

# IOT Relay User Manual

## V1.4

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# 1 Product Overview

## 1.1 Overview

Support multiple channel relay, On/Off/Delay/Momentary.

Support multiple interface RJ45/RS485/CAN/WIFI

Support HTTP GET CGI/UDP/TCP Server/TCP Client

10/100Mbps ethernet, Auto-MDIX,DHCP ip,Static IP

Local Button control

PC app config and control

WEB config and control

8KB fifo command buffer

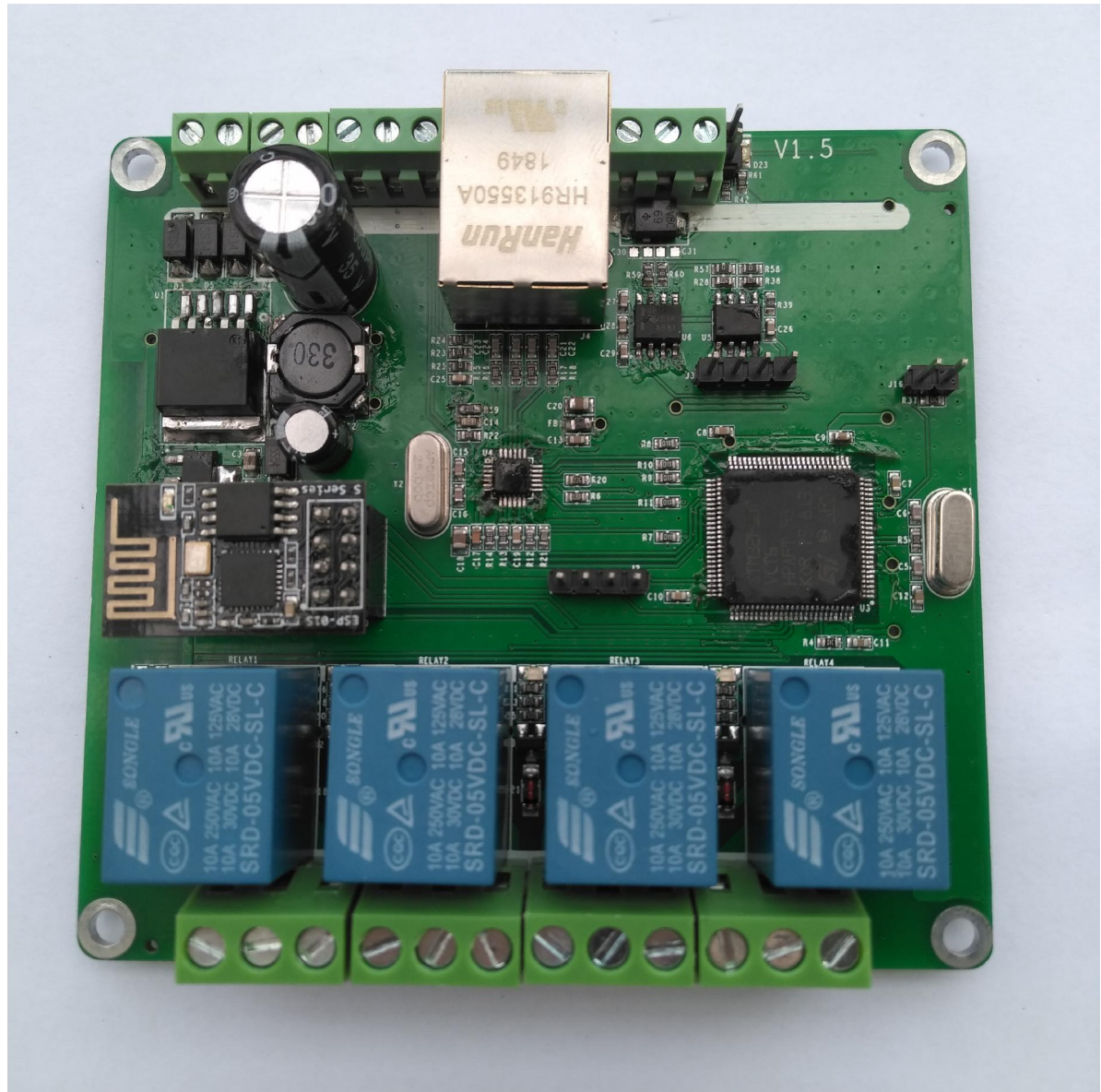
Support password.

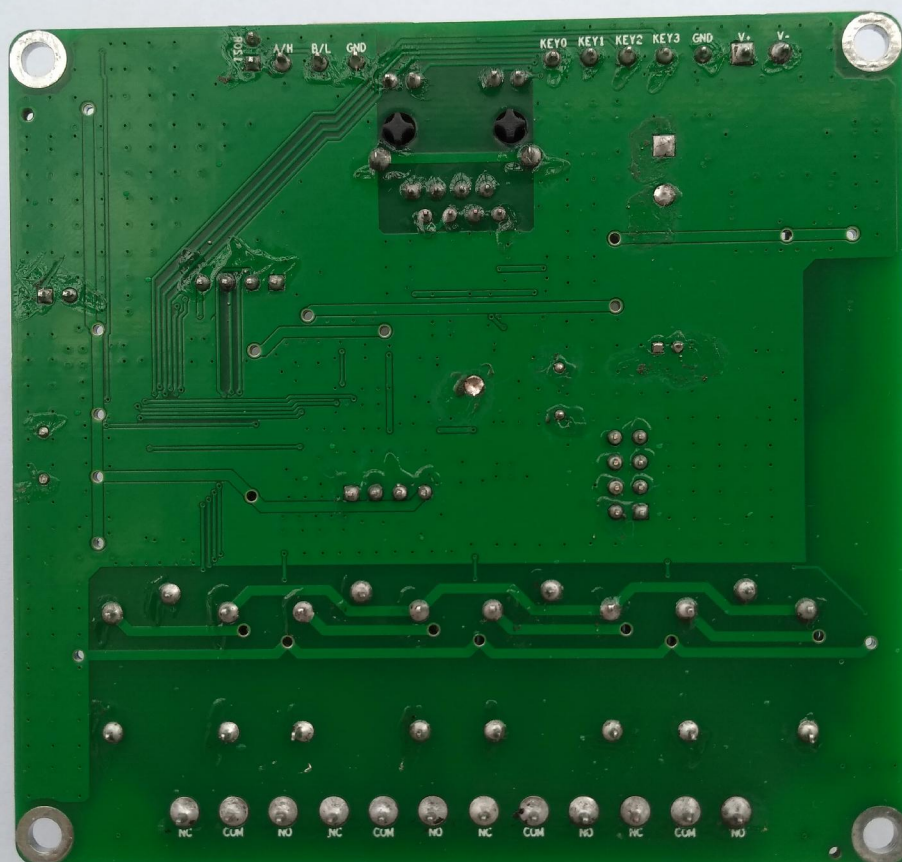
## 1.2 Technical Parameters

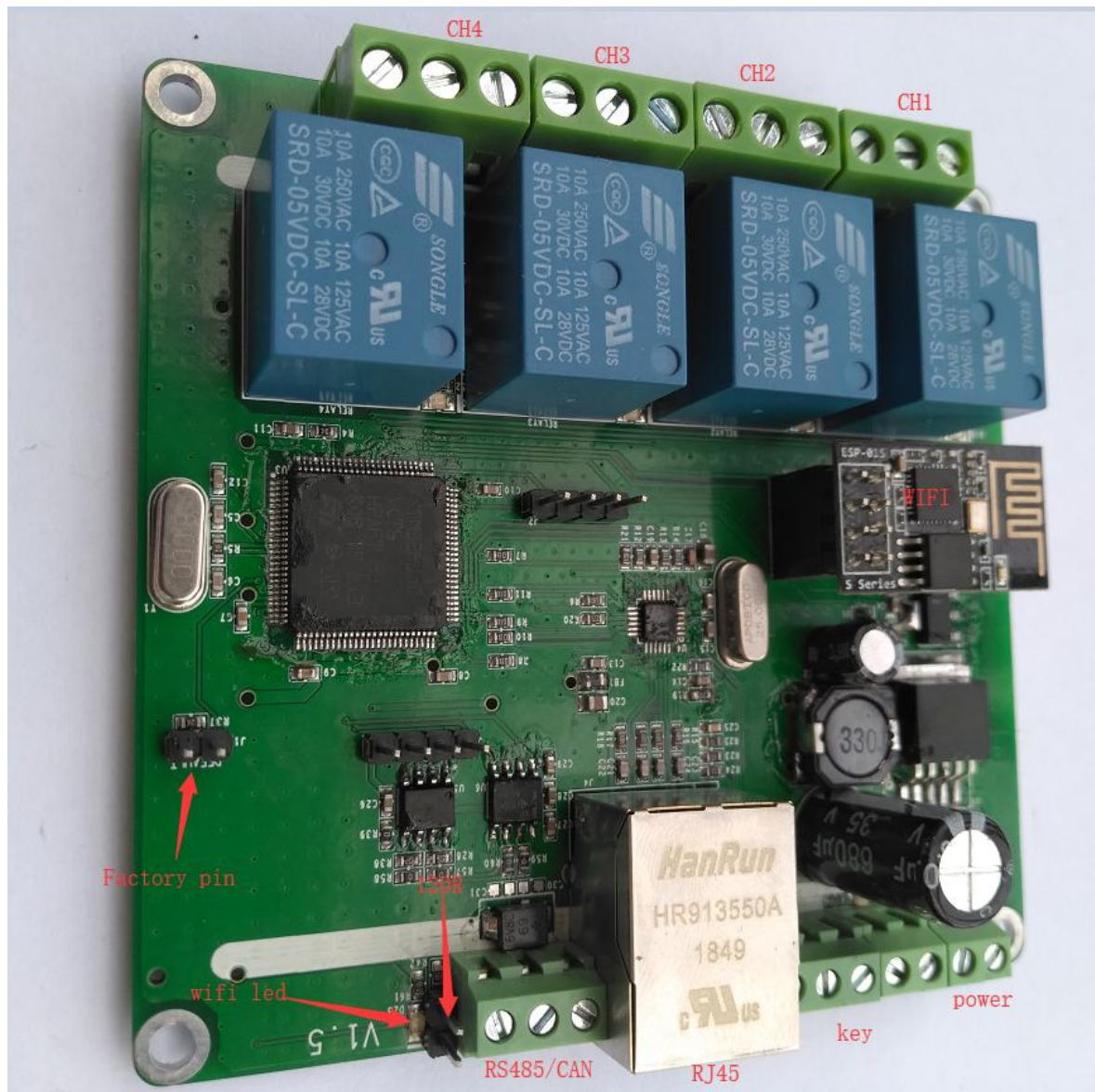
Network	Interface	RJ45/ RS485/CAN/WIFI
	Baudrate	100M/115200bps/125kbps/150Mbps
	Protocol	TCP server/client, UDP server/client, HTTP GET CGI, RS485, CAN, WIFI
Output	Relay Power	AC 250V/10A,DC 30V/10A
	Contacts	Normally Close Normally Open
	Delay	1~65535 seconds
	Momentary	Pull in 0.5 seconds, automatically release
Working environment	Operating temperature	-40~+85°C
Power	Power Specifications	Power supply 5-40V, Recommended 12V
	Current	200mA@12V DC
	Power consumption	Less than 5W

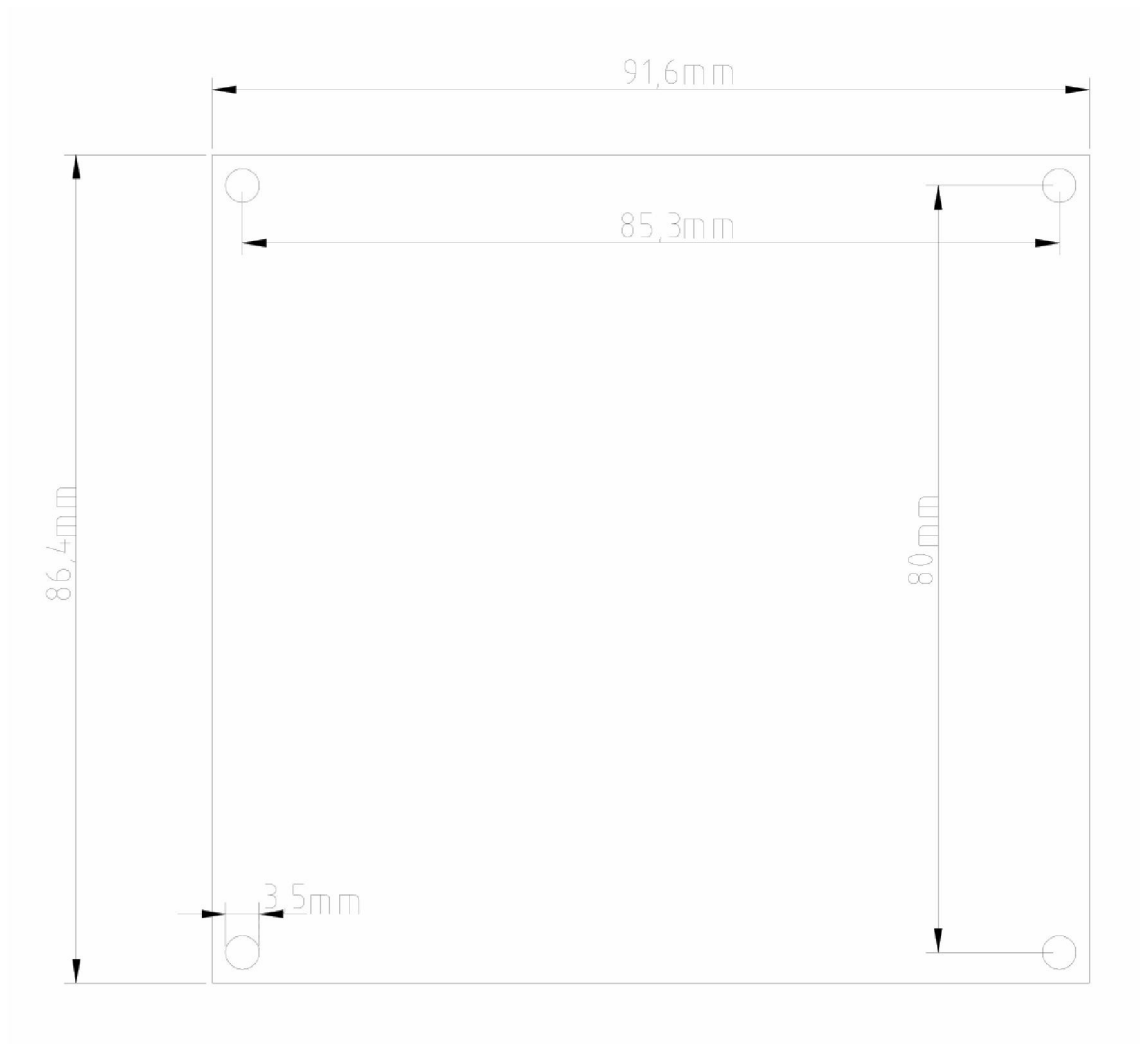
## 2 Size

### 2.1 4 Channel Relay









## 3 Interface Description

### 3.1 LED

wifi led	on: connect wireless route success off: can not connect wireless router
CH1-CH8 led	on: relay on off: relay off

### 3.2 Relay Contact

Each set of relay outputs has three terminals: normally open contact, common terminal and normally closed contact. The contact capacity is AC 250V10A, DC 30V10A, and the output of



controlling higher power requires external contactor.

- Normally open contact:

When the relay is released (or the module is powered off), the common terminal is disconnected from the normally open contact. After the suction is closed, the two contacts are closed.

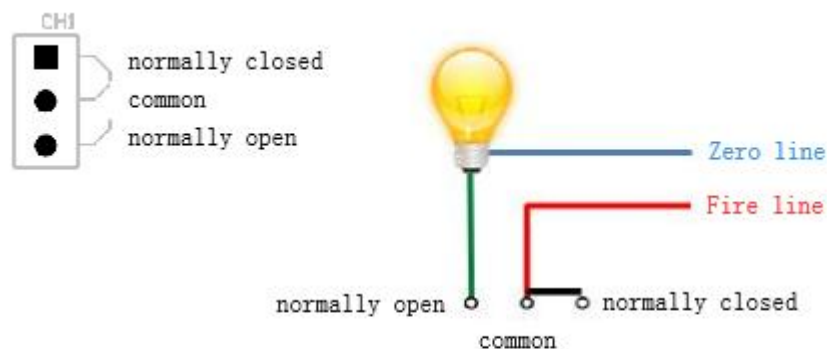
- Common:

Controlled power input

- Normally closed contact:

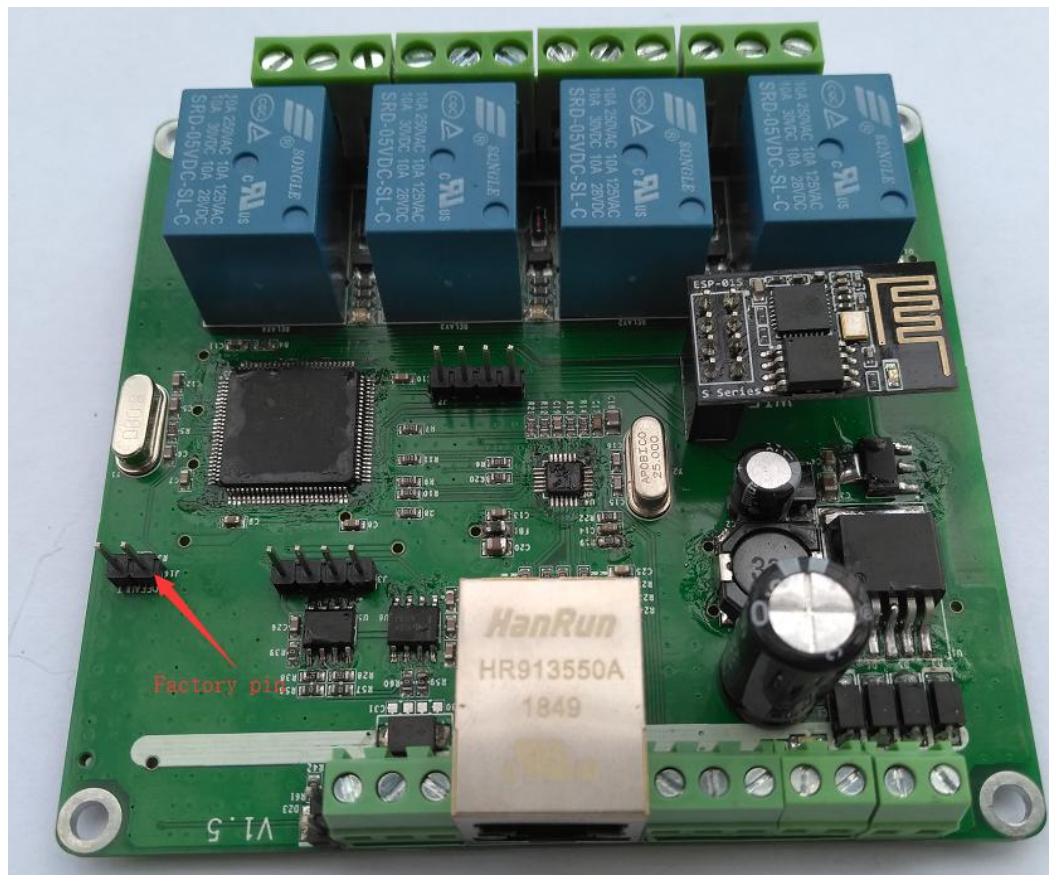
When the relay is released (or the module is powered down), the common and normally closed contacts are closed. After the pull-in, the two contacts are disconnected.

Connection example



### 3.3 Reset To Factory

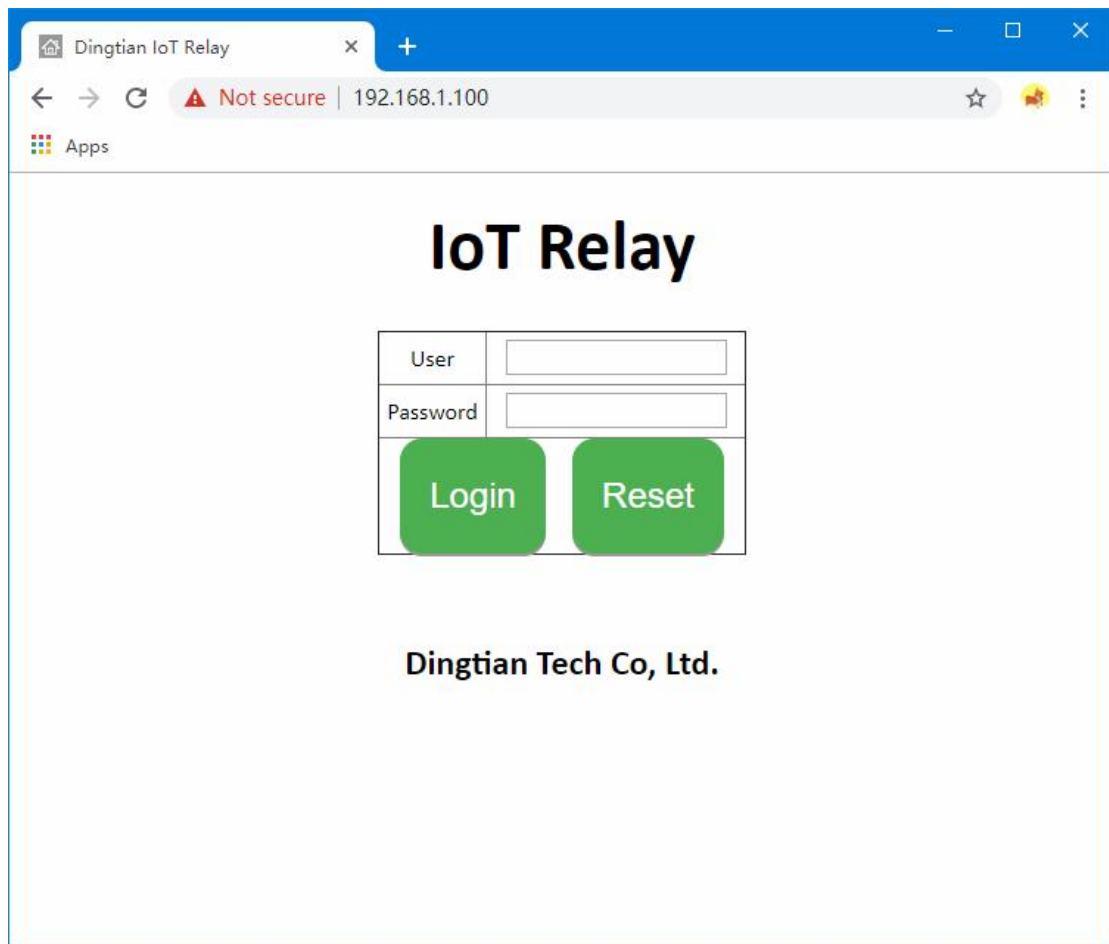
1 Short the 2 pin headers under the Default assembly with a jumper cap



- 2 Turn off the power of the network module, and then power on the module again.
- 3 Pull out the Default jumper cap



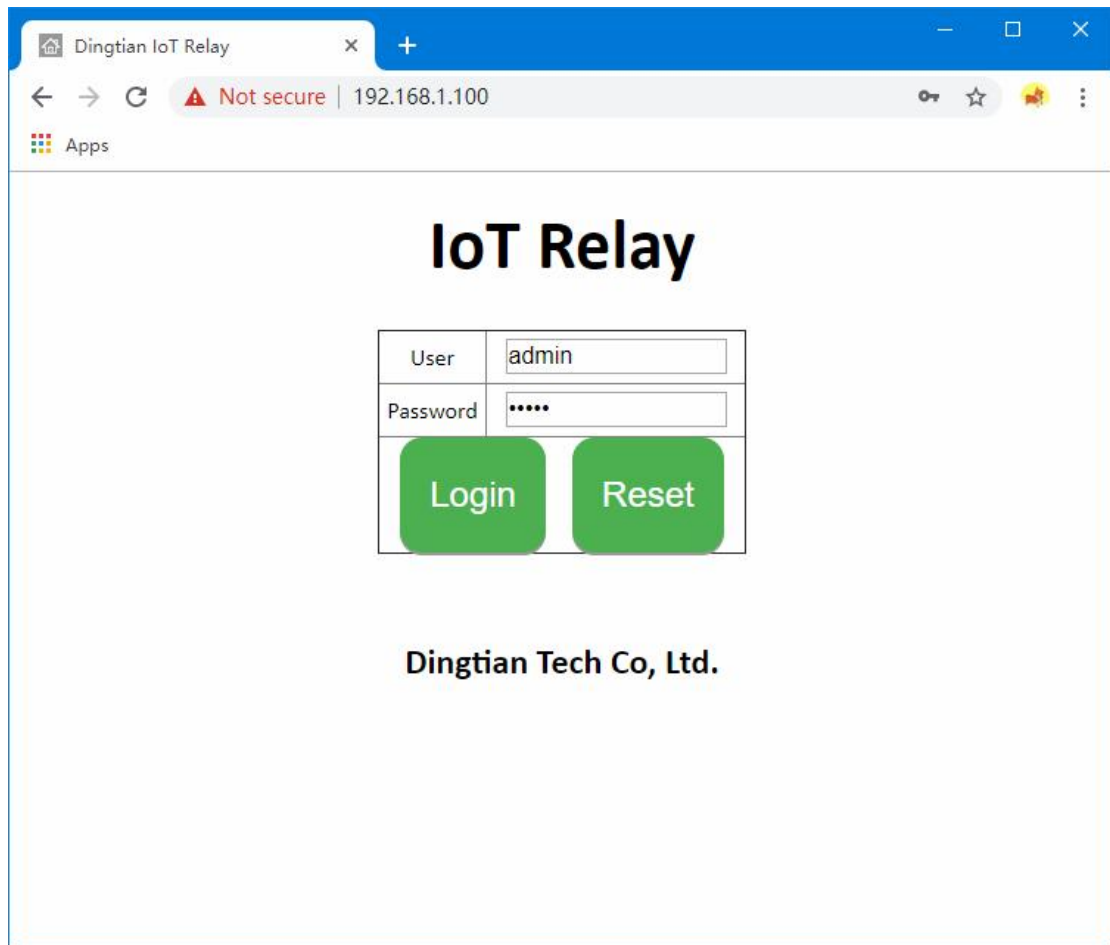
## 4 web



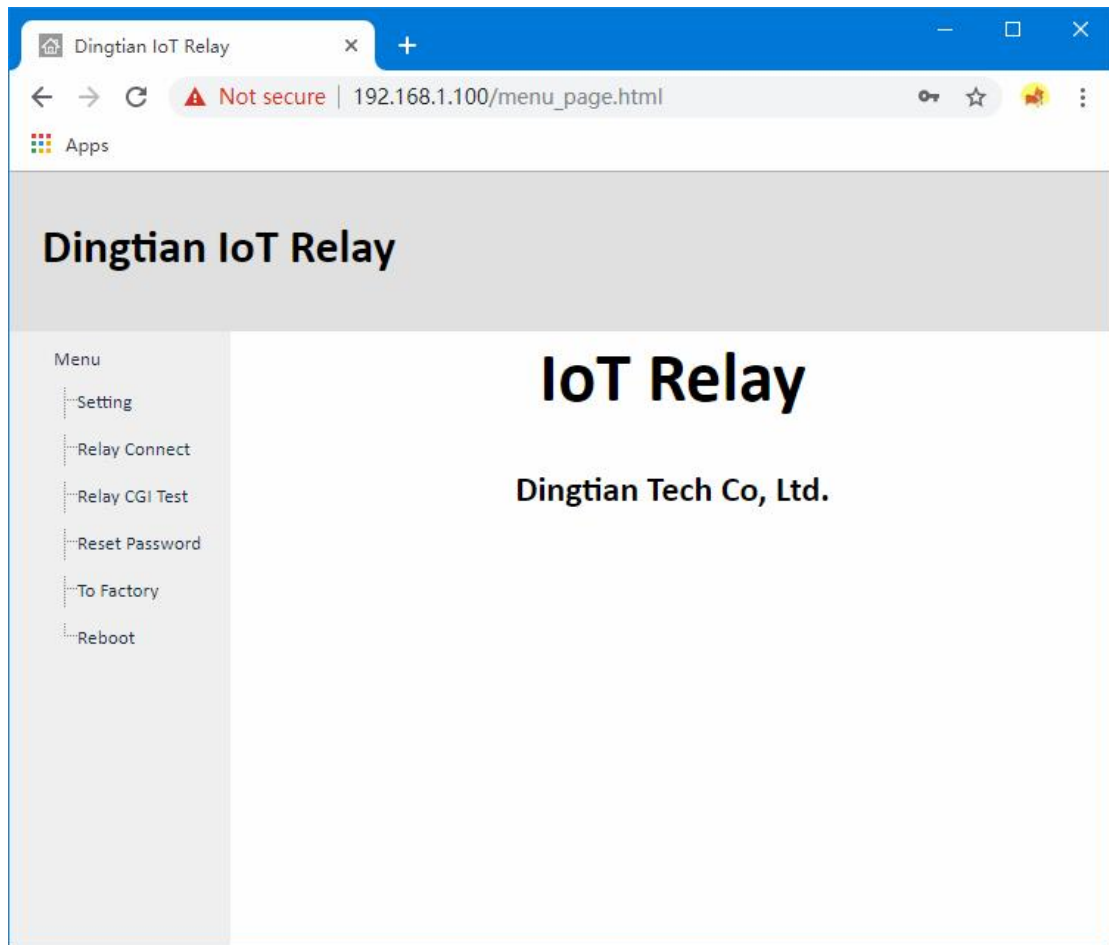
### 4.1 Login

user:admin

password:admin



webcome page



## 4.2 Setting Network

setting page set network info

after click "Save" button, device will reboot

Dingtian IoT Relay

← → ↻ ⚠ Not secure | 192.168.1.100/menu\_page.html 🔑 ☆ 📱 ⋮

Apps

Dingtian IoT Relay

Menu

- Setting
- Relay Connect
- Relay CGI Test
- Reset Password
- To Factory
- Reboot

Setting

Hardware Version	V1.6
Software Version	V2.12
Model	Dingtian IoT RELAY-4
Serial Number	0
DHCP	No ▾
IP	192.168.1.100
Netmask	255.255.255.0
Gateway	192.168.1.1
DNS	192.168.1.1
MAC	bc:34:88:00:00:00
Router SSID	lzproute
Router Password	lzplzj13723464709
	support char 0~9,a~z,A~Z,-_

Save

## 4.3 Setting Relay Connect

relay page set relay control interface param,and test relay  
after click "Save" button,device well reboot

Dingtian IoT Relay

192.168.1.100/menu\_page.html

Apps

Dingtian IoT Relay

Menu

- Setting
- Relay Connect
- Relay CGI Test
- Reset Password
- To Factory
- Reboot

# Relay

Connect Info		
RS485 Baudrate	115200bps	
RS485 Databits	8bit	
RS485 Stopbit	1bit	
RS485 Parity	None	
CAN Speed	125Kbps	
CAN ID	1	
UDP Server	192.168.1.9	
UDP Server Port	60001	
TCP Server	192.168.1.9	
TCP Server Port	60001	
WIFI UDP Server	192.168.1.9	
WIFI UDP Server Port	1883	
Relay Password	4660	0~9999(0 no password)
Keep Alive Second	30	1~120 second(0 close)
Momentary Time	5	1~255 (1=100ms)

Key Type			
Self-lock	Self-lock	Self-lock	Self-lock

Other

Power failure recoveryNo

Save

Relay Test

Relay1:Off

Relay2:Off

Relay3:Off

Relay4:Off

## 4.4 Relay CGI Test

relay CGI test

Dingtian IoT Relay

← → ↻ ⚠ Not secure | 192.168.1.100/menu\_page.html

Apps

Dingtian IoT Relay

Menu

- Setting
- Relay Connect
- Relay CGI Test
- Reset Password
- To Factory
- Reboot

Relay CGI Test

Relay Password  (0~9999)

Relay	Status	Momentary(1~255 100ms)	Delay(1~65535 Second)	On/Off	Momentary	Delay
1	Off	<div>On ▼ <input type="text" value="5"/> 500ms</div>	<div>On ▼ <input type="text" value="10"/> second</div>	<div>Do On</div>	<div>Do Momentary</div>	<div>Do Delay</div>
2	Off	<div>On ▼ <input type="text" value="5"/> 500ms</div>	<div>On ▼ <input type="text" value="10"/> second</div>	<div>Do On</div>	<div>Do Momentary</div>	<div>Do Delay</div>
3	Off	<div>On ▼ <input type="text" value="5"/> 500ms</div>	<div>On ▼ <input type="text" value="10"/> second</div>	<div>Do On</div>	<div>Do Momentary</div>	<div>Do Delay</div>
4	Off	<div>On ▼ <input type="text" value="5"/> 500ms</div>	<div>On ▼ <input type="text" value="10"/> second</div>	<div>Do On</div>	<div>Do Momentary</div>	<div>Do Delay</div>

Relay CGI load success!



## 4.5 Reset Password

Dingtian IoT Relay

← → ↻ ⚠ Not secure | 192.168.1.100/menu\_page.html

Apps

### Dingtian IoT Relay

Menu

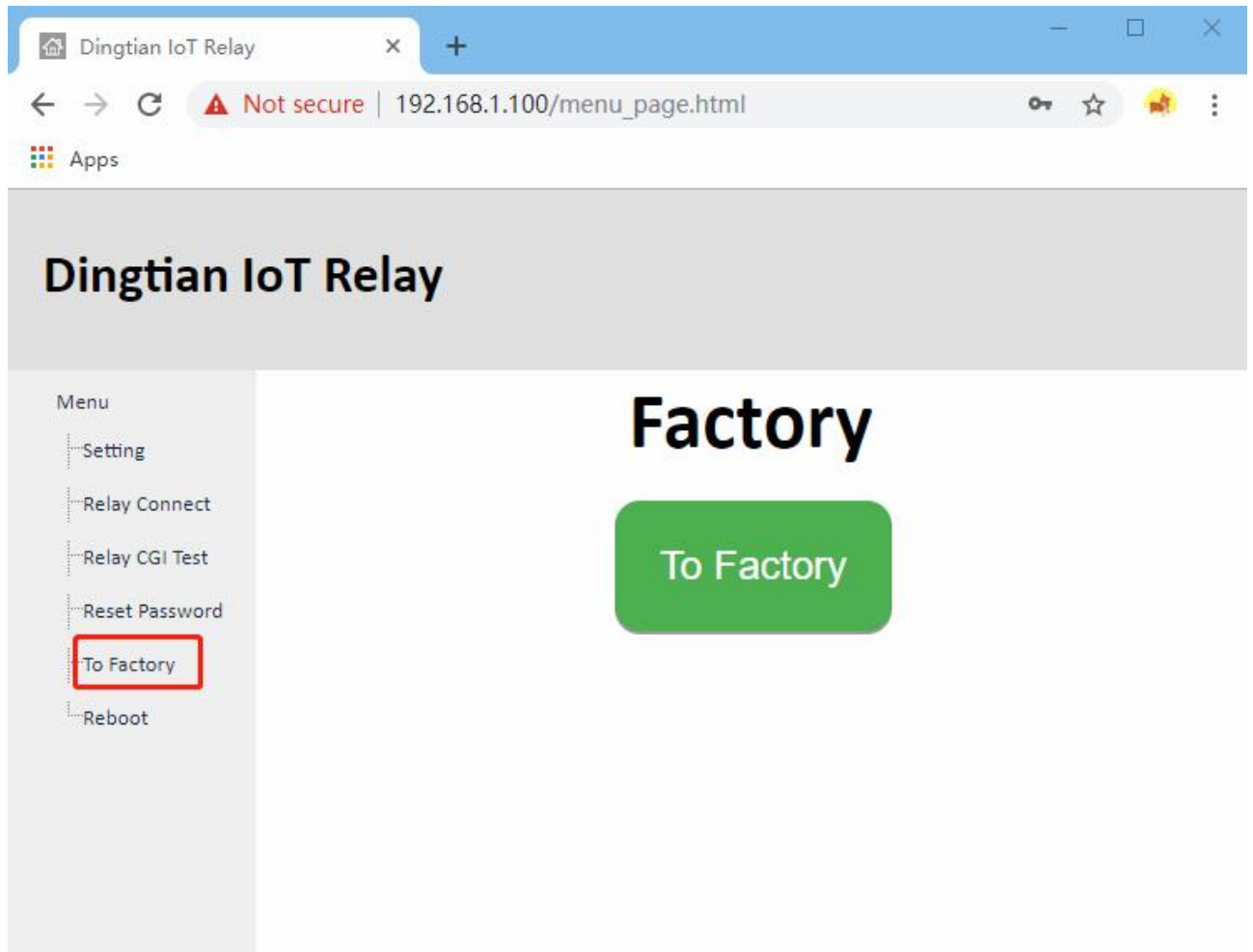
- Setting
- Relay Connect
- Relay CGI Test
- Reset Password**
- To Factory
- Reboot

## Reset Password

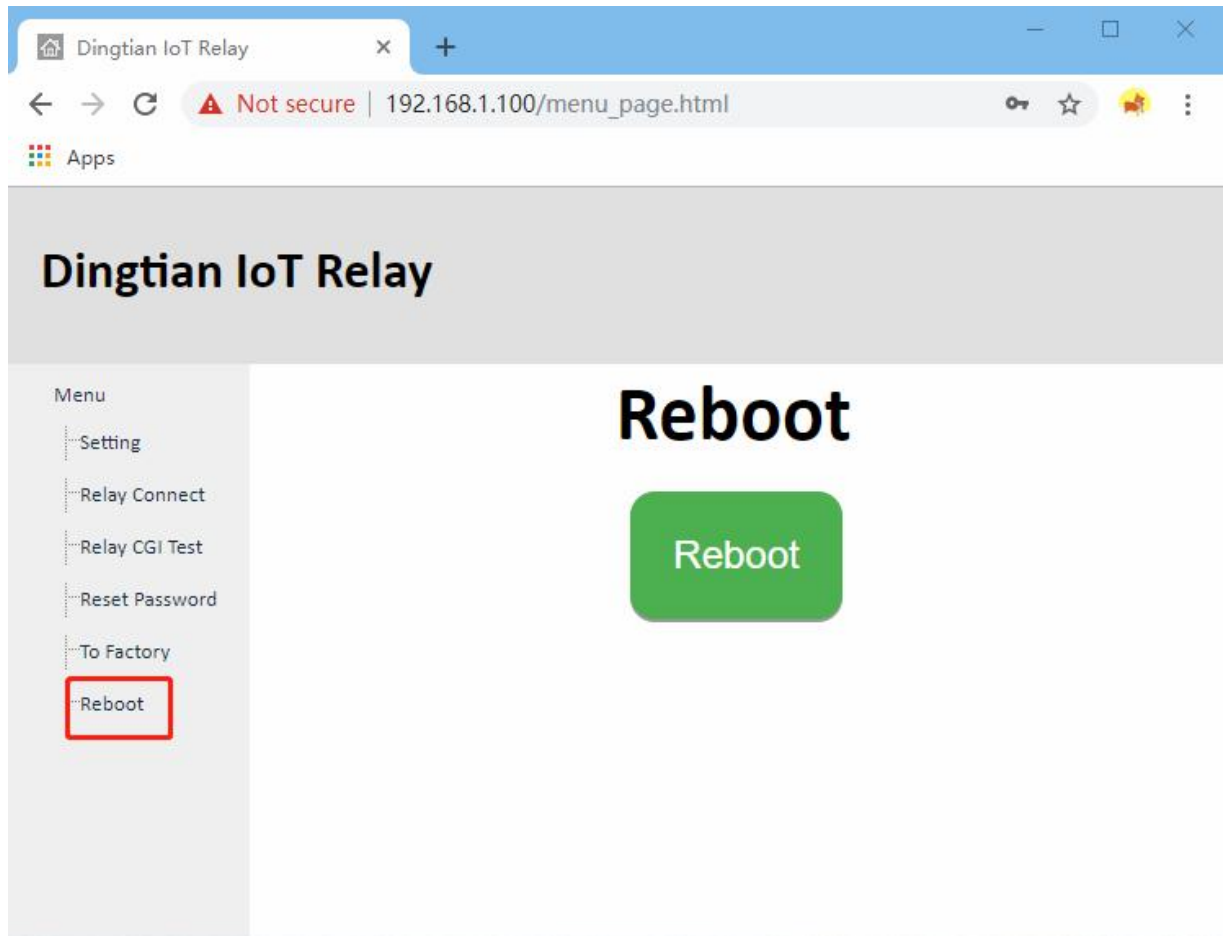
User	admin
Old password	
New password	

Reset

## 4.6 To Factory



## 4.7 Reboot



## 5 PC app

Notic: When the computer has multiple network cards,only one can be reserved.

Dingtian-Tech Relay

LanguageEnglish

When multiple devices,  
device ip and computer ip  
must be on the same network segment

COM1

Search Device

Version V1.3

Support: stephen@dingtian-tech.com

TestConfig

Commandread relay status

Relay password0 (4digital)

Relay1

Delay(Second)5 (max:65535)

StatusOff

Run

All OnAll Off

☐ Relay1☐ Relay2☐ Relay3☐ Relay4☐ Relay5☐ Relay6☐ Relay7☐ Relay6

# 5.1 Search Device

Dingtian-Tech Relay

LanguageEnglish

Version V2.0

Support: stephen@dingtian-tech.com

When the computer has multiple network cards, you need to select the correct network card.

TestConfig

192.168.1.9

1 select ip connect with relay board

2 search device(use multicast)

Search Device

Commandread relay status

Relay password0 (4digital)

Relay1

Delay(Second)5 (max:65535)

StatusOff

Run

All OnAll Off

Relay1

Relay2

Relay3

Relay4

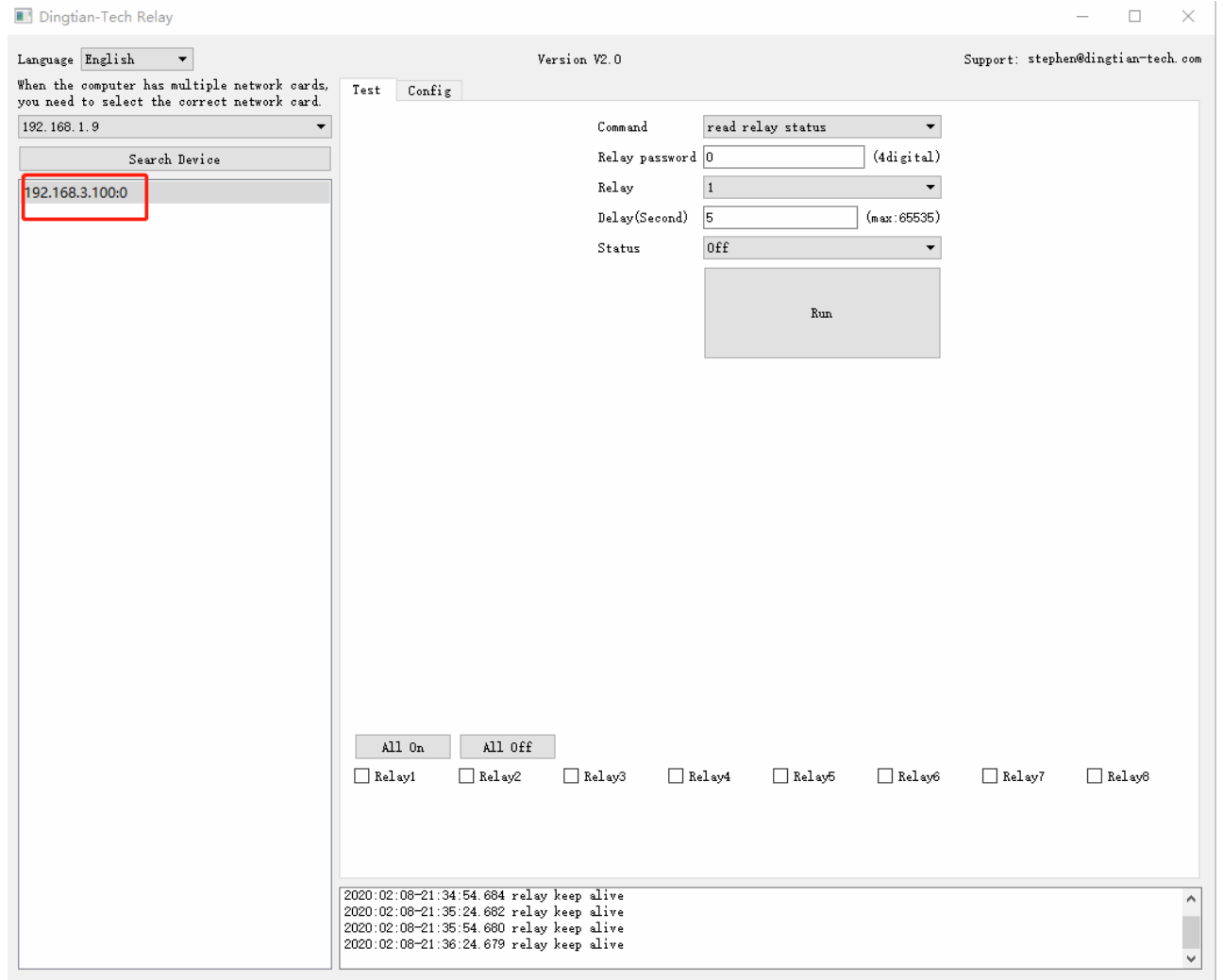
Relay5

Relay6

Relay7

Relay8

web can search a device ip is 192.168.3.100,but computer ip is 192.168.1.9



next, web can test relay,and config device



# 5.1 Test Relay

Dingtian-Tech Relay

Version V2.0

Support: stephen@dingtian-tech.com

Language English

Test

Config

When the computer has multiple network cards, you need to select the correct network card.

192.168.1.9

Search Device

192.168.3.100:0

Command read relay status

Relay password 0 (4digital)

Relay 1

Delay(Second) 5 (max: 65535)

Status Off

Run

All On

All Off

☐ Relay1

☐ Relay2

☐ Relay3

☐ Relay4

☐ Relay5

☐ Relay6

☐ Relay7

☐ Relay8

2020:02:08-21:35:24.682 relay keep alive

2020:02:08-21:35:54.680 relay keep alive

2020:02:08-21:36:24.679 relay keep alive

2020:02:08-21:36:54.678 relay keep alive

## 5.1 Config Device

Dingtian-Tech Relay

Version V2.0

Support: stephen@dingtian-tech.com

Language English

When the computer has multiple network cards, you need to select the correct network card.

192.168.1.9

Search Device

192.168.3.100:0

Test

Config

Info

model

ETH RELAY-4 V2

hw\_ver

V1.6

sn

0

sw\_ver

V2.12

Ethernet

DHCP

No

IP

192.168.3.100

Netmask

255.255.255.0

Gateway

192.168.3.1

DNS

192.168.3.1

MAC

bc:34:88:00:00:00

Router SSID

Router Password

Web Password

admin

RS485

Baudrate

115200bps

Databits

8bit

Stopbits

1bit

Parity

None

CAN

Baudrate

125Kbps

ID

1

Server

UDP Server

192.168.1.9

TCP Server

192.168.1.9

WIFI UDP Server

192.168.1.9

UDP Port

60001

TCP Port

60001

WIFI UDP Port

1883

Relay

Relay Password

0

0~9999

Power Failure Recovery

No

Keep Alive

30

1~120 second(0 close) Momentary Time

5

1~255(1=100ms)

Key Type

Key1

Key2

Key3

Key4

Key5

Key6

Key7

Key8

Self-Lock

Self-Lock

Self-Lock

Self-Lock

Follow

Follow

Follow

Follow

Read Config

Write Config

2020:02:08-21:36:54.678 relay keep alive

2020:02:08-21:37:24.676 relay keep alive

2020:02:08-21:37:50.007 interface:以太网 multicast r param success

2020:02:08-21:37:50.814 interface:以太网 multicast r param success