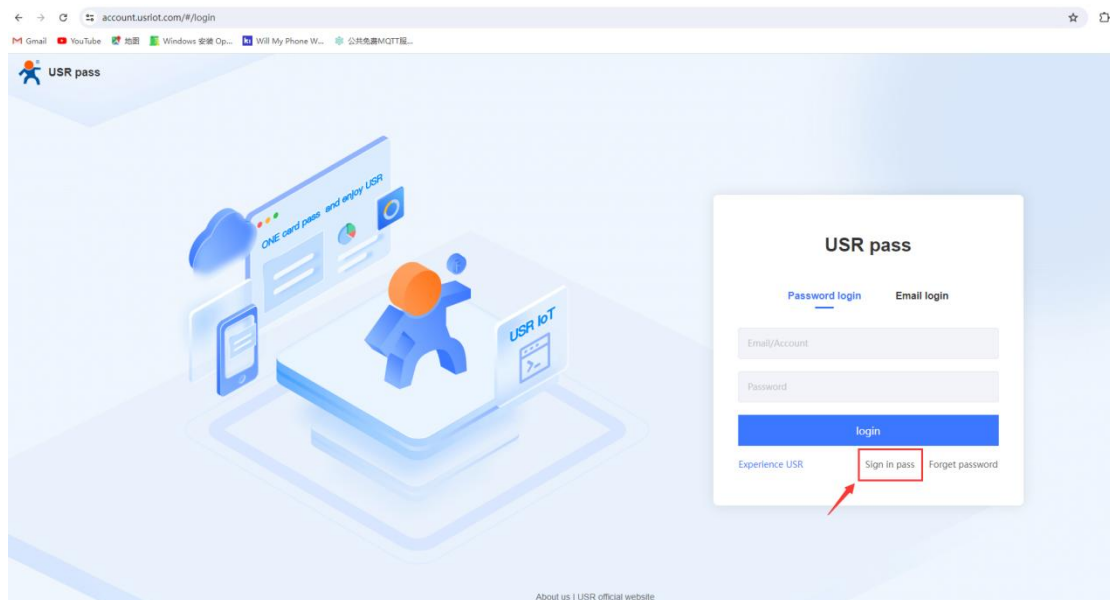# How to Connect Serial to WiFi Converter to PUSR Cloud?
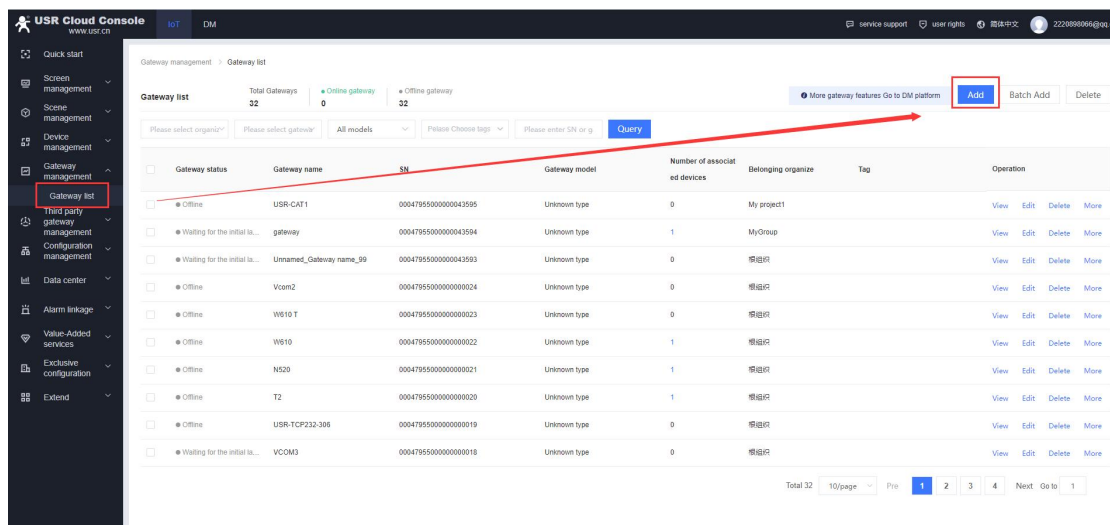
This manual applies to the following products:

USR-W610
USR-W630
USR-DR404
USR-WIFI232-A2/B2
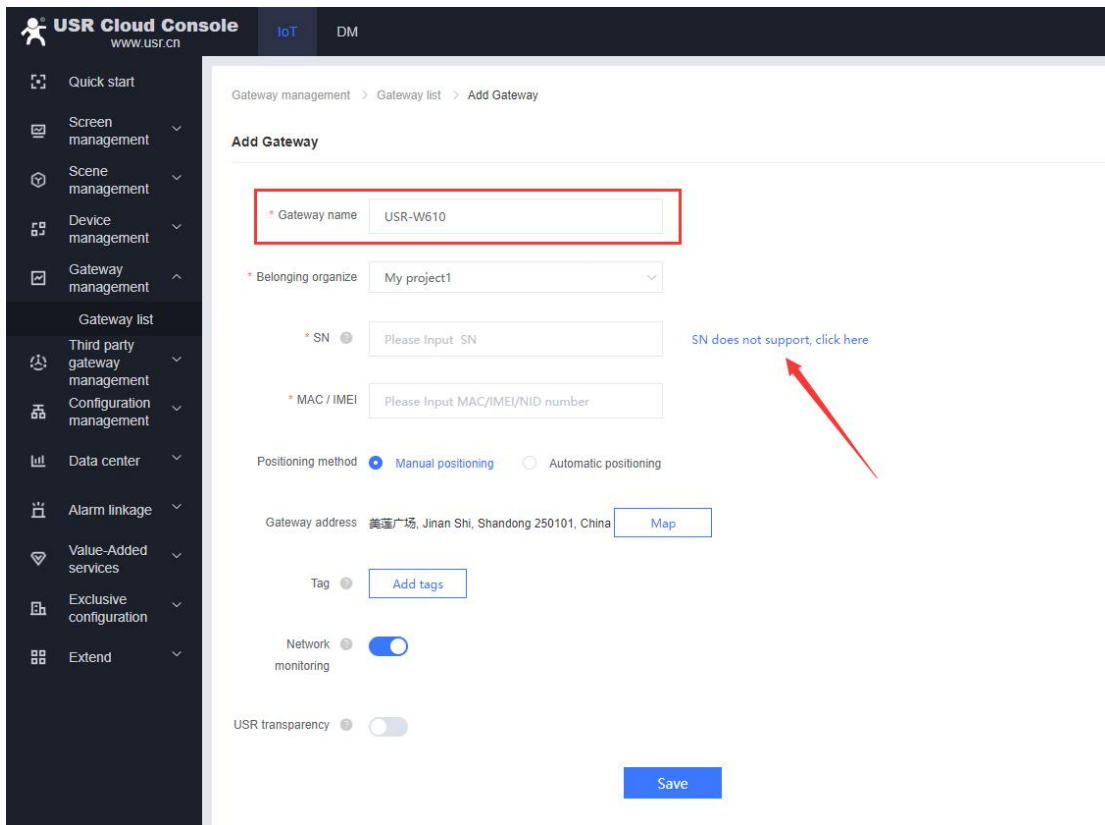
1. PUSR Cloud address: https://mp.usriot.com
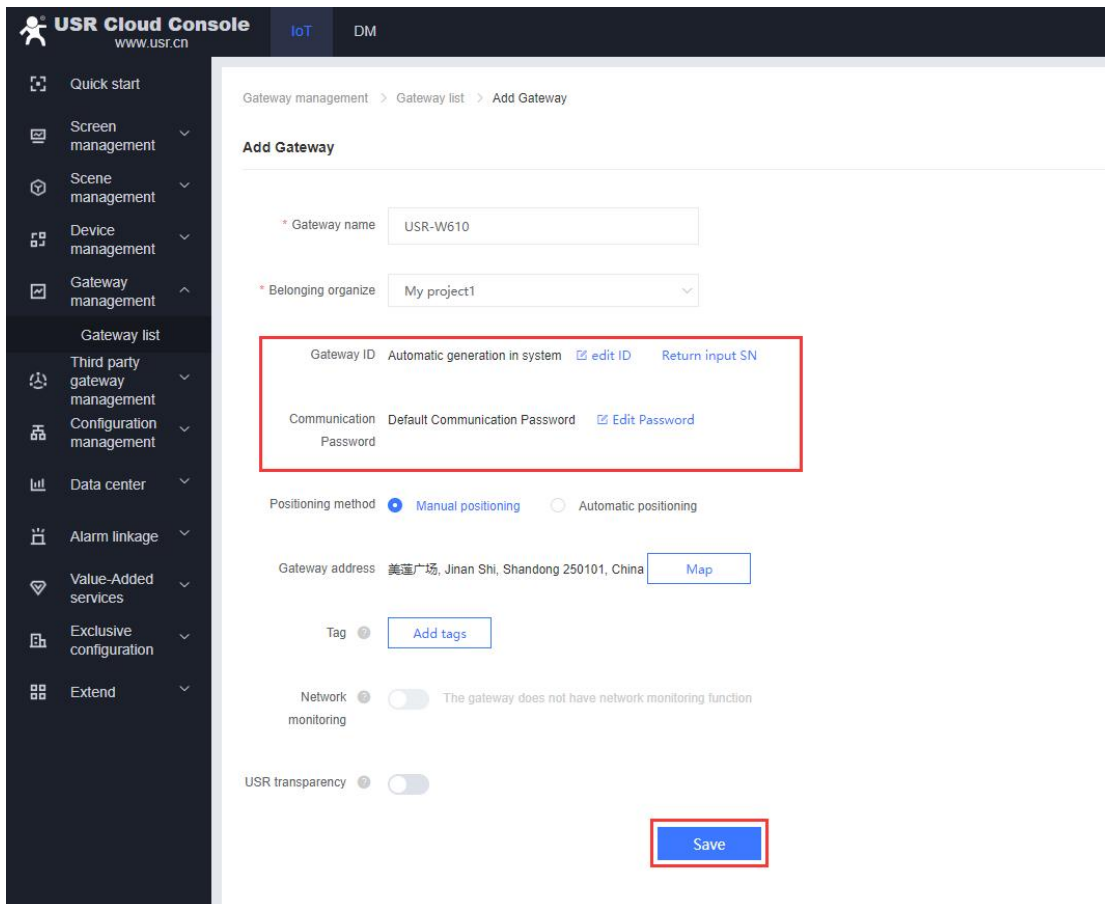2. Please register an account first, and then log in.

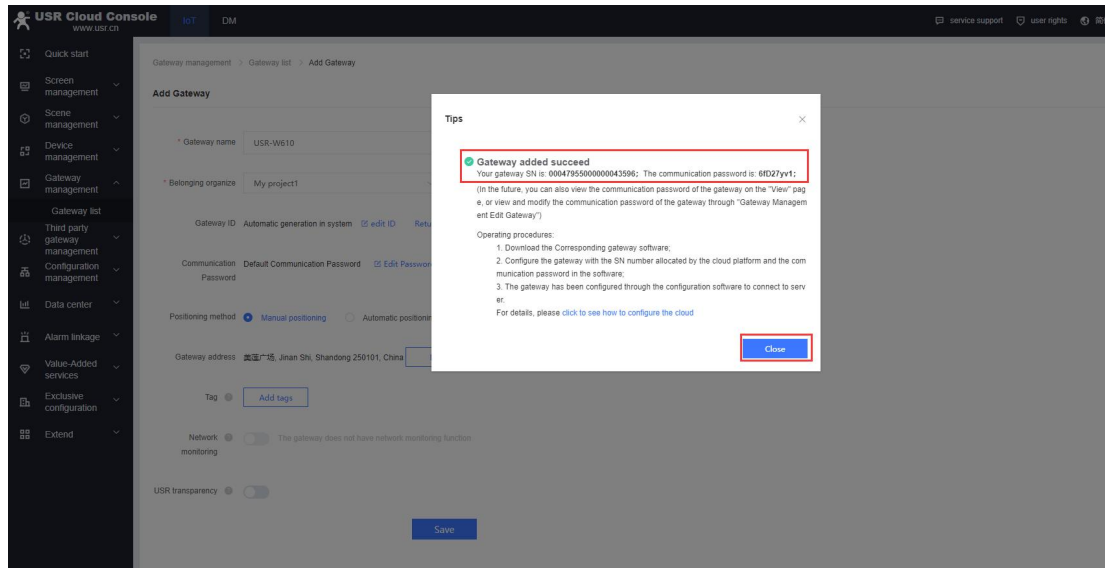3. After logging in, click to add a gateway.

4. Click "SN does not support, click here".

5. The cloud will create the SN and password automatically, click Save.

6. Copy the created SN and password. Click Close, then the gateway(W610) is added successfully.
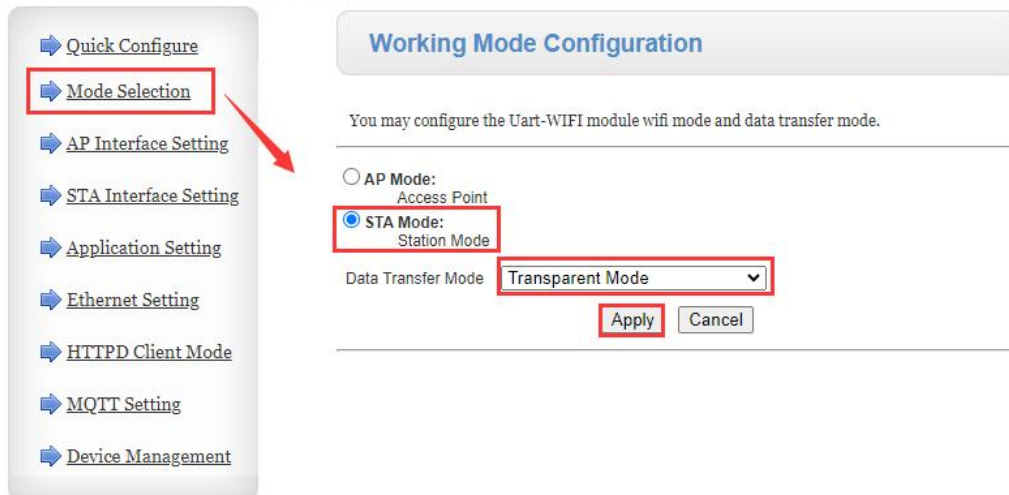

7. In this manual, we use a USR-W610 device to test.

   If you use the W610 device for the first time, it defaults to AP mode, you can connect PC to the WIFI of it. Then fill in 10.10.100.254 in the browser to access its webpage. Username and password are default to "admin".
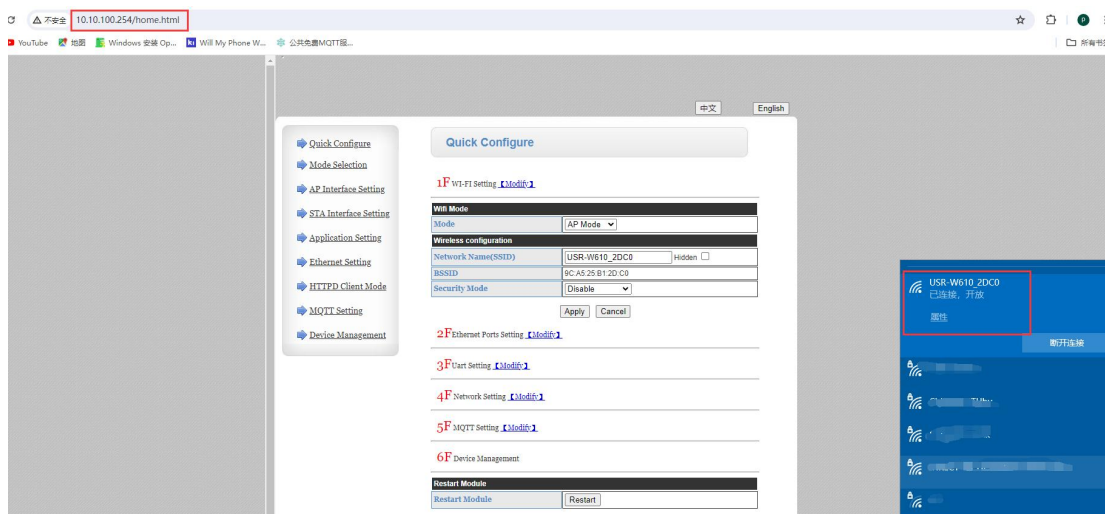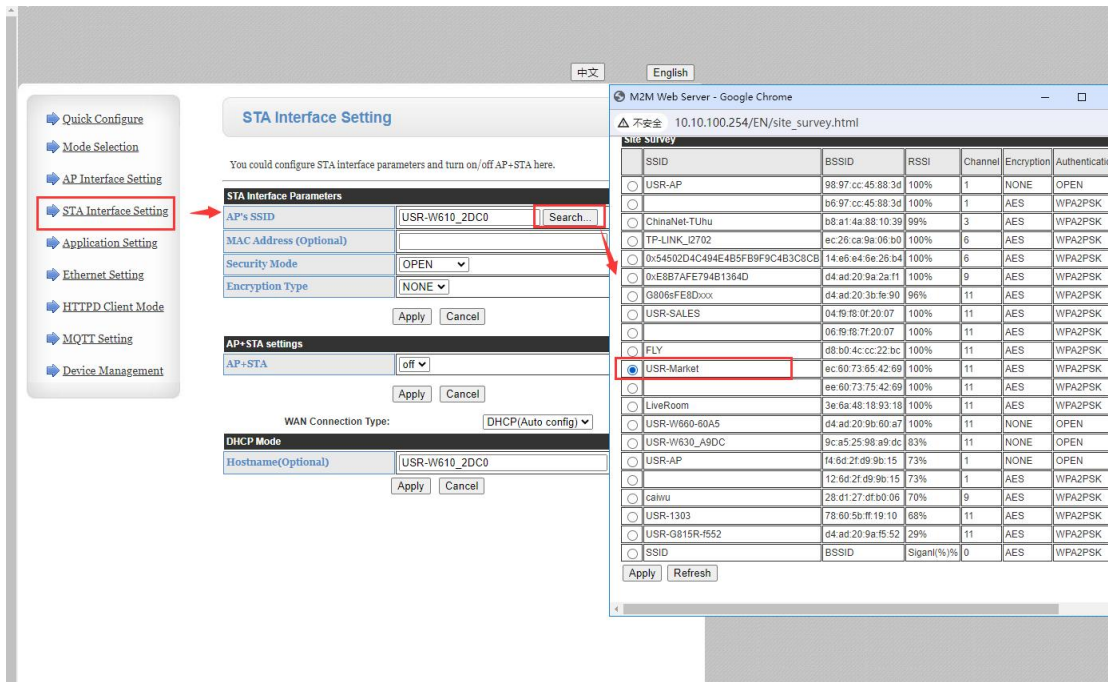

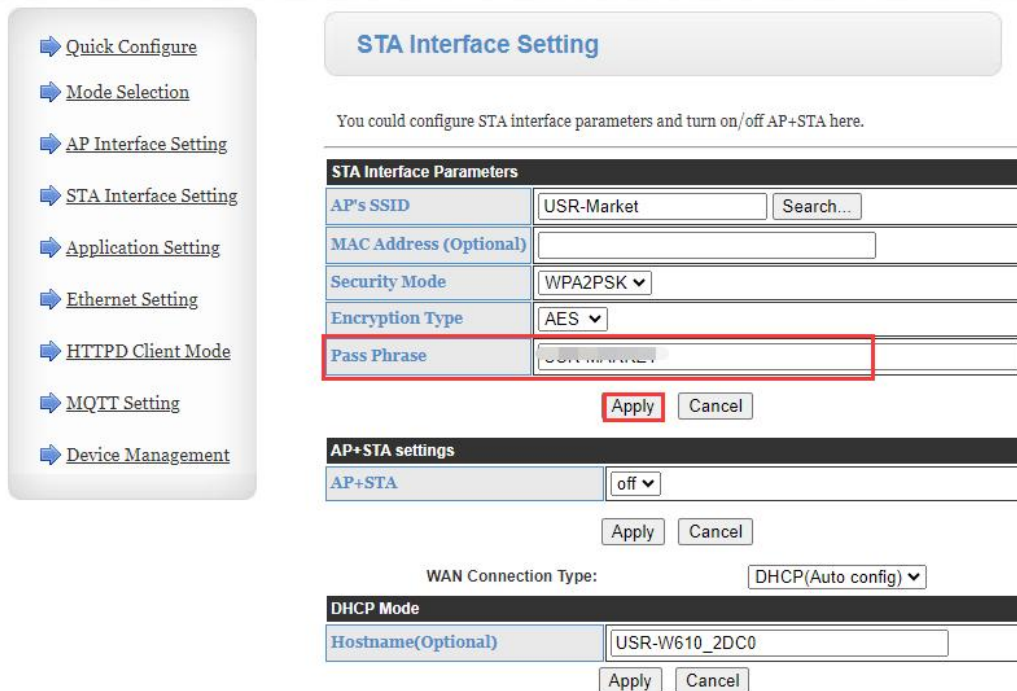8. Change the WIFI mode of W610 to STA. Click Apply.

9. Do not click Restart, directly skip this step and continue to configure. We only need to restart the device after configured all the parameters.
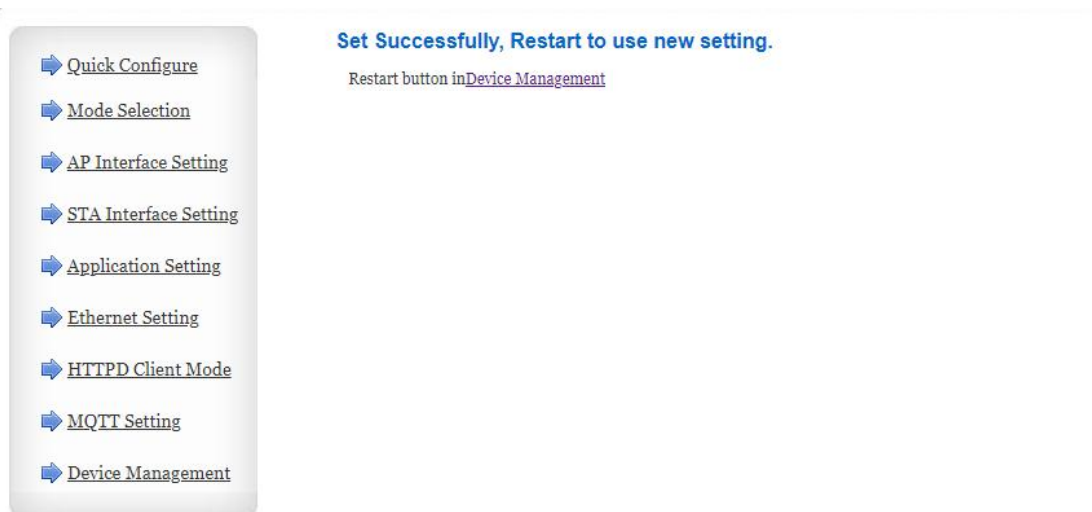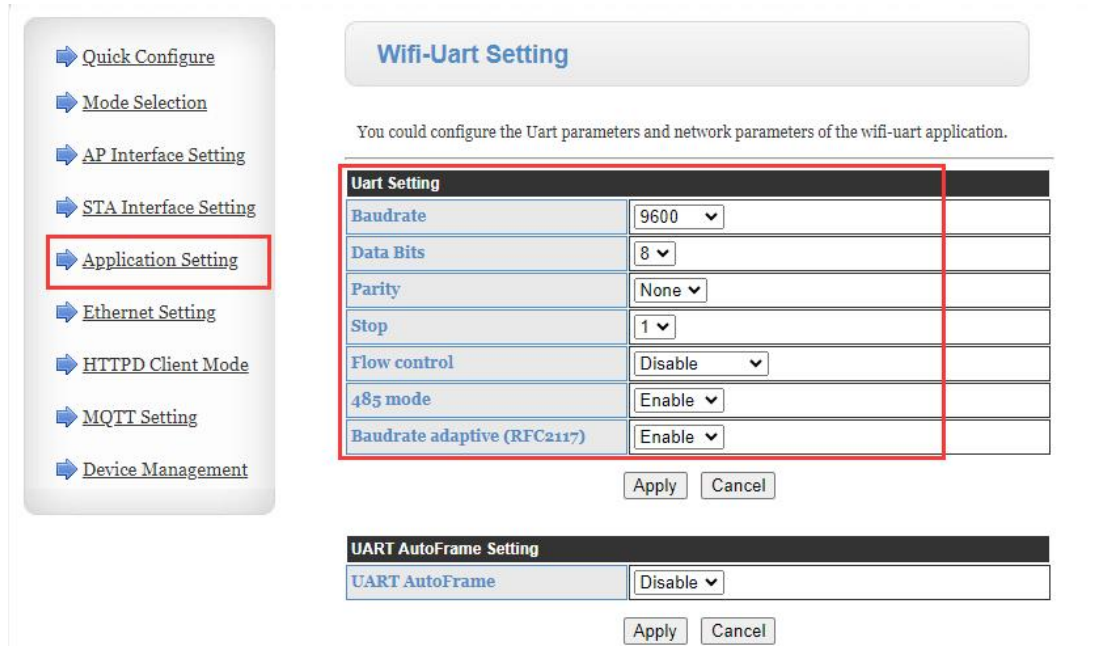

10. In "STA Interface Settings", click "Search" to find the WIFI network you need to connect. Click "Apply".
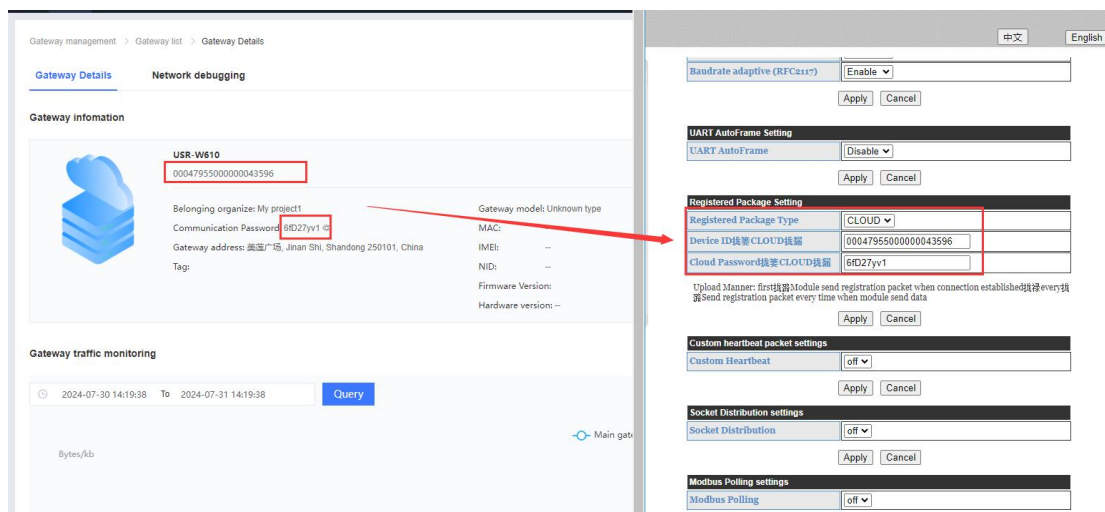
11. Fill in the password and security of the WIFI network.

12. In "Application Setting", configure the serial parameters of W610 to be consistent with your serial Modbus device.

13. Fill in the SN and password created in USR Cloud, you can also click the Gateway name to find it.

14. In "Network A Settings", change the mode to TCP Client, the server address is: tcp.mp.usriot.com, port is 15000.

Modbus Polling settings

Modbus Polling	off ▾

Apply　Cancel

Httpdclient Mode settings

Httpdclient Mode	long ▾

Apply　Cancel

485 Switch Settings

485 selector switch	on ▾
Switching time interval(1~350)(us)	3

Apply　Cancel

Network A Setting

Mode	Client ▾
Protocol	TCP ▾
Port	15000
Server Address	tcp.mp.usriot.com
MAX TCP Num. (1~24)	24
TCP Time out (MAX 600 s)	0
SSL Enable	OFF ▾

Socket B Setting

Open the SocketB function	on ▾
Protocol	TCP ▾
Port	18899
Server Address	10.10.100.100
TCPB Time out (MAX 600 s)	0

Apply　Cancel

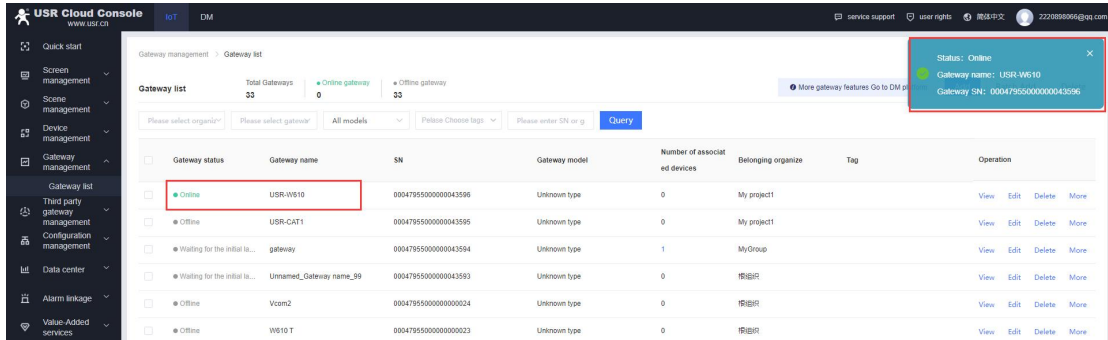15. After configuring all the parameters of W610, restart to take effect.
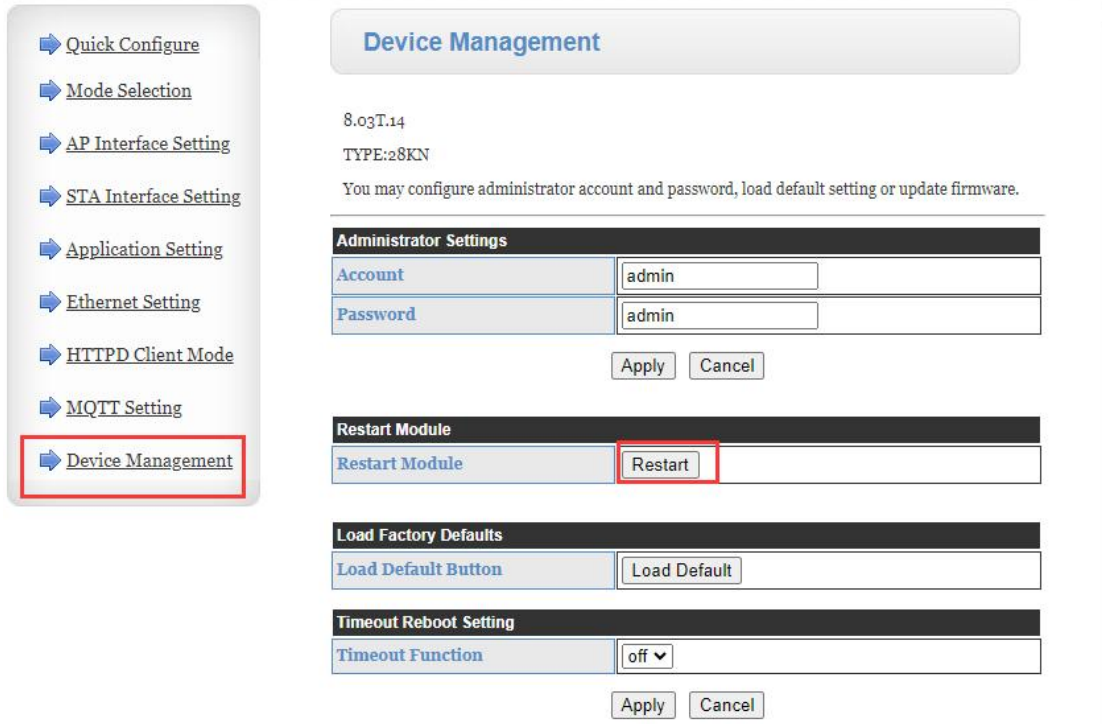
16. If you need to login to the webpage of W610 in STA mode, can find its new address got from the WIFI network in the router, or you can query using below serial AT commands.
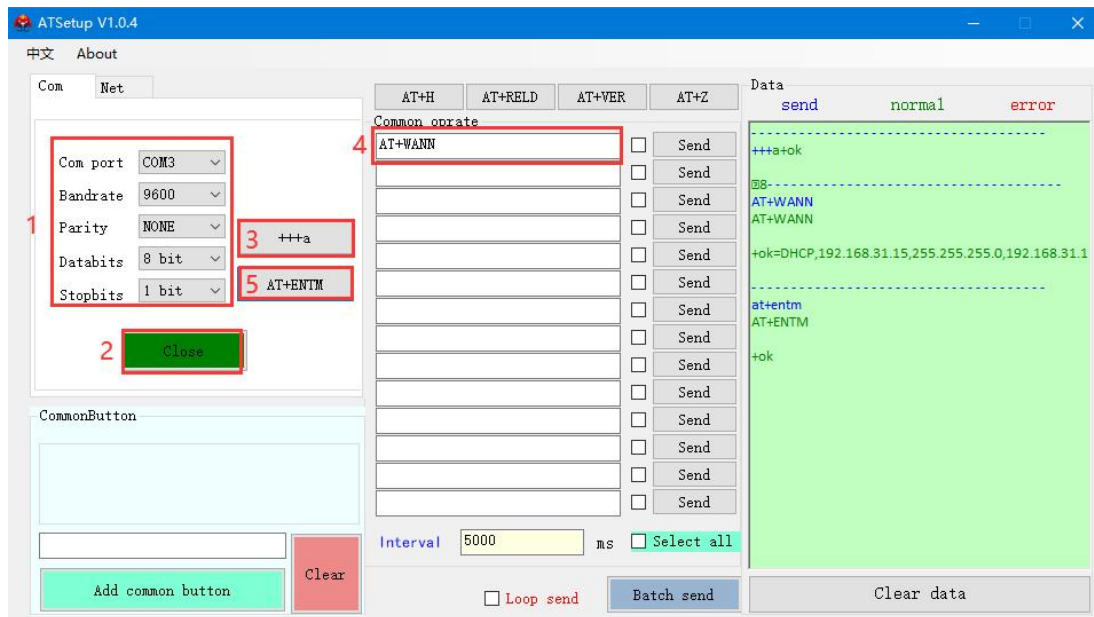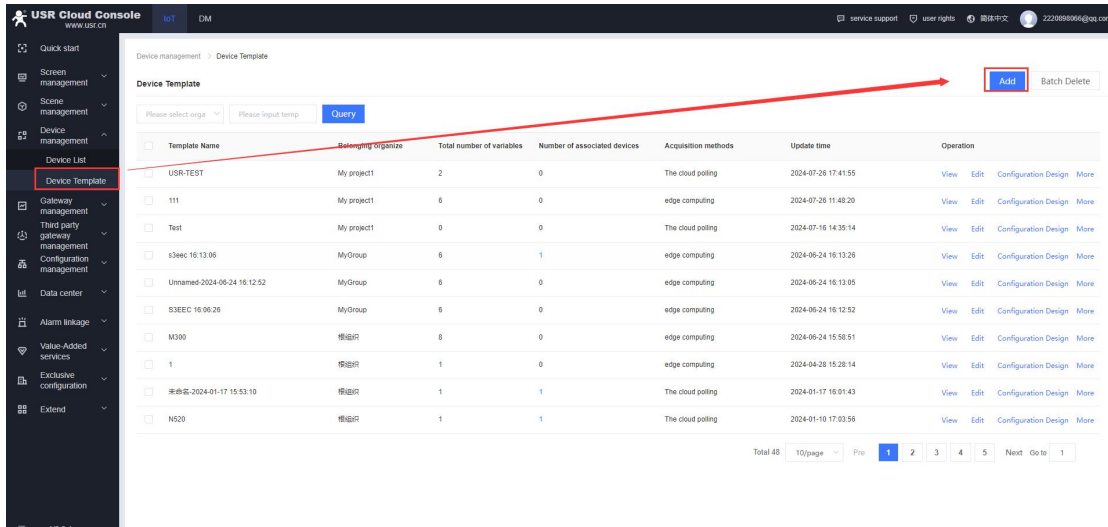

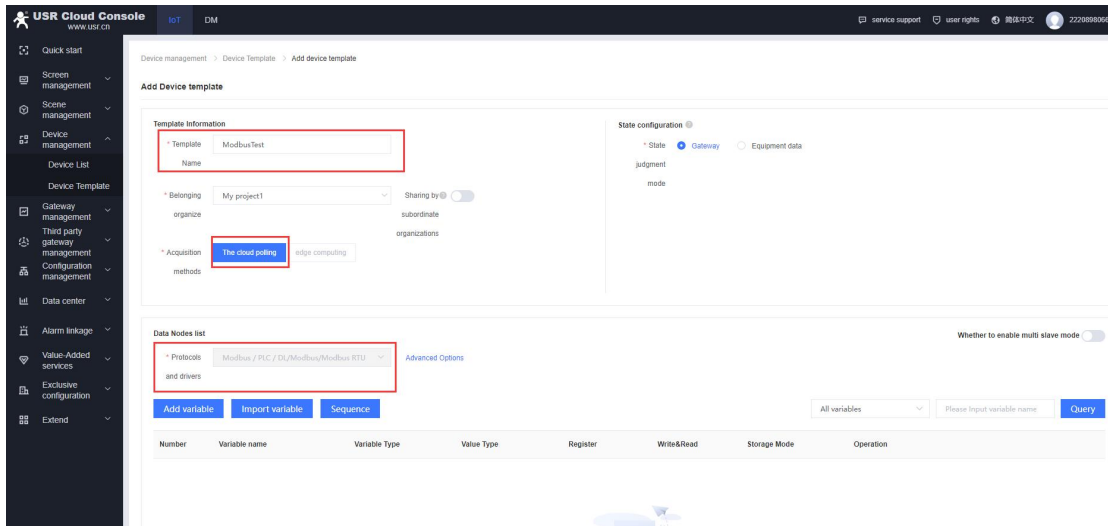17. After W610 restarts, it will be online in USR Cloud.

18. In "Device Template", click to add the template.

19. Configure the template name, the protocol is configured like below:

20. Add the Modbus registers according to the user manual of your Modbus device.

Register: It is the same as the Modbus master software. Fill in the decimal register address.

Function code 03H or 06H, starting address 0000H, register is 4 and address filling 1;

Function code 04H, starting address 000AH, register is 3, address filling 11;
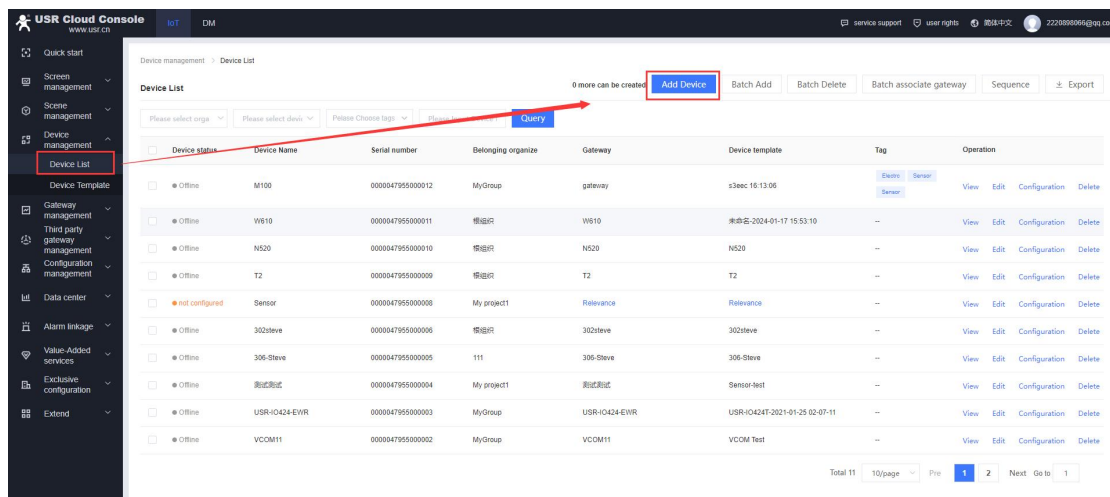
Function code 01H or 05H, starting address 0002H, register is 0 and address is 3;

If the function code is 02H and the start address is 0003H, the register is 1, and the address is
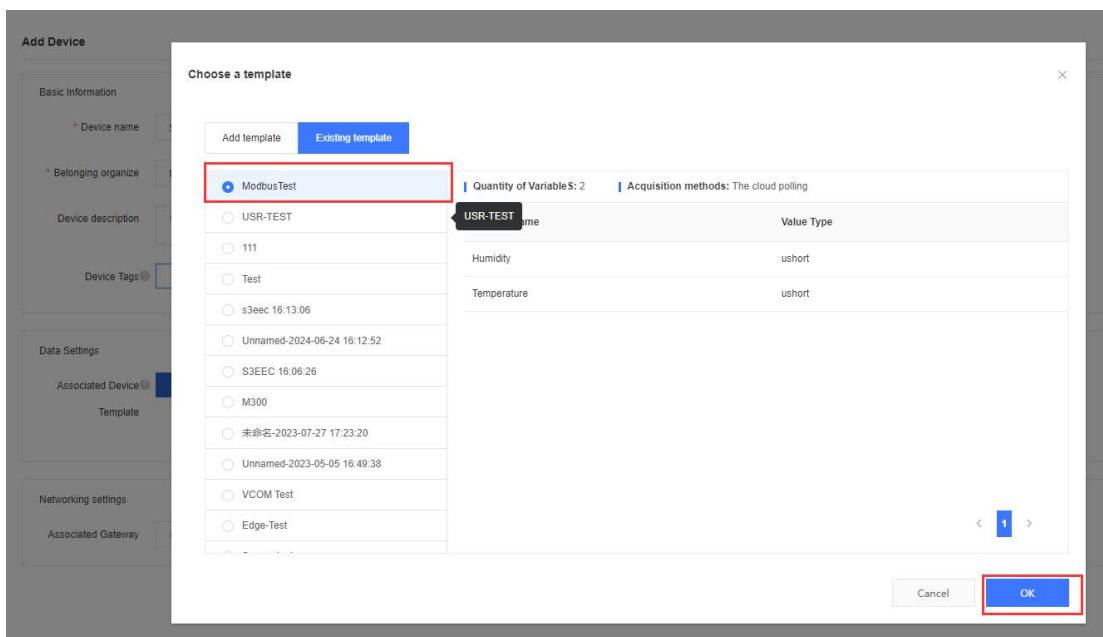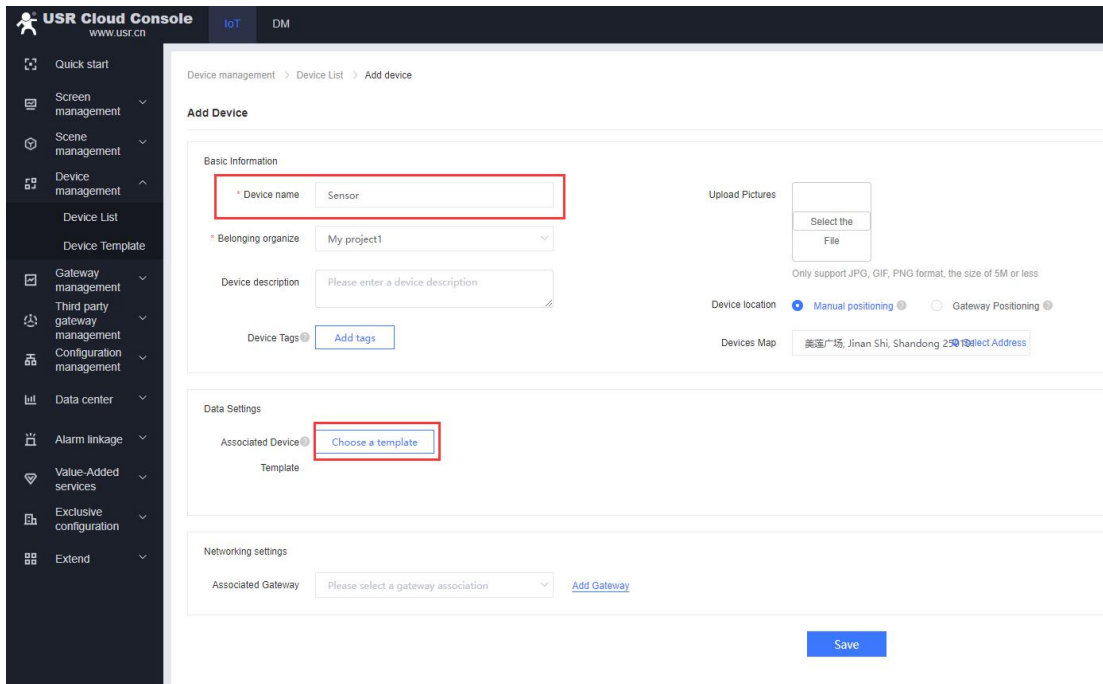
filled with 4.
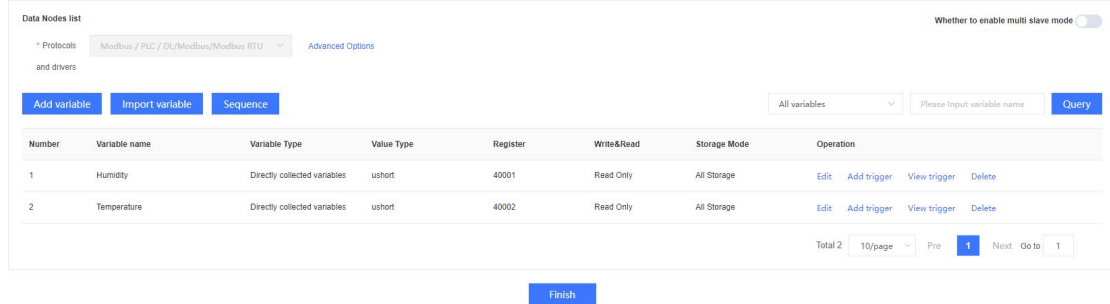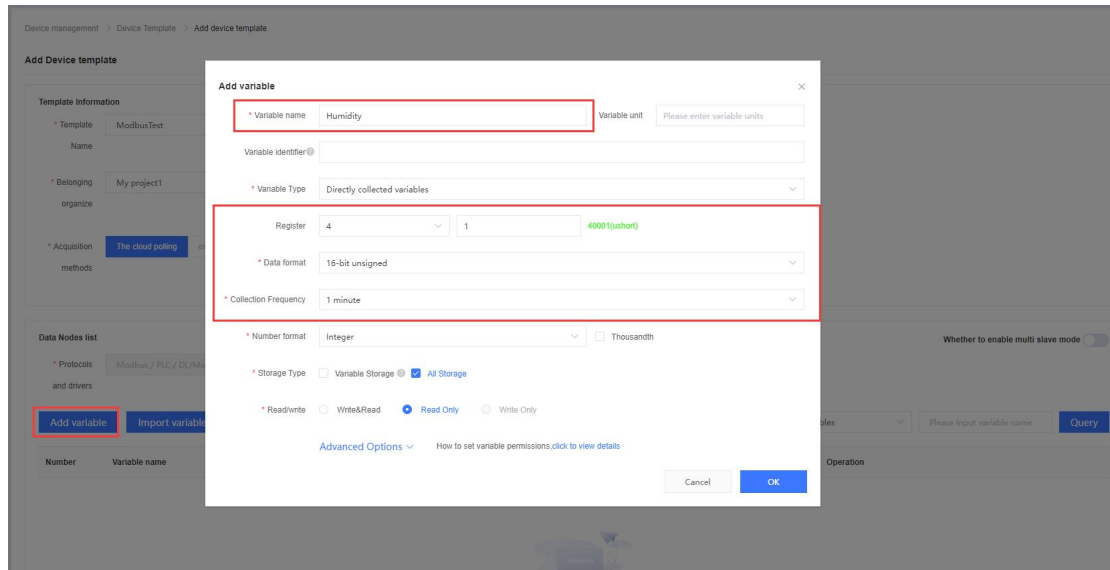
21. After adding template, click to add a device. Here the device is corresponding to your serial device.

22. Bind the device to the created Modbus template and gateway.

23. Configure the Slave number to be same with the slave ID of your Modbus device.

24. Device gets online.

25. In this test, I use an RS485 to USB adaptor to simulate an RS485 sensor to test. When the data changed in Modbus slave software, it will be updated in the cloud according to the configured time interval.