Single-phase Remote Control Meter (WiFi) Quick Guide
Model: DDZY422-D2

1、Product Introduction

Single-phase Remote Control Meter (WiFi) (DDZY422-D2) is applied for energy management purpose, and it works to measure and control electricity consumption of PV system, power system, construction industry and etc,. A real-time, accurate and quick measurement of voltage, current, active power, frequency, power factor, positive/negative active energy and etc, has been realized.

2、Parameters

	Parameter	Value
Communication	Wireless Type	WiFi
	Working Frequency	2.412GHz~2.484GHz
	Local COM	RS485
	Serial Parameter	Address 001、9600bps、E、8、1
	Data Interval	5 mins
Meter	Rated Voltage	AC 230V 5(60)A 50/60Hz
	Power Range	0~999999.99kWh
	Accuracy Class	1.0
	Consumption	≤3.5W
Environment	Working Temperature	−30℃~+70℃
	Relative Humidity	≤85%(No condensation), Altitude<3000m
	Atmospheric Pressure	70kPa~106kPa
	Transportation & Storage	Temperature: −40℃~85℃, Relative Humidity≤85%

3、Display

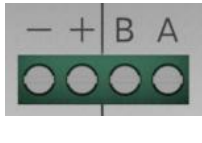3.1 Display Panel (Note: "*" represents single number, "#" represents "-".)
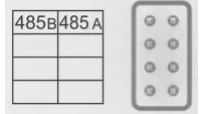
Flip-screen Mode: Auto-flip in 2s/Click to flip the screen.

No.	Content	Display Form	Unit	No.	Content	Display Form	Unit
1	Positive Active Total Energy (High 4-bit)	****	kWh	5	Current	L #**	A
2	Positive Active Total Energy (Low 4-bit)(Two decimal)	**.**	kWh	6	Power	P #**	kW
3	MODBUS COM Address	A ***		7	Power Factor	PF *.*	
4	Voltage	U ***	V	8	Frequency	F **.*	

3.2 Display of Positive Active Total Energy (4-bit liquid crystal,2 decimal)

Data is less than 99.99, E,g. "68.52" :	Data is greater than 99.99, E.g. "220968.52" :

4、Interface Instruction

|			
		Switch	Close: Press for 3s Open: Press for 3s
	B	RS485 A Receive&Send Data	Address 001、9600bps、E、8、1
	A	RS485 B Receive&Send Data	
	+	Pulse Port	Calibration Interface
	−	Pulse Port	
	L↓	L-Line In	L-line Interface
	L↑	L-Line Out	
	N	N-Line In&Out	N-Line Interface
	485B	RS485 B Receive&Send Data	Address 001、9600bps、E、8、1
	485A	RS485 A Receive&Send Data	
	Pin1	RS485 A Receive&Send Data	Address 001、9600bps、E、8、1
	Pin2	RS485 B Receive&Send Data	

Notice: RS485A, RS485B of Pin,Female Header are directly connected.

5、Indicator Lights

Indication	Identification	Status
	ON/OFF Switch (Green)	1.On: Close 2.Off: Open
	Electric Energy Pulse (Red)	1.Flash: According to consumption status. (1200 times means 1kWh)
	Communicate with Meter (Green)	1.On: Connect to meter. 2.On 400ms/Off 1600ms: Initializing. 3.On 400ms/Off 400ms:Data transmitting between module and meter. 4.Off: Fail to connect to meter.
	Communicate with Server (Green)	1.On: Connect to server. 2.On 400ms/Off 1600ms: Initializing. 3.On 400ms/Off 400ms: Fail to connect to server.
	Running status	1.On 64ms/Off 2000ms: Running normally. 2.On/Off: WiFi module abnormal.

6、Installation Diagram
6.1 Installation Position: Grid Side
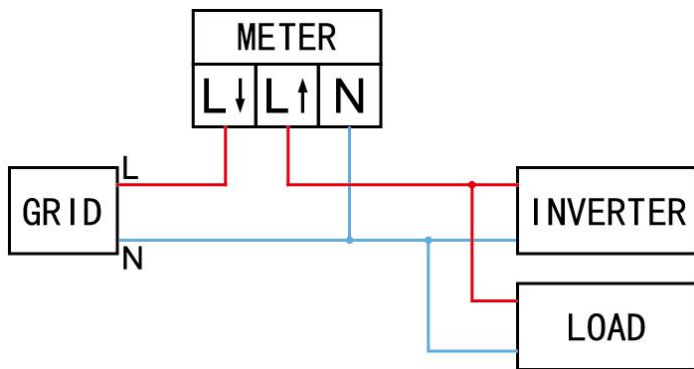
6.2 Installation Position: Production Side
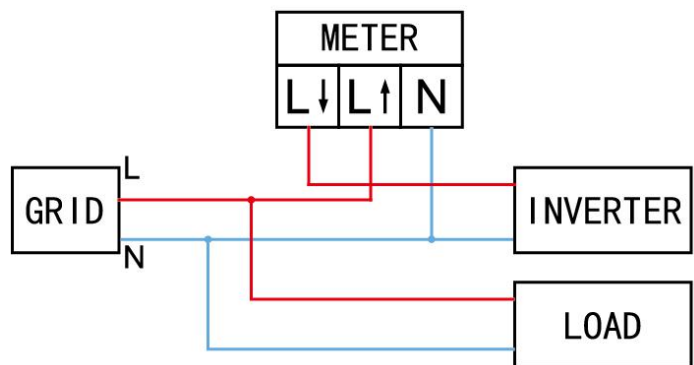
6.3 Installation Position: Consumption Side
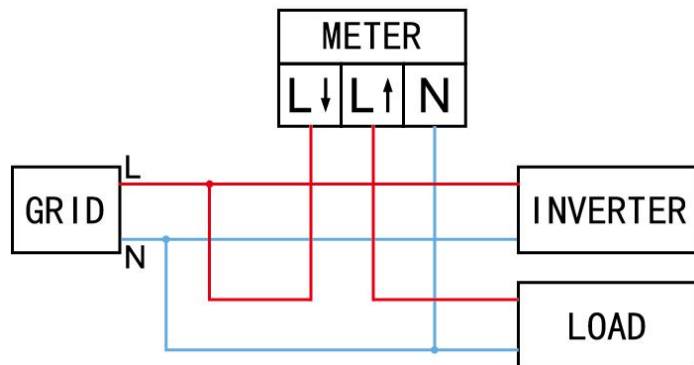
USER MANUAL for SOLARMAN APP

1. Download app

SOLARMAN Smart
for end user

SOLARMAN Business
for business

iPhone: Search "SOLARMAN Smart" / "SOLARMAN BUSINESS" in Apple Store.
Android: Search "SOLARMAN Smart" / "SOLARMAN BUSINESS" in Google Play.

You can also login via WEB as below:

pro.solarmanpv.com

home.solarmanpv.com

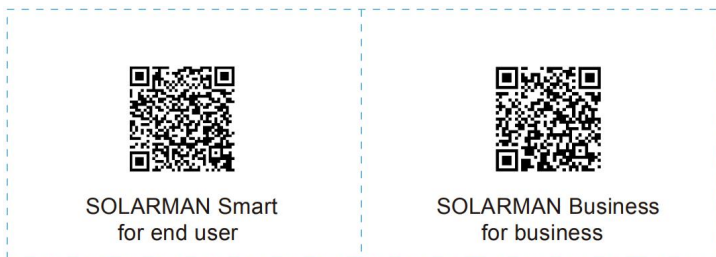## 2. Registration on SOLARMAN SMART

Go to SOLARMAN SMART and register. Click "Register" and create your account here.
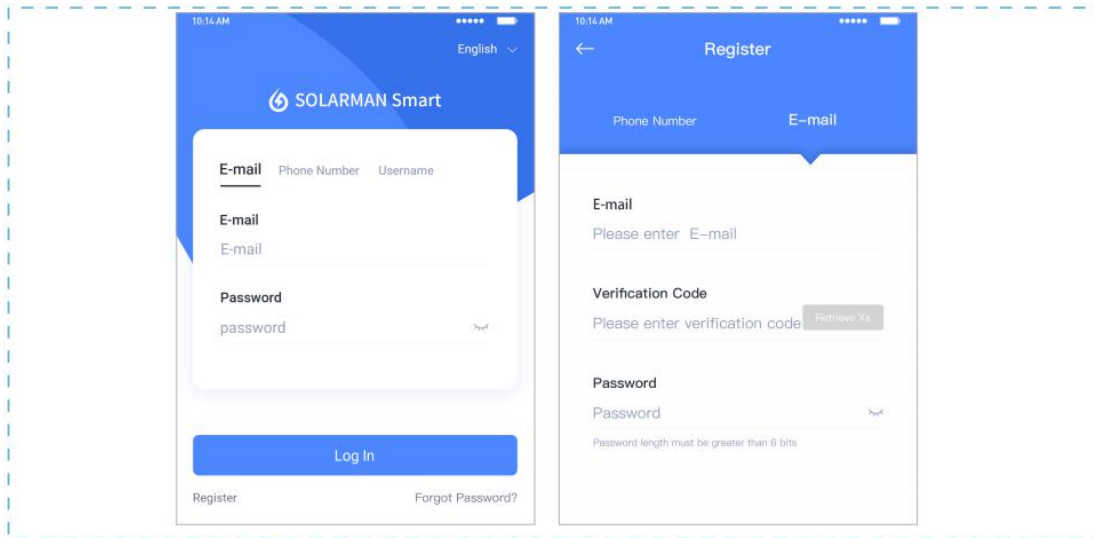
3. Create a Plant

Click "Add Now" to create your plant. Please fill in plant basic info and other info here.

4. Add a Device

Method 1: Enter logger SN manually.

Method 2: Click the icon in the right and scan to enter logger SN You can find logger SN in the external packaging or on the logger body.

5. Meter Configuration

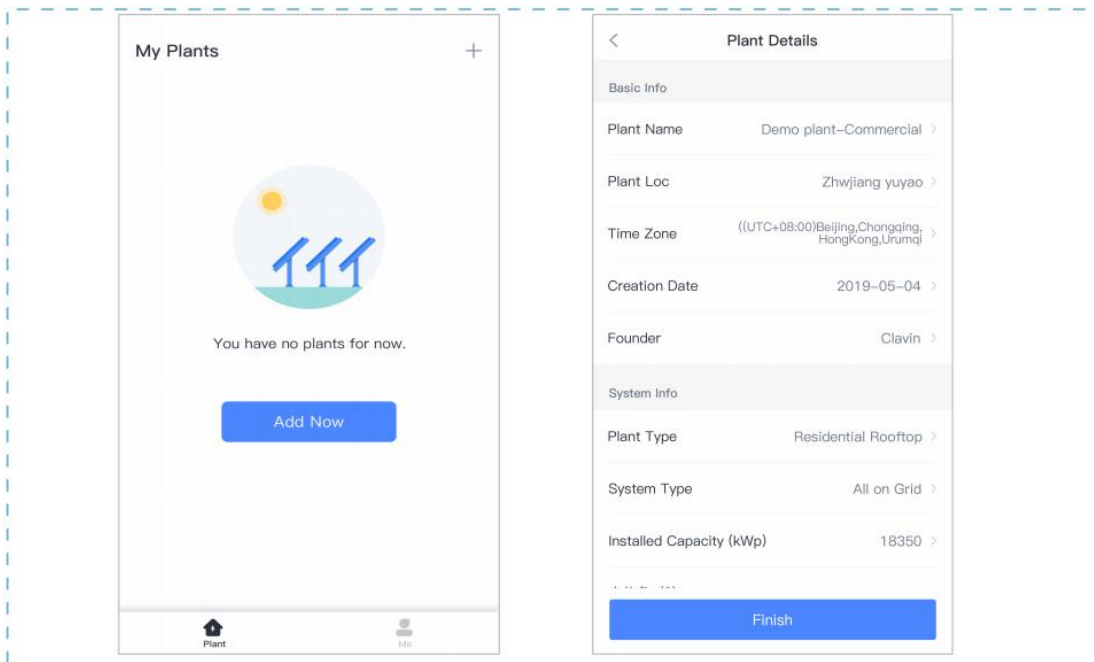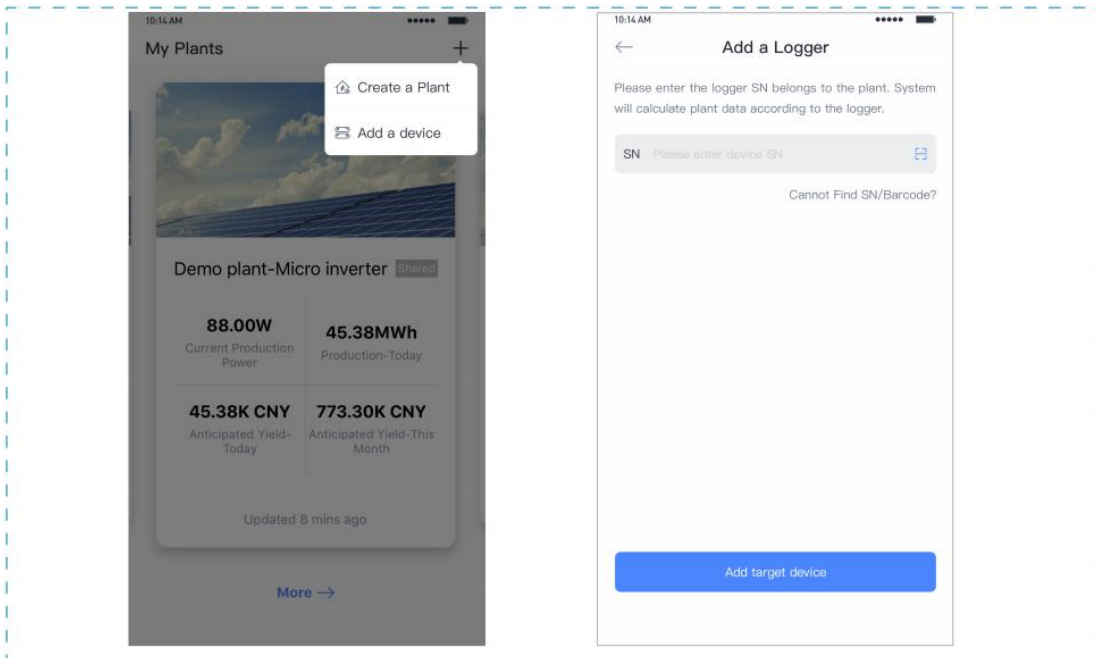The aim of meter configuration is to send meter data to platform and calculate meter data.

5.1 Add a meter to plant via logger

SOLARMAN platform does not support adding a meter directly. Users can add a logger first and logger will send meter data to platform.

Connect the devices first. After logger is powered on and data is transmitting, target meter will be listed on device list.
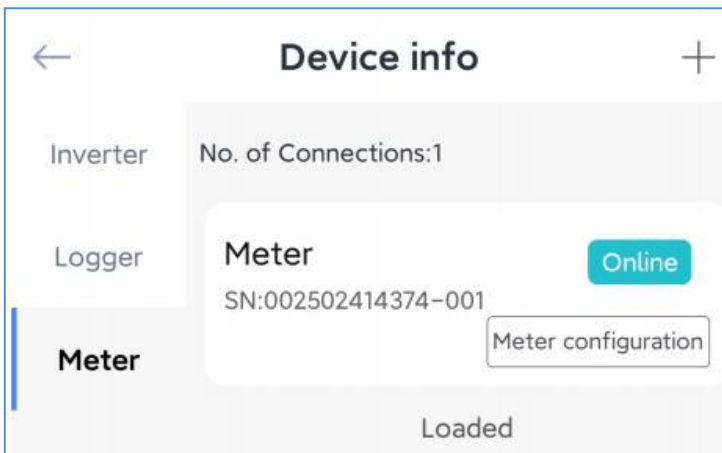
5.2 Meter Configuration

Go to「Device Info」and click "Configure" button.
Configure the meter according to installation location

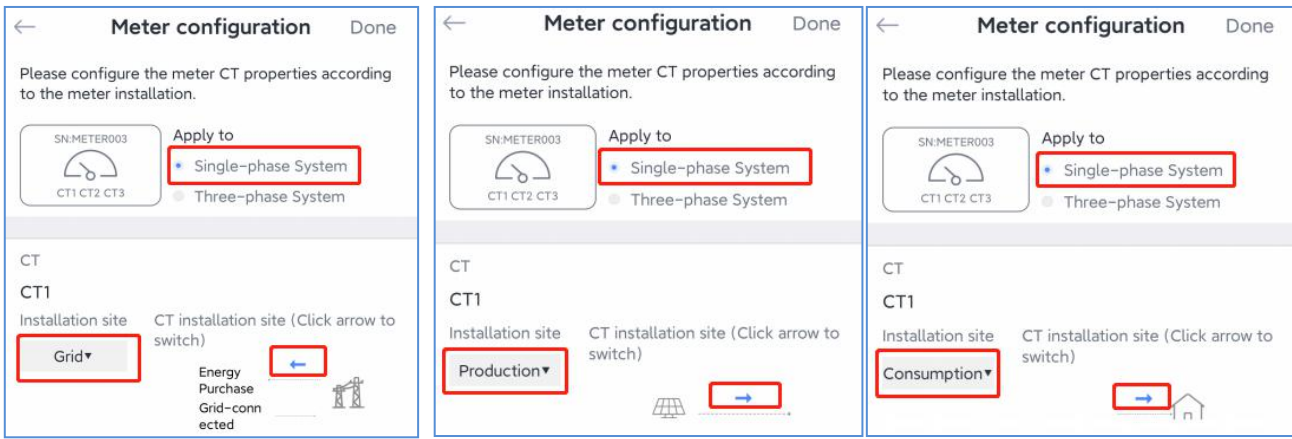| Meter configuration Done	Meter configuration Done	Meter configuration Done
Please configure the meter CT properties according to the meter installation.	Please configure the meter CT properties according to the meter installation.	Please configure the meter CT properties according to the meter installation.
SN:METER003 **Apply to** • Single-phase System ○ Three-phase System	SN:METER003 **Apply to** • Single-phase System ○ Three-phase System	SN:METER003 **Apply to** • Single-phase System ○ Three-phase System
CT1 CT2 CT3	CT1 CT2 CT3	CT1 CT2 CT3
CT	CT	CT
CT1	CT1	CT1
Installation site · CT installation site (Click arrow to switch)	Installation site · CT installation site (Click arrow to switch)	Installation site · CT installation site (Click arrow to switch)
Grid▾ · Energy Purchase Grid-connected ←	**Production▾** · →	**Consumption▾** · →

6.Network Configuration

After the logger is added, please configure the network to ensure normal operation.

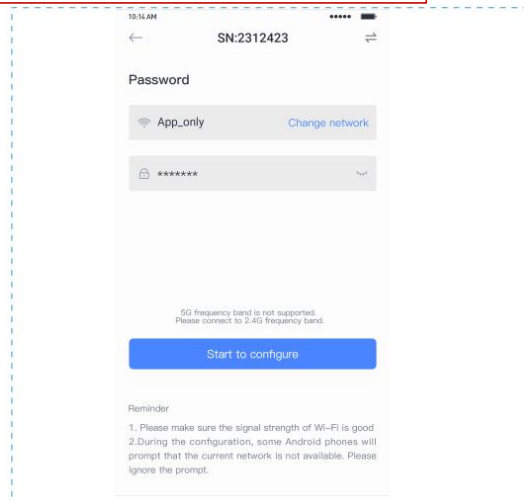Go to "Plant Details"-"Device List", find the target SN and click "Networking".
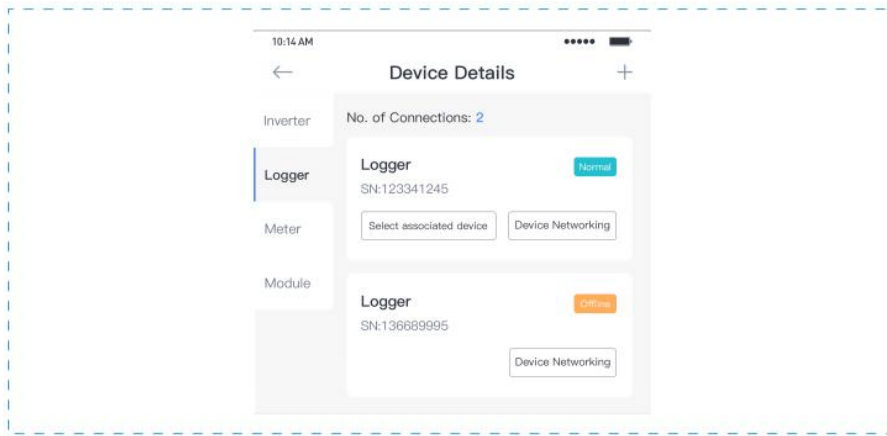
Step 1：Confirm Wi-Fi Info

Please make sure your phone has connected to the right WiFi network. And click "Start".

⚠ Notice: 5G WiFi is not supported .

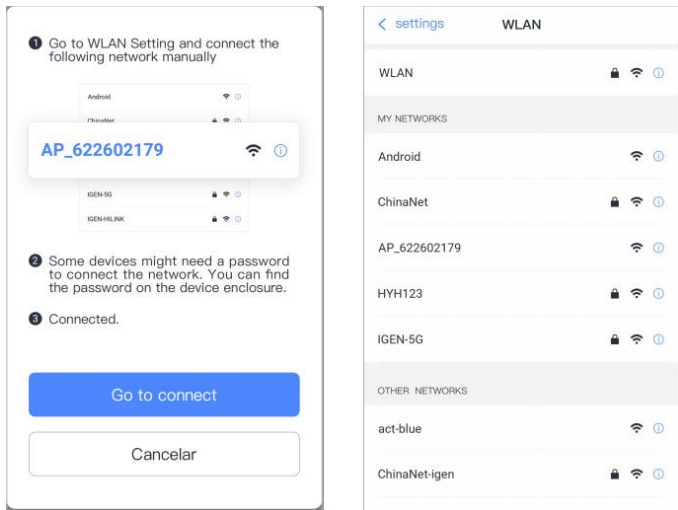Avoid the use of special characters in WiFi networks（, ; = " " '）

Step 2：Connect to AP network

Click "Go to connect" and find the right "AP_XXXXX" network (XXXXX
refers to logger SN).
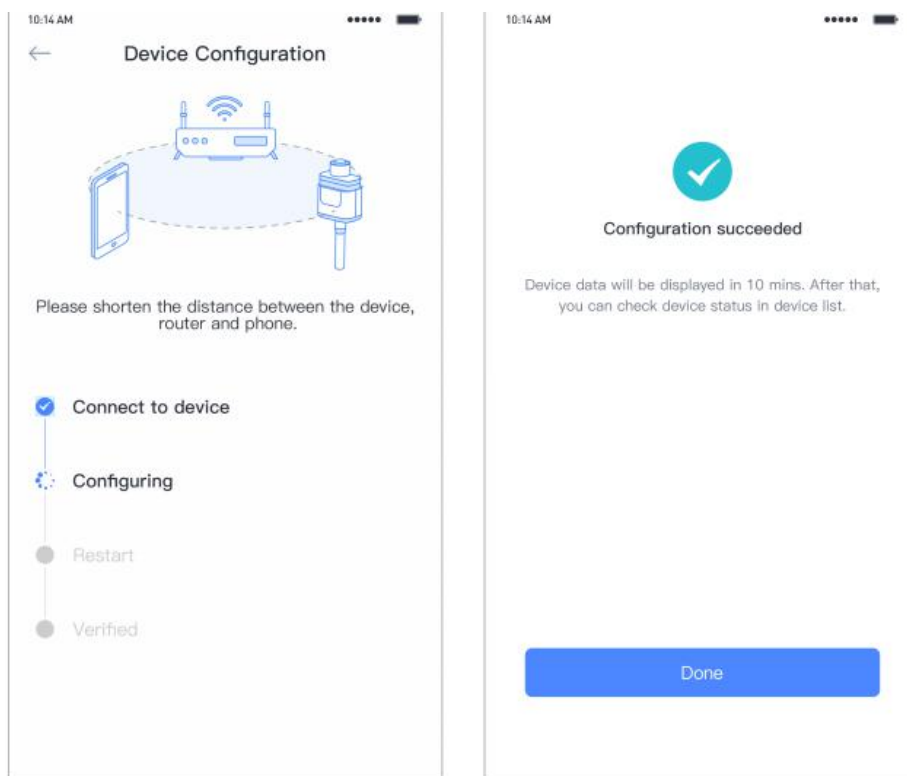If the password is required, you can find the password on the logger
body.
Go back to SOLARMAN Smart APP, after connecting to AP network.

Step 3：Auto Configuration
Please wait for a while to complete the configuration. Then system will switch to the following page.
Click "Done" to check plant data. (Usually, the data will be updated in 10 mins)

If configuration failure occurs, please check the following reason and try it again.
（1） Make sure WLAN is ON.
（2） Make sure WiFi is normal.
（3） Make sure wireless router does not implement the white-black list.
（4）Remove the special characters in Wi-Fi network.
（5） Shorten the distance between the phone and device.
（6）Try to connect to other Wi-Fi.