?

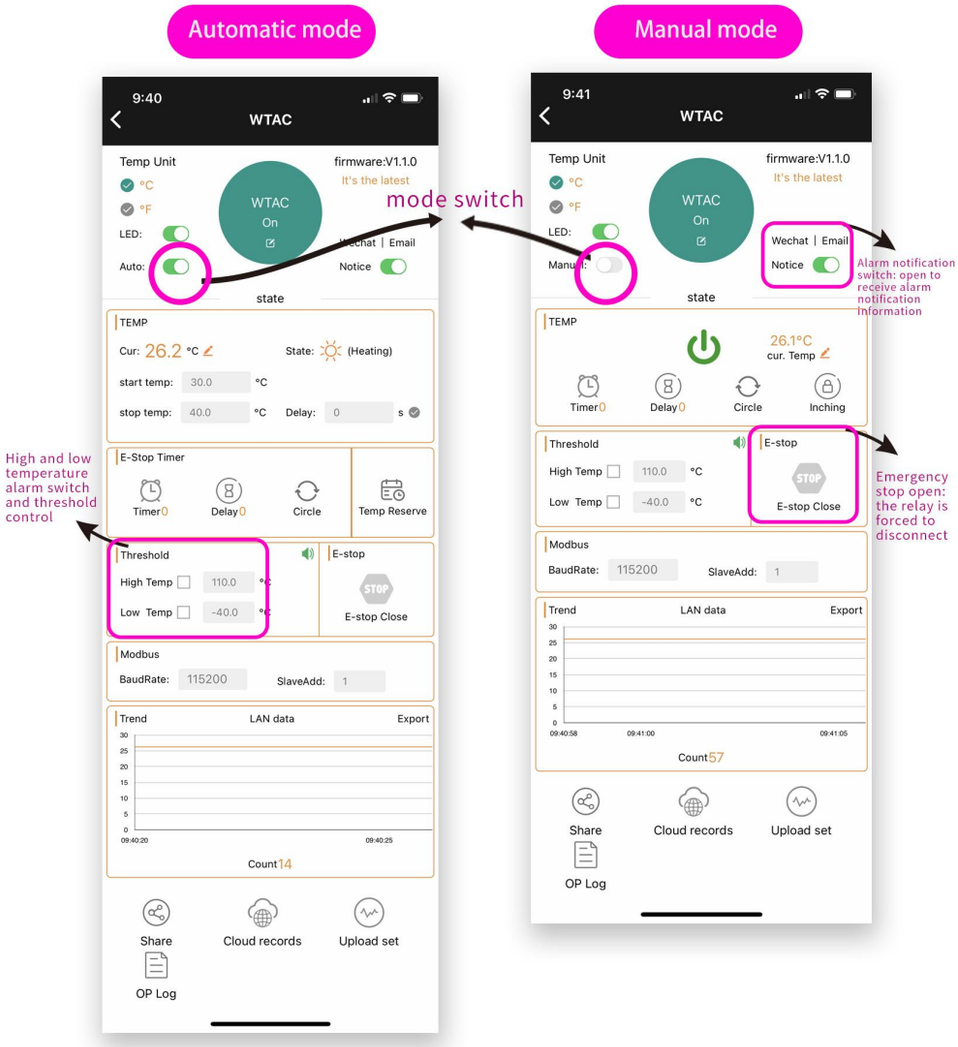
A Support alarm notification, bind wechat and follow the official account "Sinilink", you can receive alarm notification.

5 Q: Can temperature data be recorded? For us to analyze?

A The product can save up to 15 days of data, upload rate up to 1 / second, can be exported at any time.

# Mobile APP control interface

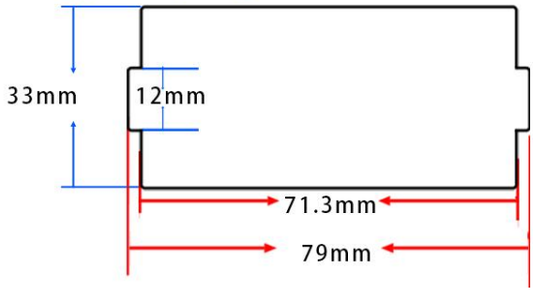
In automatic mode, with the emergency stop function, the work can be allowed in the specified time period; Manual mode, the product seconds to become intelligent time control switch, support timing delay cycle;




## XY-ST/SA Comparison of product specifications

| Model / Parameter | XY-ST10/ST10-W | XY-ST30/ST30-W | XY-SA10/SA10-W | XY-SA30/SA30-W |
|---|---|---|---|---|
| |  |  |  |  |
| Type of relay | 10A relay | 30A relay | 10A relay | 30A relay |
| Maximum control | current≤10A | current≤30A | current≤10A | current≤30A |
| Input power supply | DC 6-30V | DC 6-30V | AC 110-220V | AC 110-220V |
| Output type | 1 relay switch output | 1 relay switch output | Live output (AC 110-220V) | Live output (AC 110-220V) |


The suggested opening size is shown below:



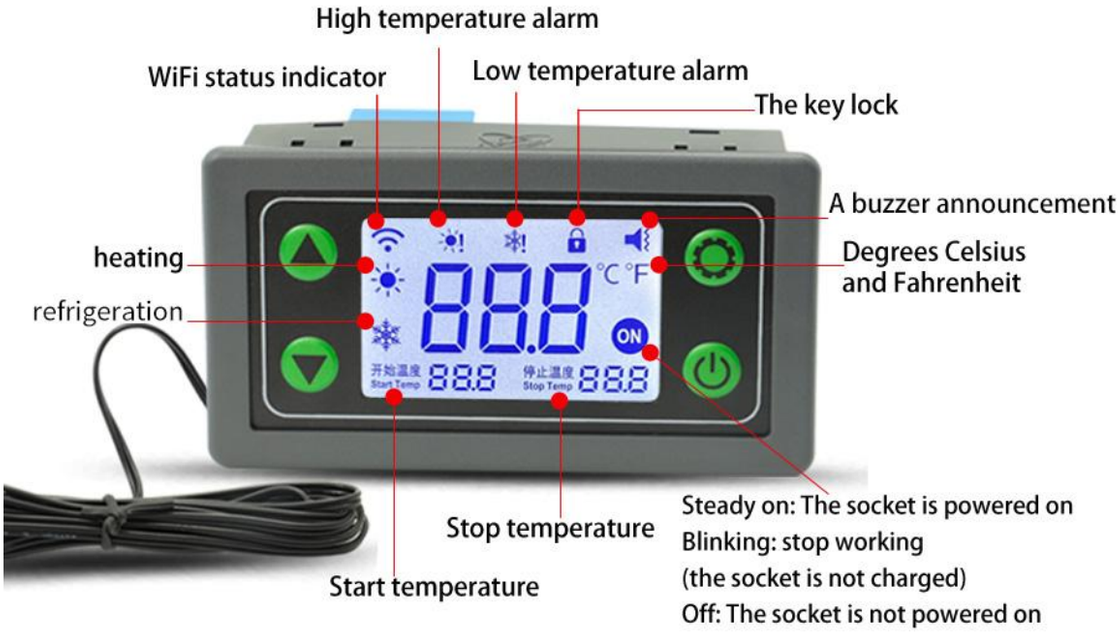

**Product Weight:**
**Temperature controller module 56g**
**+NTC line 13g**
**+WiFi module 3g**
**= 72g in total**

## XY-ST10 Temperature controller product specifications

| | | | |
|---|---|---|---|
| product name | WIFI remote smart thermostat | Product Model | XY-ST10/ST10-W |
| Input power supply | DC 6-30V | Output type | 1 relay switch |
| Type of probe | 10K NTC 3950B | Length of probe | 2 m waterproof probe |
| Size of appearance | 79*43*25(MM) | weight | 72g |
| Maximum control | Current within 10A | Additional Features | Buzzer cue + backlight control |

| | | | | | |
|---|---|---|---|---|---|
| Temperature control range | -40~110°C | Temperature control precision | 0.1°C | Temperature measuring range | -40~110°C |

# 2. Interface description



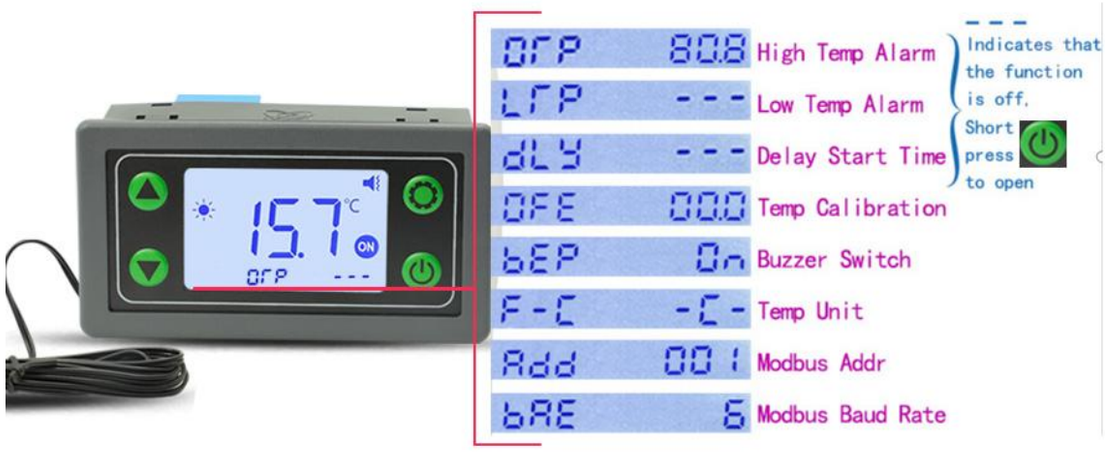

## 2.1 run interface


1. After power on, the “running interface” will be displayed, short press the “▼” key to turn on/off the backlight;
2. Short press the "" key to turn on/off the emergency stop, when the emergency stop is turned on, ON will flash to remind, and the product will stop working at this time;
3. Long press the "  " key to turn on/off the key lock;
4. Press the "▲" key and the "▼" key at the same time for more than 5 seconds, the WiFi will enter the pairing state (only WiFi version);

## 2.2 Start-stop temp setting interface


1. In the running interface, short press the " ⚙ " key to enter the start-stop temperature setting interface;
2. Short press the " " key to switch the start temperature/stop temperature, and use the "▲" key and "▼" key to modify the parameter value;
3. Press and hold the "⚙" key for more than 2 seconds to save the parameters and exit the start-stop temperature setting interface;

## 2.3 System param setting interface



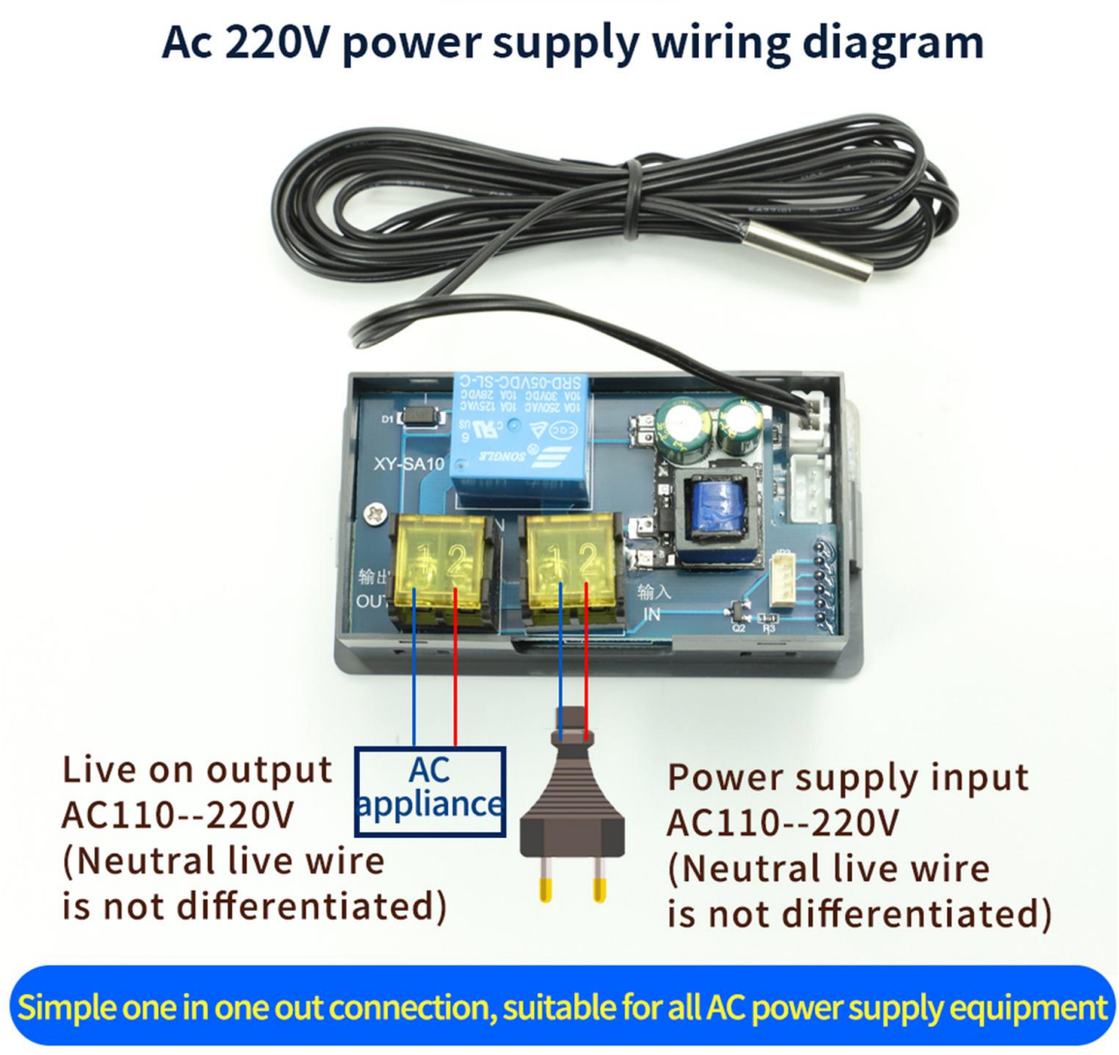

1. In the running interface, long press the "⚙" key for more than 2 seconds to enter the system parameter setting interface.

2. On the system parameter setting interface, press "⚙", "▲", "▼" and "⏻" keys to set "high temperature protection OTP, low temperature protection LTY, delayed start dLY, temperature correction OFE, buzzer switch BEP, temperature unit F-C, device address Add, baud rate bAE" and other functions
3. Press and hold the "⚙" key for more than 2 seconds to save the parameters and exit the system parameter setting interface.

# 3. Key Description

| Interface / Key | Run Interface | Start-Stop Temp Set | System Param Set |
|---|---|---|---|
| ⚙ | Short press: enter the start-stop temp setting interface<br>Long press: enter the system parameter setting interface | Short press: switch to modify the start and stop temperature<br>Long press: Exit settings and save parameters | Short press: switch to modify system parameters<br>Long press: Exit settings and save parameters |
| ▲ | None | Increase start/stop temperature value, support short press + long press | Increase system parameter value, support short press + long press |
| ▼ | Short press: turn on/off the backlight | Decrease start/stop temperature value, support short press + long press | Reduce the system parameter value, support short press + long press |
| ⏻ | Short press: turn on/off emergency stop<br><br>Long press: Turn on/off the key lock | None | Short press: Turn on/off the OTP/LTP/dLY protection function, when the function is turned off, it will display "----" |
| ▲+▼ | Long press for 5 seconds: enter WiFi pairing mode (WTAC-W only) | None | None |

# 4.ST/SA Wiring diagram

# 5.Product Features

## 5.1 Heating and cooling mode

When the start temperature < stop temperature, the working mode is heating mode ☀; when the detection temperature ≤ start temperature, the relay pulls in and starts heating; when the detection temperature ≥ stop temperature, the relay is disconnected and heating stops.

When the starting temperature is greater than the stopping temperature, the working mode is command mode ❄; when the detected temperature is ≥ the starting temperature, the relay is closed and the cooling starts; when the detected temperature is less than or equal to the stopping temperature, the relay is disconnected and the heating is stopped.

In the running interface, short press the "⚙" key to enter the start-stop temperature setting interface. After entering the start-stop temperature setting interface, short press the "⚙" key to switch the start temperature/stop temperature, and use the "▲" and "▼" keys to modify the start temperature/stop temperature. Temperature value; long press the "⚙" key for more than 2 seconds to save the parameters and exit the start-stop temperature setting interface.

In the running interface, short press the "⏻" key to turn on/off the emergency stop; when the emergency stop is turned on, the relay remains disconnected, and the "ON" icon flashes as a reminder.

## 5.2 Emergency stop function

In the running interface, short press the "⏻" key to turn on/off the emergency stop; when the emergency stop is turned on, the relay remains disconnected, and the "ON" icon flashes as a reminder.

## 5.3 High temperature alarm (OTP)

When the high temperature alarm function is turned on and the detected temperature ≥ high temperature alarm value, the product is in a high temperature alarm state;

In the running interface, long press the "⚙" key for more than 2 seconds to enter the system parameter setting interface, short press the "⚙" key to select the parameter item "High temperature alarm OTP", press the "▲" and "▼" keys to modify the high and low temperature alarm value, short press The "⏻" key turns on/off the high temperature alarm; when the function is turned off, it displays "---

## 5.4 Low temperature alarm (LTP)

When the low temperature alarm function is turned on and the detection temperature ≤ low temperature alarm value, the product is in a low temperature alarm state.
For parameter setting of low temperature alarm, please refer to chapter 4.3

## 5.5 Delay start (dLY)

If the delay start (unit: second) is enabled, after a heating or cooling is completed, if the heating

or cooling conditions are met again within the delay period, the product will not execute, and the product will not execute until the delay is completed; parameter setting refer to 4.3 chapter.

## 5.6 temperature calibration (OFE)

The product supports temperature self-correction. Actual temperature = detected temperature + temperature correction; please refer to chapter 4.3 for parameter settings.

## 5.7 Buzzer switch (BEP)

The button prompt tone + sound alarm switch can be modified,please refer to chapter 4.3 for parameter settings.

## 5.8 temperature unit (F-C)

The product supports the switching of temperature units ℃/℉, please refer to chapter 4.3 for parameter settings.

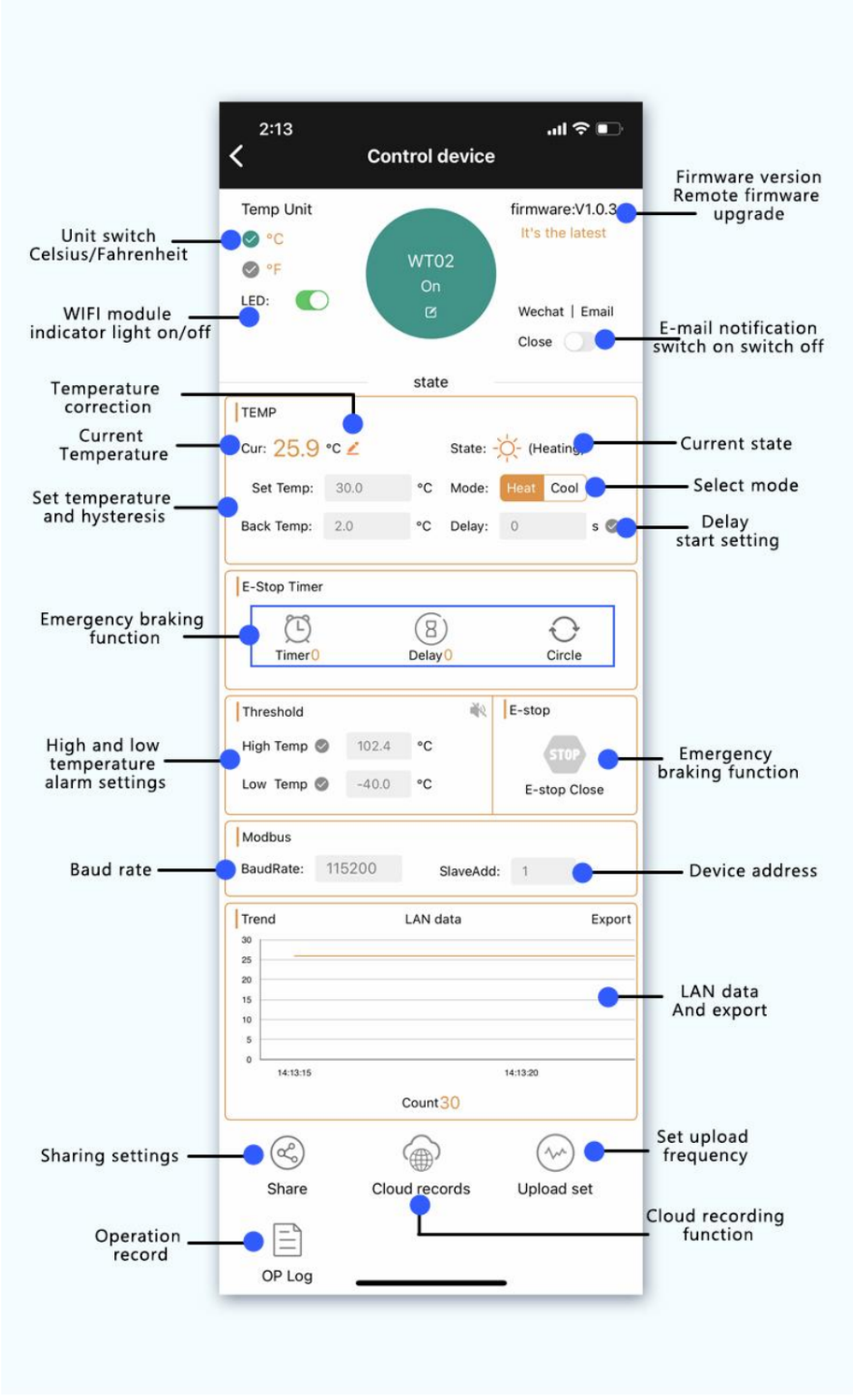
## 5.9 Modbus slave address(Add)

Modbus slave address ranges from 1 to 247, please refer to chapter 4.3 for parameter setting

## 5.0 Modbus baud rate(bAE)

Modbus Baud rate range：
0：9600 1：14400 2：19200 3：38400 4：56000 5：57600 6：115200
please refer to chapter 4.3 for parameter setting

# 6. APP interface function description




## 6.1Remote parameter settings

First of all, we should ensure that the "port rate and equipment address" of the app communication column are consistent with the product. After successful communication, the product operation parameters can be set through the app, such as working mode, working temperature, temperature unit, etc., which is convenient and fast;

## 6.2 Support the timing | delay | cycle function

Timing, delay and cycle can be added through app, and this function controls the state of the emergency stop switch of the product to meet the needs of the timing scene;

## 6.3 Whether the product can be run offline offline

When the parameters are set, the product can run offline, parameter power is not lost; timing, delay, circulation and other functions need time information, the network cannot be run;

## 6.4 LAN data export function

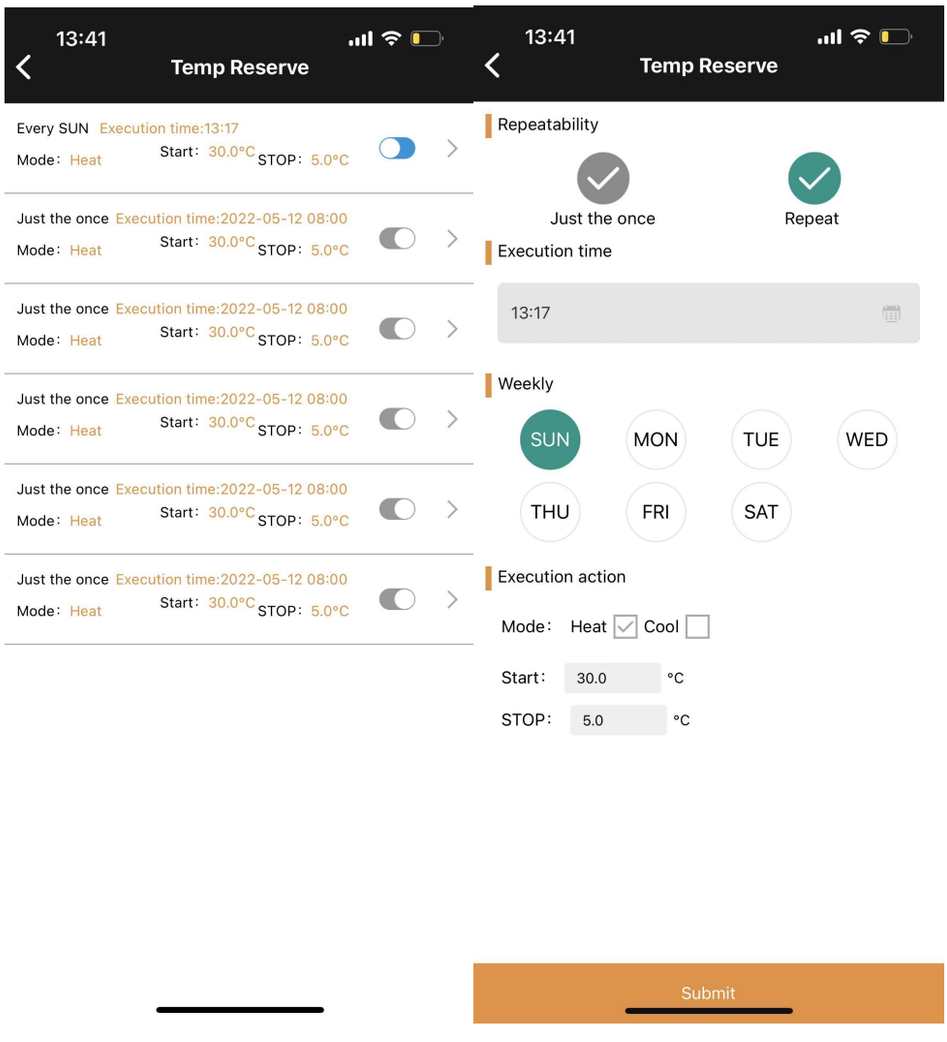
A temperature data will be transmitted from the LAN for 1 second. After clicking "Export", it will be automatically exported to the EXCEL to analyze the temperature data

## 6.5 Share Settings

You can share with others, realize multiple people to share a device, can control its functions.

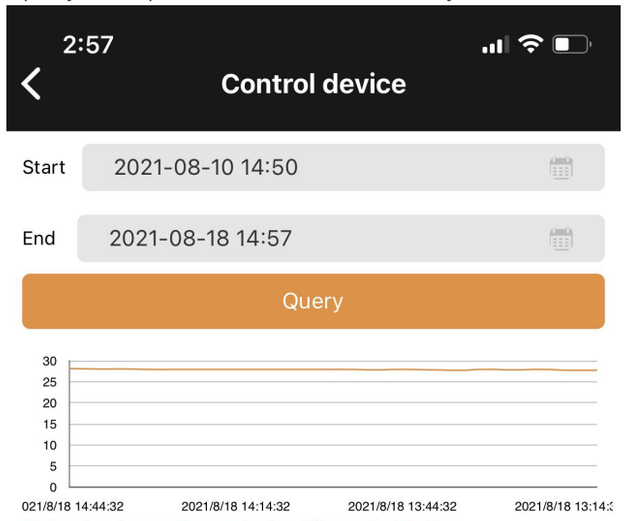
## 6.6 temperature reservation

The product supports 6 temperature reservations, and supports the setting of three parameters: working mode, start temperature, and stop temperature; and can repeat the mode and execution time



## 6.7 operation note

All operation records can be stored in the background, and the + timer + button +APP+ heating refrigeration mode to query the operation status of the relay;

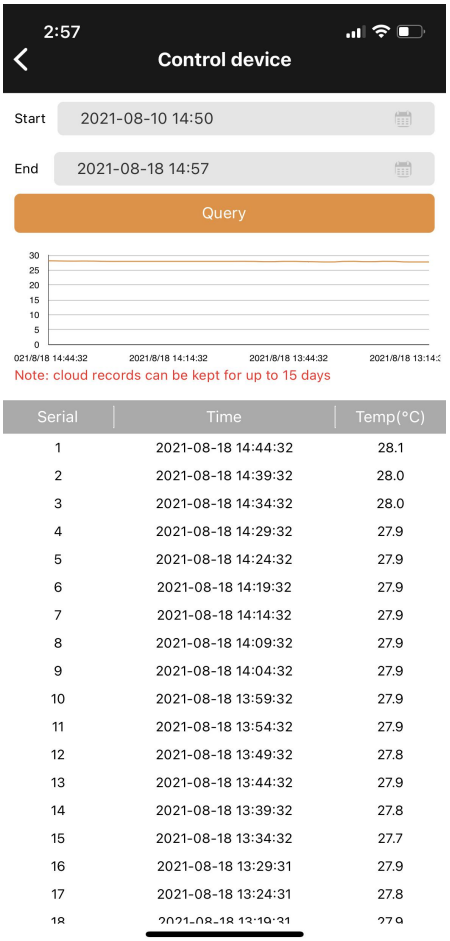



Note: cloud records can be kept for up to 15 days

| Serial | Time | Temp(°C) |
|---|---|---|
| 1 | 2021-08-18 14:44:32 | 28.1 |
| 2 | 2021-08-18 14:39:32 | 28.0 |
| 3 | 2021-08-18 14:34:32 | 28.0 |
| 4 | 2021-08-18 14:29:32 | 27.9 |
| 5 | 2021-08-18 14:24:32 | 27.9 |
| 6 | 2021-08-18 14:19:32 | 27.9 |
| 7 | 2021-08-18 14:14:32 | 27.9 |
| 8 | 2021-08-18 14:09:32 | 27.9 |
| 9 | 2021-08-18 14:04:32 | 27.9 |
| 10 | 2021-08-18 13:59:32 | 27.9 |
| 11 | 2021-08-18 13:54:32 | 27.9 |
| 12 | 2021-08-18 13:49:32 | 27.8 |
| 13 | 2021-08-18 13:44:32 | 27.9 |
| 14 | 2021-08-18 13:39:32 | 27.8 |
| 15 | 2021-08-18 13:34:32 | 27.7 |
| 16 | 2021-08-18 13:29:31 | 27.9 |
| 17 | 2021-08-18 13:24:31 | 27.8 |
| 18 | 2021-08-18 13:19:31 | 27.9 |

## 6.8 Cloud recording and upload frequency

Temperature data can be stored in the background, the log upload frequency of can be set, can set 1 second / bar (one default 5 minutes); data can be inquired for any time period at will to retain data within 15 days; cloud data export function can be added to make the next analysis of the temperature data;

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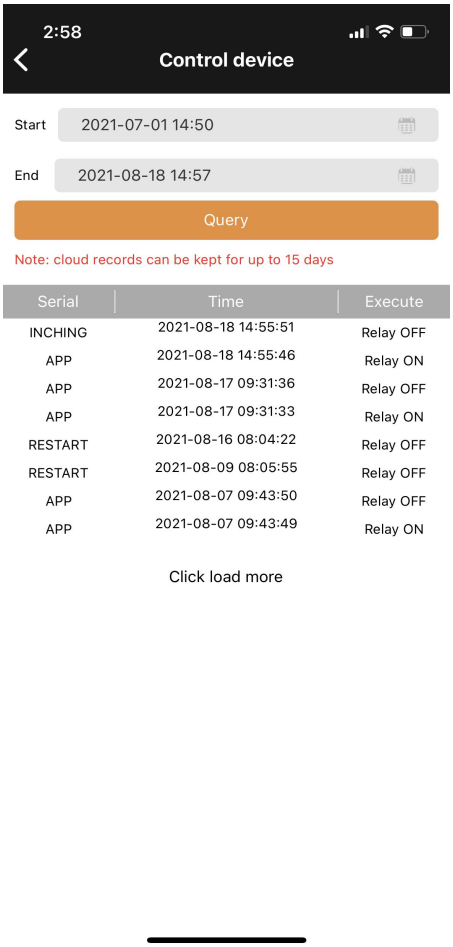
| 16 | 2021-08-18 13:29:31 | 27.9 |
| 17 | 2021-08-18 13:24:31 | 27.8 |
| 18 | 2021-08-18 13:19:31 | 27.9 |




| Serial | Time | Execute |
|---|---|---|
| INCHING | 2021-08-18 14:55:51 | Relay OFF |
| APP | 2021-08-18 14:55:46 | Relay ON |
| APP | 2021-08-17 09:31:36 | Relay OFF |
| APP | 2021-08-17 09:31:33 | Relay ON |
| RESTART | 2021-08-16 08:04:22 | Relay OFF |
| RESTART | 2021-08-09 08:05:55 | Relay OFF |
| APP | 2021-08-07 09:43:50 | Relay OFF |
| APP | 2021-08-07 09:43:49 | Relay ON |

Click load more

# 7.Mail notification function:

## 7.1 How to bind a mailbox

1) Turn on the mail notification

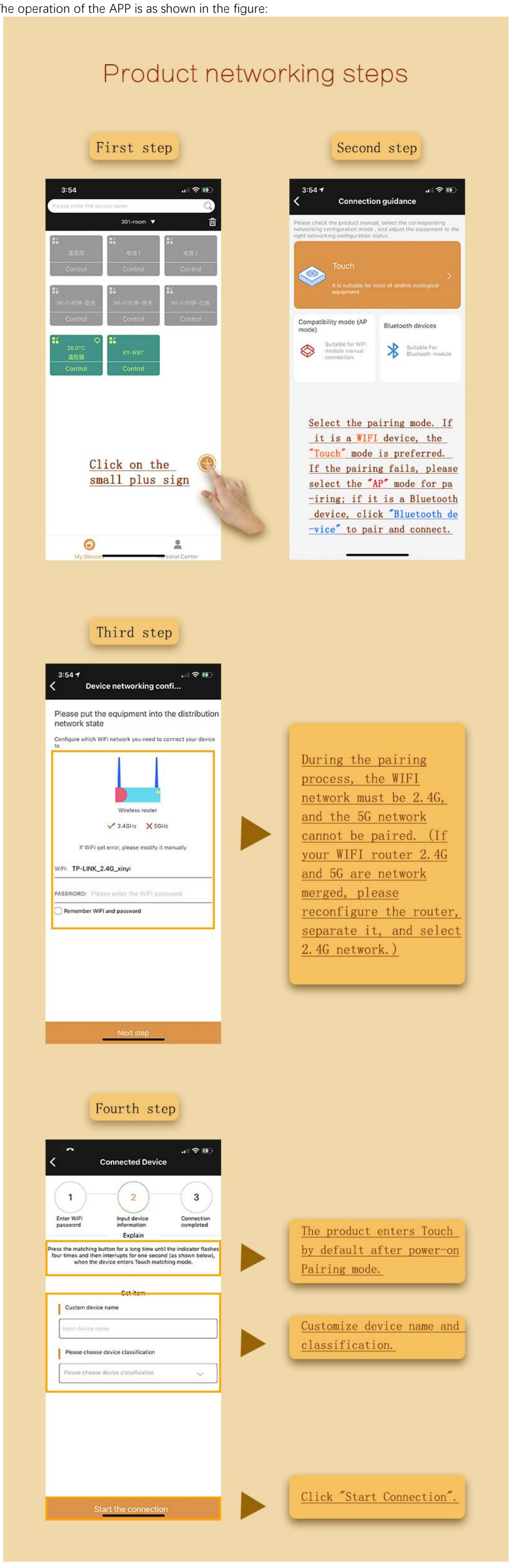

1. Open the APP into the device operation interface, the top left corner is the switch of the mail notification function; if the email notification is turned on, when the computer status sends the change will send the latest status and operation type of the computer in real time through the mailbox used to register the APP;

Operation types are divided into five types: 1. Equipment power 2. Key operation 3. Timer operation 4.APP operation 5. Point operation operation; as shown in the figure below


# 8.How to distribution network

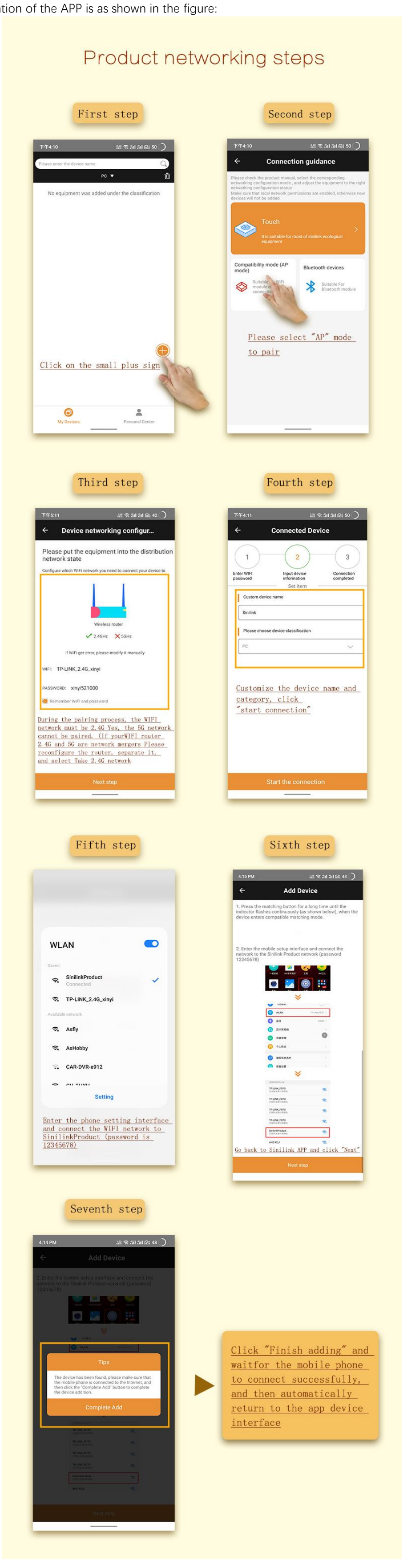
## 8.1 Touch pair

1. On the running interface, press the "▲" key and the "▼" key simultaneously for more than 5 seconds, and wait for the icon to flash 4 times every 1 second, indicating that the product has entered the Touch pairing state.
2. The operation of the APP is as shown in the figure:



## 8.2 AP pair

1. In the running interface, simultaneously press the "▲" key and the "▼" key for more than 5 seconds, and the icon continues to flash rapidly to indicate that the product has entered the AP pairing state.
2. The operation of the APP is as shown in the figure:



## 9. How to download a mobile APP

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