

Wireless Wi-Fi / 4G Camera

WA08 Series User Manual

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1. Introduction

WA08 is a Wi-Fi / 4G Camera that helps monitor your business or property remotely. Equipped with PIR, anti-tamper, and dry contact, WA08 takes photos on a schedule or when triggered. With support for both 4G and Wi-Fi networks, it keeps you updated as an emergency occurs. No matter where you are, WA08 captures every detail and sees everything for you.

2. Appearance



3. Features

- Powered by 4* ER14505 batteries
- Easy operation and configuration
- Support Wi-Fi or 4G Cat1 communication
- Set a time or interval to take pictures
- Take pictures when dry contact input / PIR / vibration sensor is triggered
- Button (reed switch) triggered photo capture
- Different resolution settings: 640 x 480 (300,000 pixels) / 1280 x1024 (1,000,000 pixels) / 1920 x1080 (2,000,000 pixels) / 2048 x1536 (3,000,000 pixels) / 2560 x1920 (5,000,000 pixels)
- Supports supplemental lighting for low-light environments
- Configure parameters on the web server
- Easily connected to third-party MQTT platform

4. Setup Instructions

On / Off

Turn on	<ol style="list-style-type: none">1. Insert 4* ER14505 batteries2. Press and hold the function key or take magnet close to the magnetic switch for 3 seconds.3. The blue indicator flashes one time.
Turn off	<ol style="list-style-type: none">1. Press the function key or take magnet close to the magnetic switch.2. The blue indicator remains on.3. Press and hold the function key or take magnet close to the magnetic switch for 5 seconds.4. The blue indicator flashes 10 times. WA08 is off.
Factory reset	<ol style="list-style-type: none">1. Press the function key or take magnet close to the magnetic switch.2. The blue indicator remains on.3. Press and hold the function key or take magnet close to the magnetic switch for 10 seconds.4. The blue indicator flashes 20 times. WA08 is factory reset.
Power off	Remove the batteries.

Function key / Magnetic switch

Wake WA08 (Activation Mode)	<ol style="list-style-type: none">1. Press the function key or move the magnet close to the switch and remove it.2. The blue indicator remains on. <p>Note: a. If device is not connected to a network in 1 minute, or it is connected but no configuration is made in 3 minutes, it enters sleep mode automatically. b. Please make sure WA08 is awake before starting any operation.</p>
Take picture(s) and report data to MQTT. (Trigger Type = 1)	<ol style="list-style-type: none">1. Press the function key or move the magnet close to the switch and remove it.2. The blue indicator flashes once. <p>Note: Devices connected to 4G need to exit from the configuration page first.</p>
Switch to picture-taking mode (only support 4G devices)	<ol style="list-style-type: none">1. Press and hold the function key or move the magnet close to the switch for 2 seconds and remove it.2. The blue indicator flashes 2 times and remains on.3. Device exits the configuration page and switches to picture-take mode.

Sleep mode	<ol style="list-style-type: none"> 1. Press and hold the function key or move the magnet close to the switch for 3 seconds and remove it. 2. The blue indicator flashes 2 times. 3. WA08 enters sleep mode. <p>Intelligent sleep mode: If it is not connected within 1 minute, or if no configuration operation is performed within 3 minutes after connection, it will automatically enter sleep mode.</p>
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Note:

- In activation mode, hold the button (or magnet near the reed switch); the LED flashes at 2s / 3s / 5s to indicate release, then executes the action above.
- If the voltage is lower than 3.3V, device will flash six times and be in sleep mode.

5. Data Report

After WA08 is on and connected to MQTT, it will send a data packet (Trigger Type = 0).

If no configuration is done, the device sends data based on the default settings.

Sensors can only be triggered when WA08 enters sleep mode.

(1) Dry contact

When the dry contact status changes, WA08 takes picture(s) and reports data (Trigger Type = 4).

(2) PIR

When PIR is triggered, WA08 takes picture(s) and reports data (Trigger Type = 2).

PIR can only be triggered again after IR Dection Time (60s).

IR Dection Time = 60 seconds (default)

0 (PIR off.)

(3) Shock Alarm (Anti-tamper)

When sensor detects data exceeds the threshold, WA08 takes picture(s) and reports data (Trigger Type= 3).

Reporting interval: 60s (Vibration sensor reports another data at least 60 seconds after the last one is sent)

Shock Alarm Level: 1 to 3 (default)

0 (Shock Alarm off.)

Example of data packet:

{

```
"FW_version": "v1.0",
"HW_version": "v0.5",
"FW_date": "2025-06-23",
"values": {
  "devName": "Netvox WA08",
  "devEui": "00137a111111",
  "Capacitor_voltage": 33,
  "Battery_voltage": 35,
  "TriggerType": 0,
  "ts": 1750737105,
  "localtime": "Tue Jun 24 11:51:45 2025",
  "pixel": "1920*1080",
  "imageSize": 74101,
  "image": "/9j/4AAQSk... (Image code)"}
```



0	Turn on
1	Press function key
2	PIR trigger
3	Shock Alarm trigger
4	Dry contact trigger
5	Take picture at given time
6	Take picture at a set interval

}

}

6. Login

- 1 Make sure WA08 is on and awake.
- 2 Open Settings on your phone or computer and tap Wi-Fi.
Find and connect the wi-fi named Netvox_WA08_xxxx.
- 3 Open a browser and enter <http://192.168.6.1> to the configuration page.

SSID: Netvox_WA08_xxxx

 The last 4 digits of MAC address. Please check the sticker on the device.

Password: Netvox_WA08

Default IP: 192.168.6.1

Note:

- a. If no configuration is made in 3 minutes, WA08 will be in sleep mode. Press the function key to wake device and search for Wi-Fi.
- b. If more than one device needs to be configured, please clear browser cache every time a device is configured, or log into with an incognito window.

7. Configure WA08 Parameters

① Web Login Interface

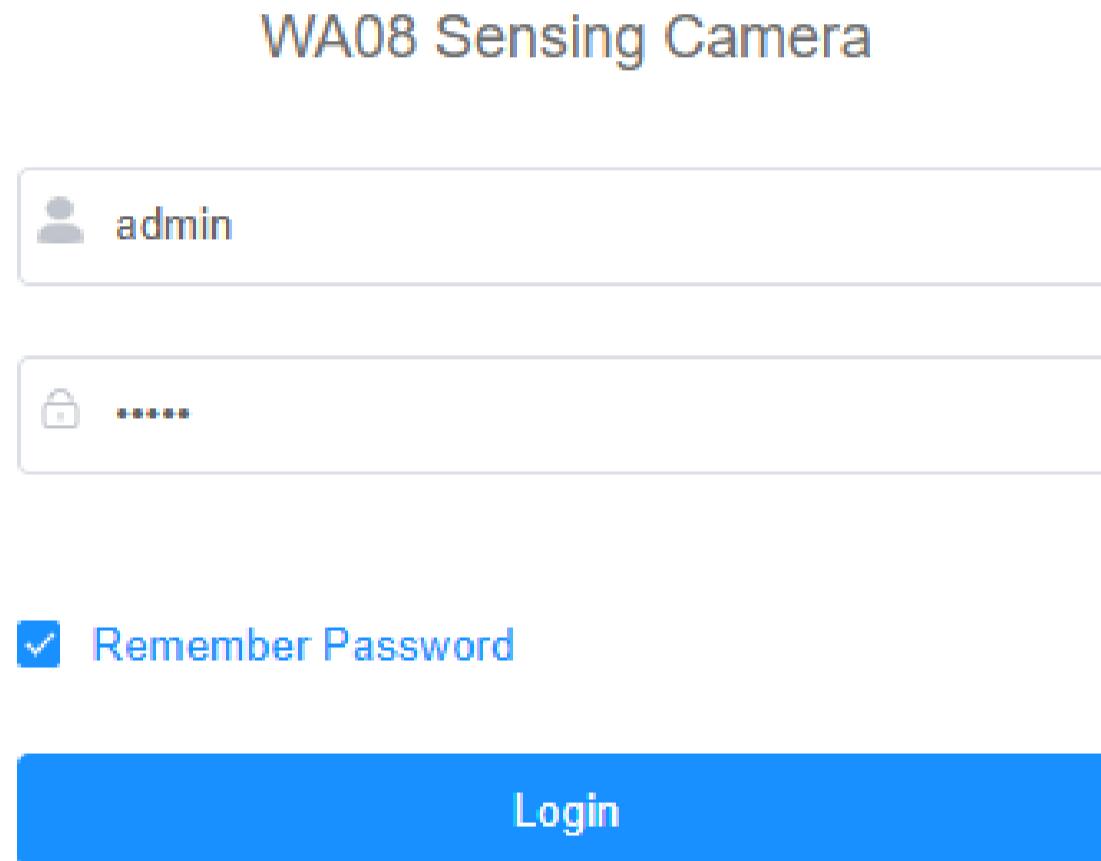
Default Username: **admin**

Default Password: **admin**

Note:

*The username and the password can be changed.

*When the device is restored to factory settings, default login username / password will be restored.



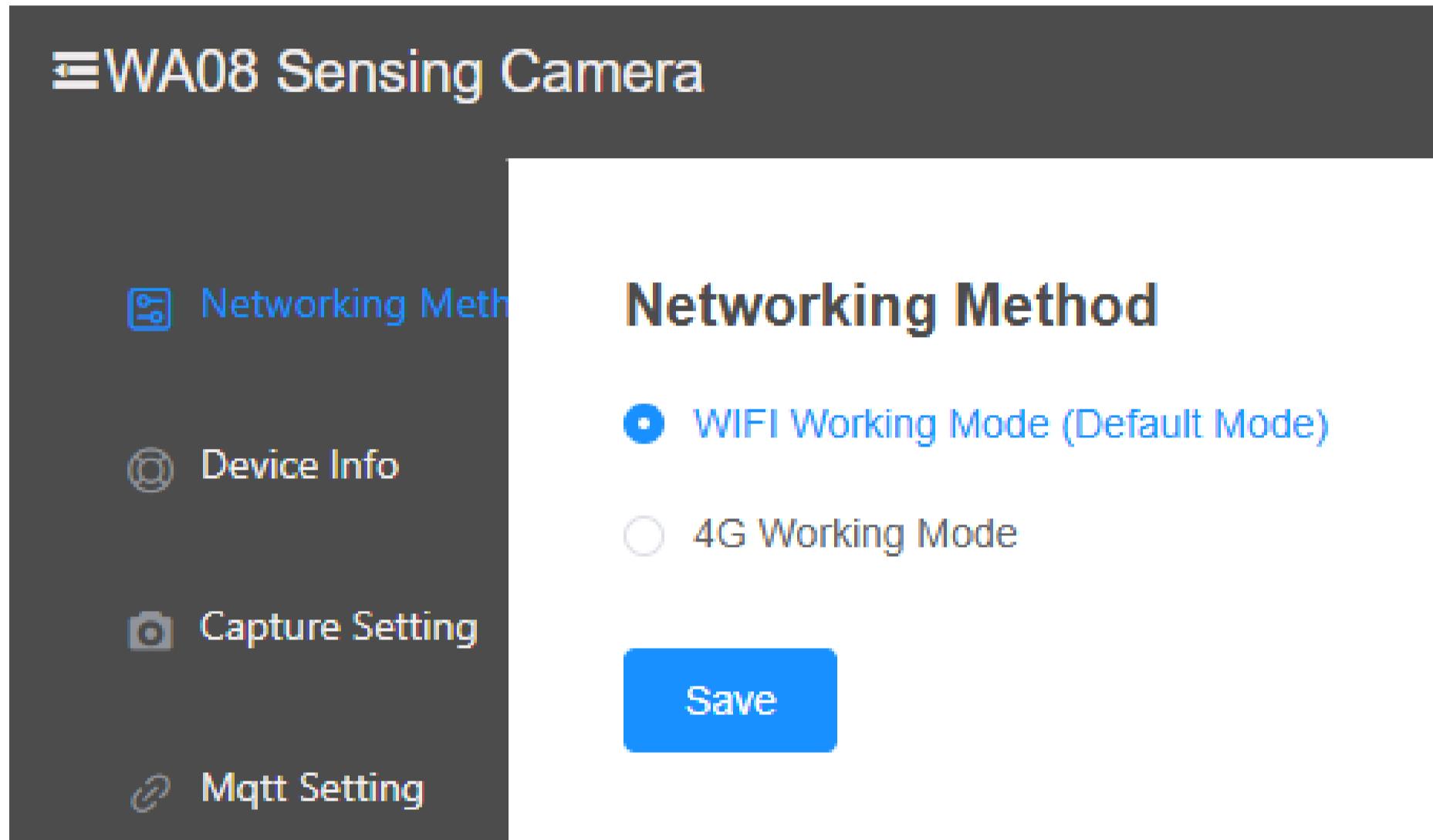
② Set up the device's network connection

Select Wi-Fi or 4G mode based on the network that your device supports.

Note:

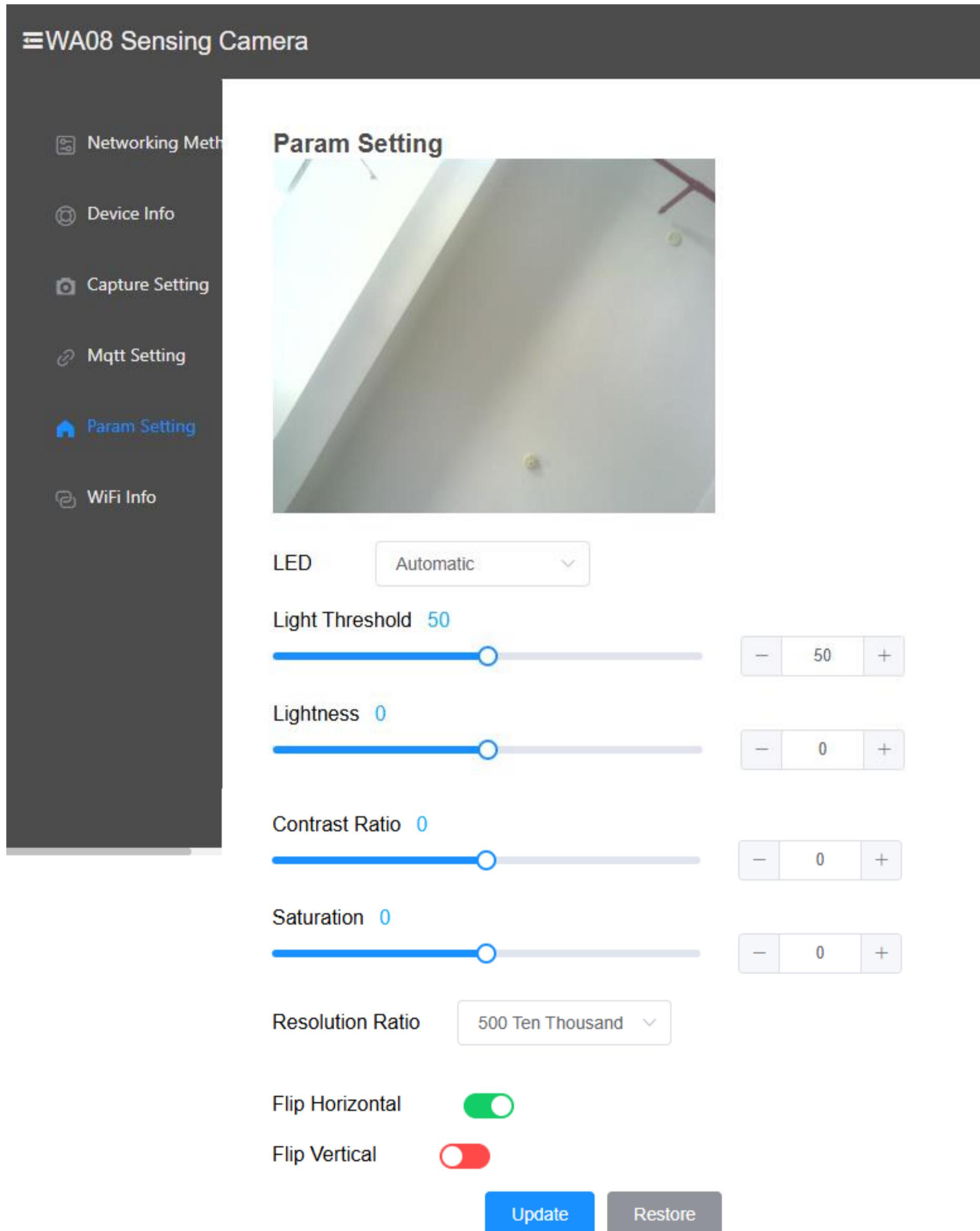
WA08 (for Wi-Fi) can only select Wi-Fi working mode.

WA08A/ WA08B (for 4G network) supports Wi-Fi and 4G.



③ Image Configuration

Adjust camera settings to ensure the quality of pictures.



- **LED Light**

Automatic: LED light is on when WA08 takes picture(s) and illuminance < Light threshold

Always on: LED light is on when WA08 takes picture(s).

Always off: LED light remains off.

- **Light Threshold**

Adjust light threshold to turn on / off LED when it enters automatic mode.

Range: 0 – 100 (Default: 50)

Illuminance < Light threshold LED: Automatic

Illuminance \geq Light threshold LED: Off

- **Lightness**

Adjust picture's brightness

Range: -2 – 2 (Default: 0)

- **Contrast Ratio**

Range: -2 – 2 (Default: 0)

- **Saturation**

Range: -2 – 2 (Default: 0)

- **Resolution Ratio**

300,000 / 1,000,000 / 2,000,000 / 3,000,000 / 5,000,000 pixels
(default)

Note: Power consumption could increase when the resolution is 5,000,000 pixels.

- **Flip Horizontal / Vertical**

Flip the photo horizontally or vertically.

Flip Horizontal (Default: On)

Flip Vertical (Default: Off)

- **Restore**

Undo the changes.

④ Capture Settings Configuration

WA08 Sensing Camera

- Networking Method
- Device Info
- Capture Setting**
- Mqtt Setting
- Param Setting
- WiFi Info

Capture Setting

Capture button

Dry Contact Screenshot

Activate PIR infrared capture

Activate vibration detection and capture

Scheduling Screenshot

Capture Mode

Capture interval

Number of photos taken

Save **Refresh**

- **Capture button (TriggerType= 1)**

Press the function key to take a picture.

Note: When device is in sleep mode, please press the function key to wake device first.

- **Alarm-In capture (TriggerType= 4)**

Take picture(s) when voltage changes to trigger an Alarm-In capture during sleep mode.

- **Activate PIR infrared capture (TriggerType= 4)**

Turn on set IRDectionTime.

Device takes photo(s) and reports data when PIR is triggered.

Note: Each report requires a gap equal to the PIR delay time.

Activate PIR infrared capture

PIR infrared delay time S

Activate vibration detection and capture

Vibration sensitivity

- **Activate vibration detection and capture (TriggerType= 3)**

Set vibration sensitivity.

Device takes photo(s) and reports data when vibration is detected.

- **Schedule Screenshot**

Timed Capture of Image (TriggerType= 5):

Set device to take photo(s) at a given time

Scheduling Screenshot

Capture Mode

Time Setting Add

Interval snapshot (TriggerType= 6):

Device takes photo(s) at a set interval

Capture Mode

Capture interval Hour

- **Number of photos taken**

The number of photos you want to take at a time.

Range: 1 – 10

5 Adjust MQTT Settings

Complying with MQTT protocol, WA08 sends photos to Netvox platform or third-party server.

Mqtt Setting

Server: Netvox Cloud

Update Refresh

Mqtt Setting

Server: Customize

Host: broker.emqx.io

Mqtt Port: 1883

Topic: topic

Client ID: mqtx_80e12da4

Qos: QoS 0

Username: username

Password: password

- Server

Netvox Cloud

Check photos on Netvox AIoT app.

Customize

Select Customize if you use a third-party server.

- Host

Enter the MQTT address.

- MQTT Port

Enter the MQTT port.

- Topic

Give the photo collection a name.

- Client ID

Enter the Client ID.

- QoS

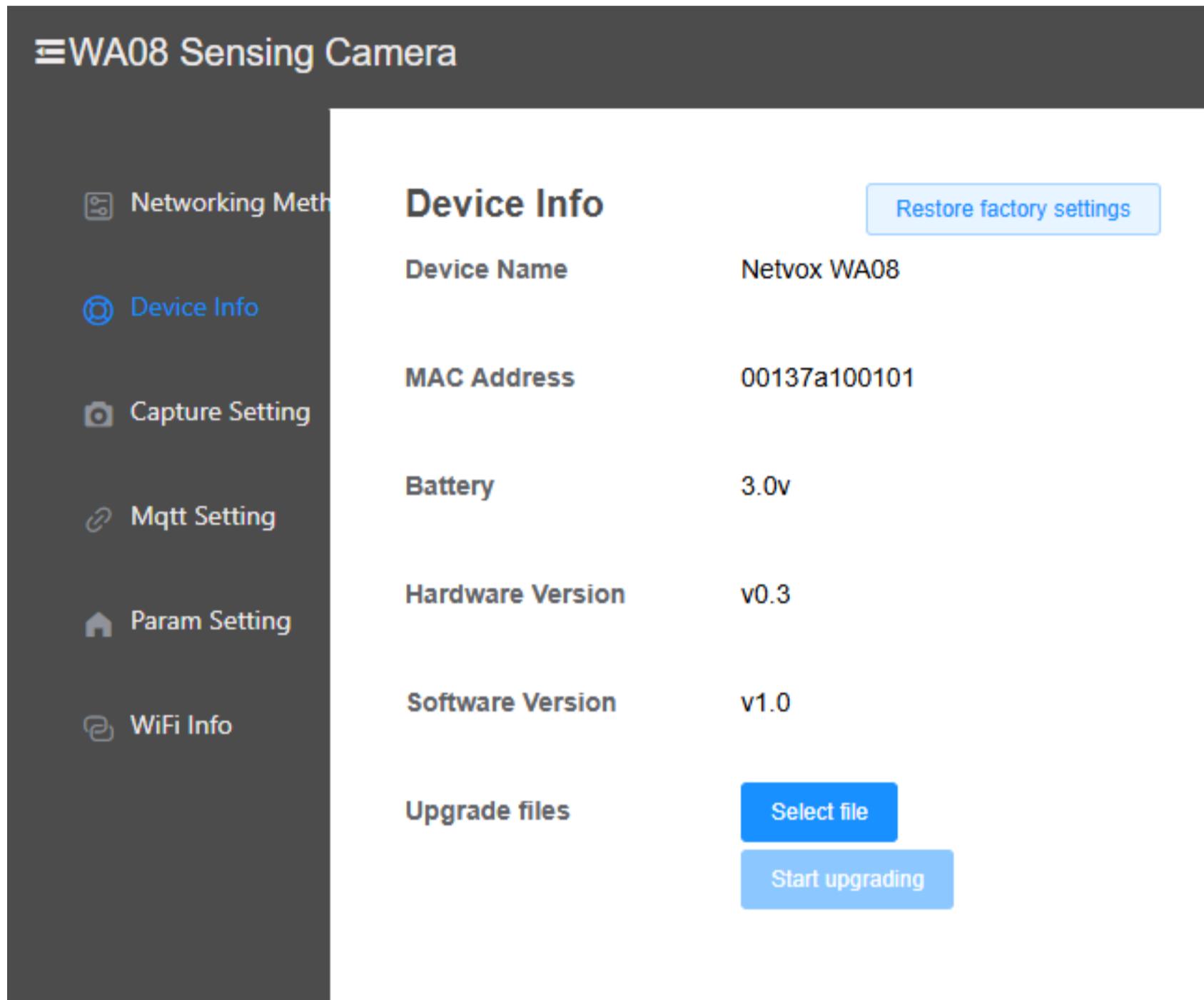
Select QoS 0, 1, or 2.

- Username & Password

Set your username and password to connect to MQTT.

⑥ Device Info

View device info or check if an upgrade is available.



If upgrade is available, please click Select file to download firmware first and start upgrading.

Please do not turn off the device or perform other tasks during upgrading. Device will reboot when upgrade is completed.

⑦ WLAN (for Wi-Fi connection only)

The device can connect to a Wi-Fi network and transmit images to the platform via Wi-Fi.

It can also acquire the current Wi-Fi information or reconfigure the Wi-Fi network to connect to.

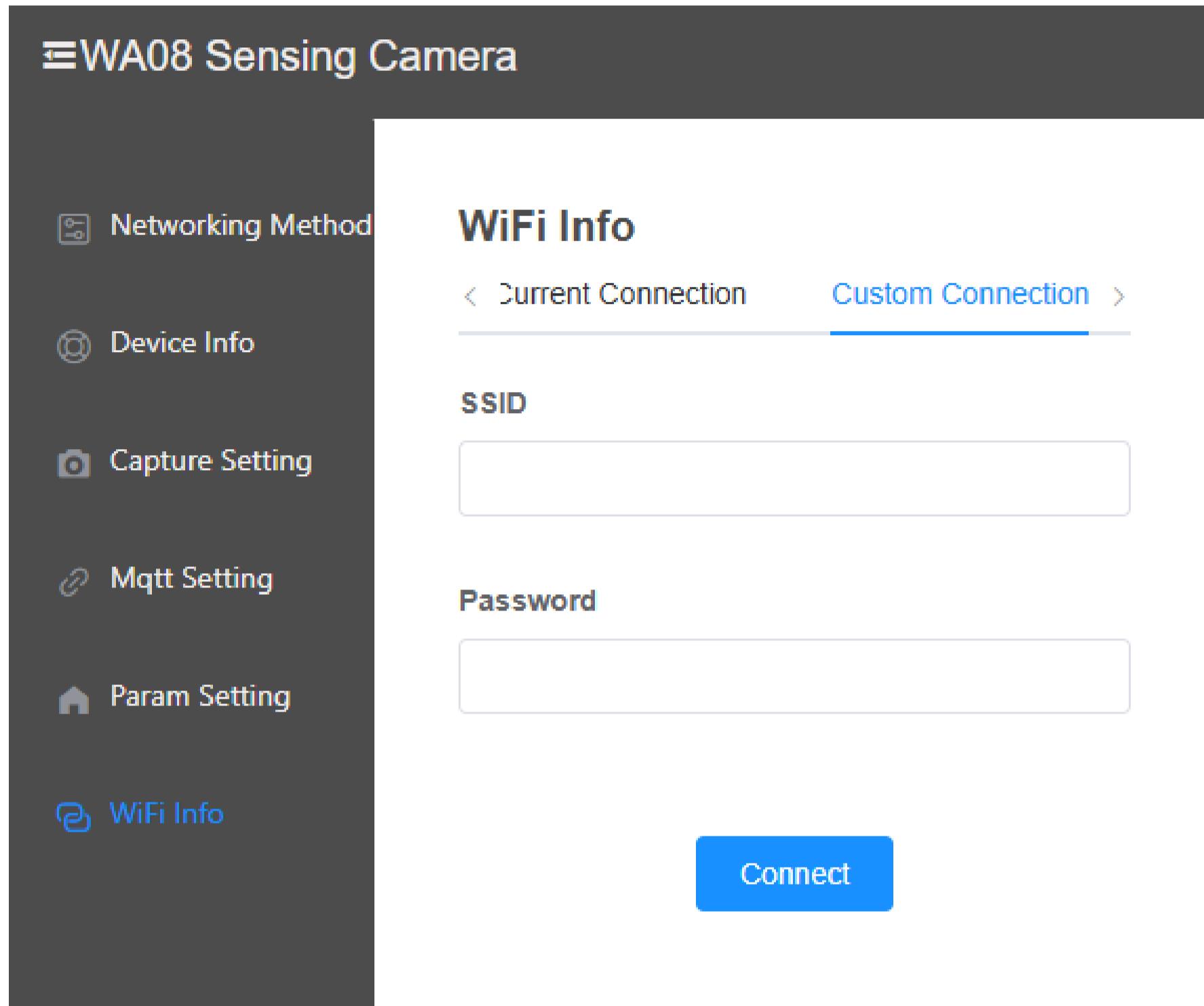
● Scan

Displays the WiFi hotspots found (up to 10).

SSID	RSSI	
NETGEAR	-40	🔒
Netvox_CSHC_0A2F	-66	🔒
RAK7258_F778	-67	
hyj6666	-68	🔒
RAK7268_218B	-69	🔒
IoT_GW_945D	-69	🔒
Netvox_CSHC_84F21	-70	🔒

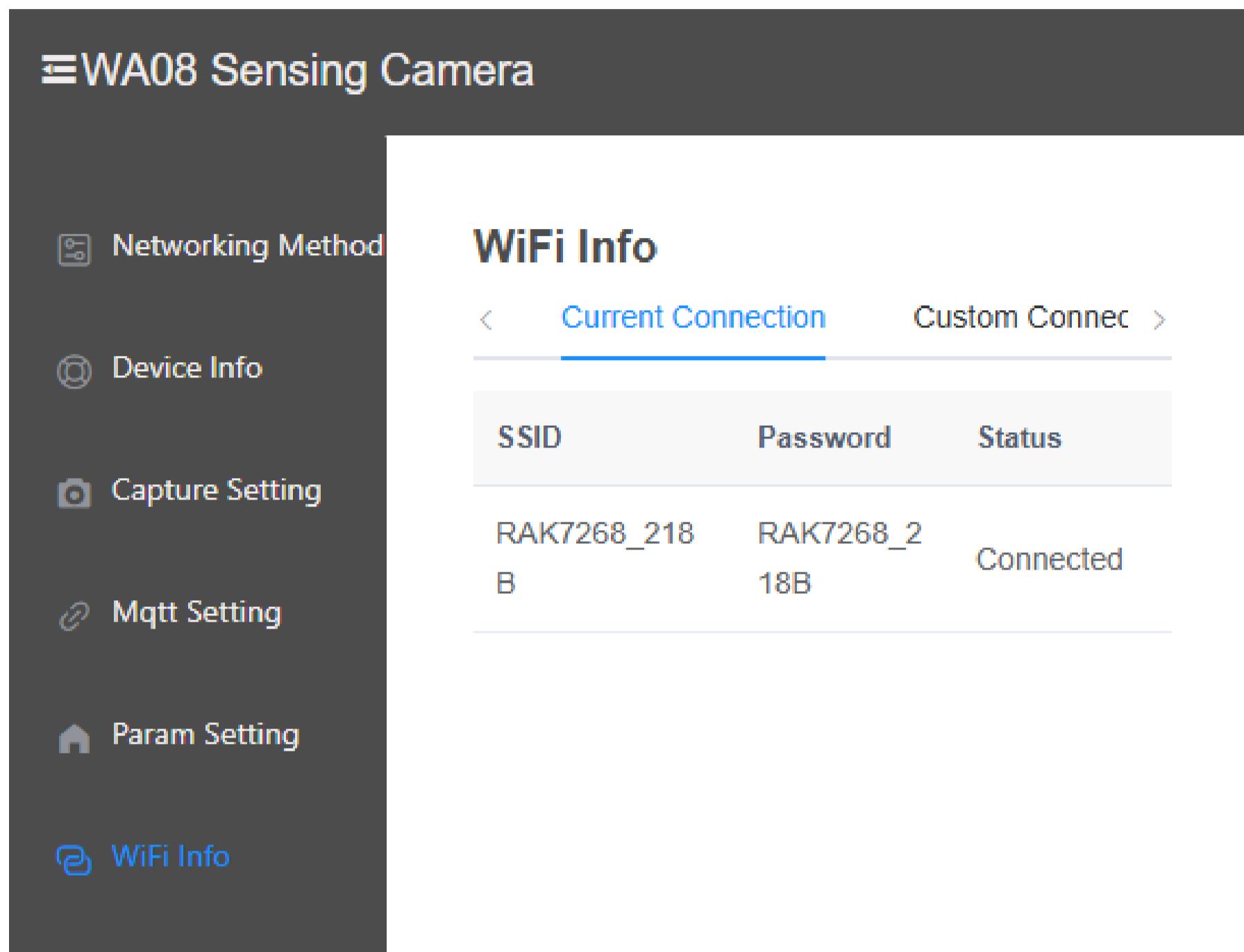
- **Current Connection**

Shows the current WiFi information and connection status.

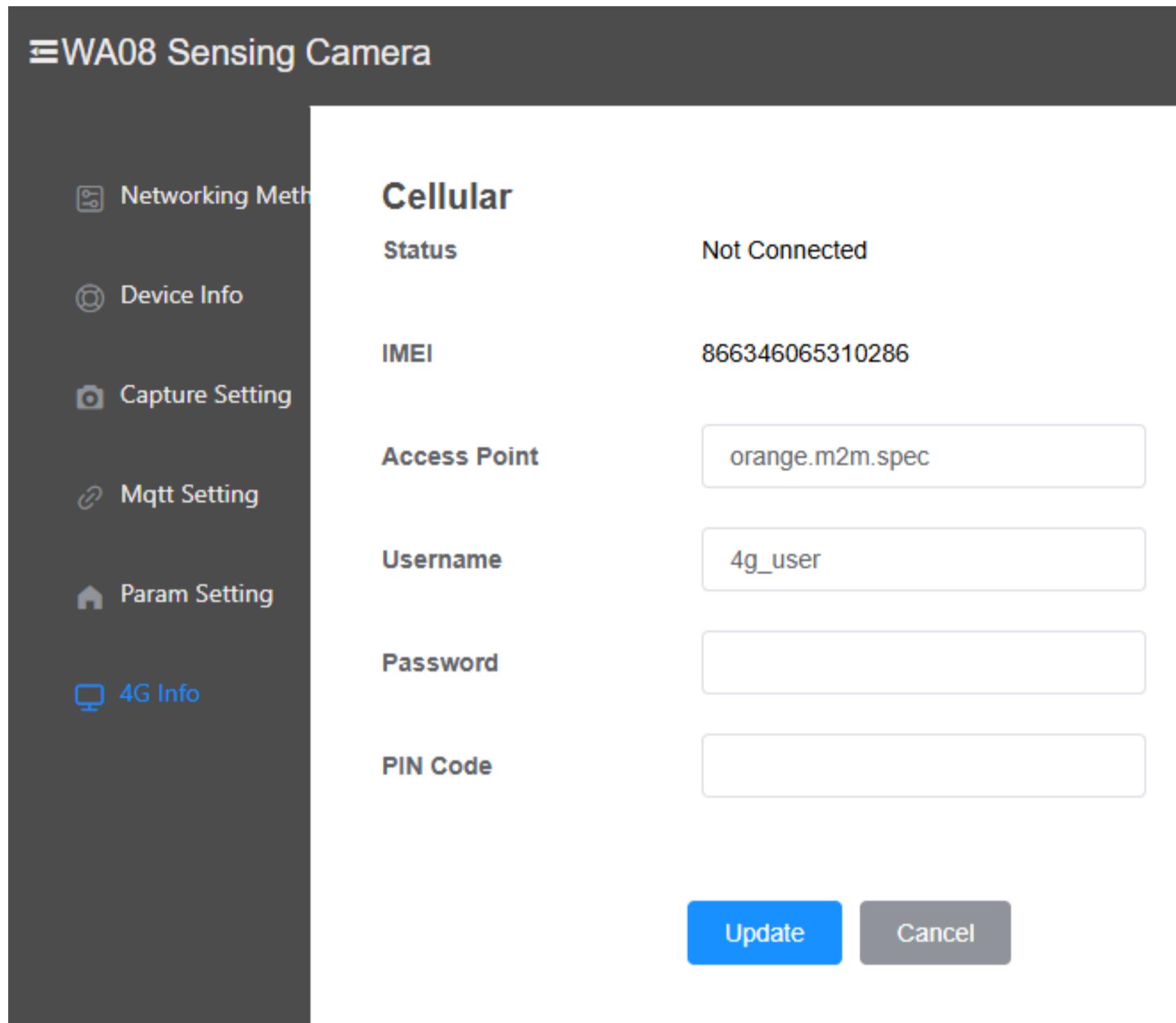


● Custom Configuration

If the desired Wi-Fi is not found in the scan, you can manually configure the Wi-Fi information through custom settings.



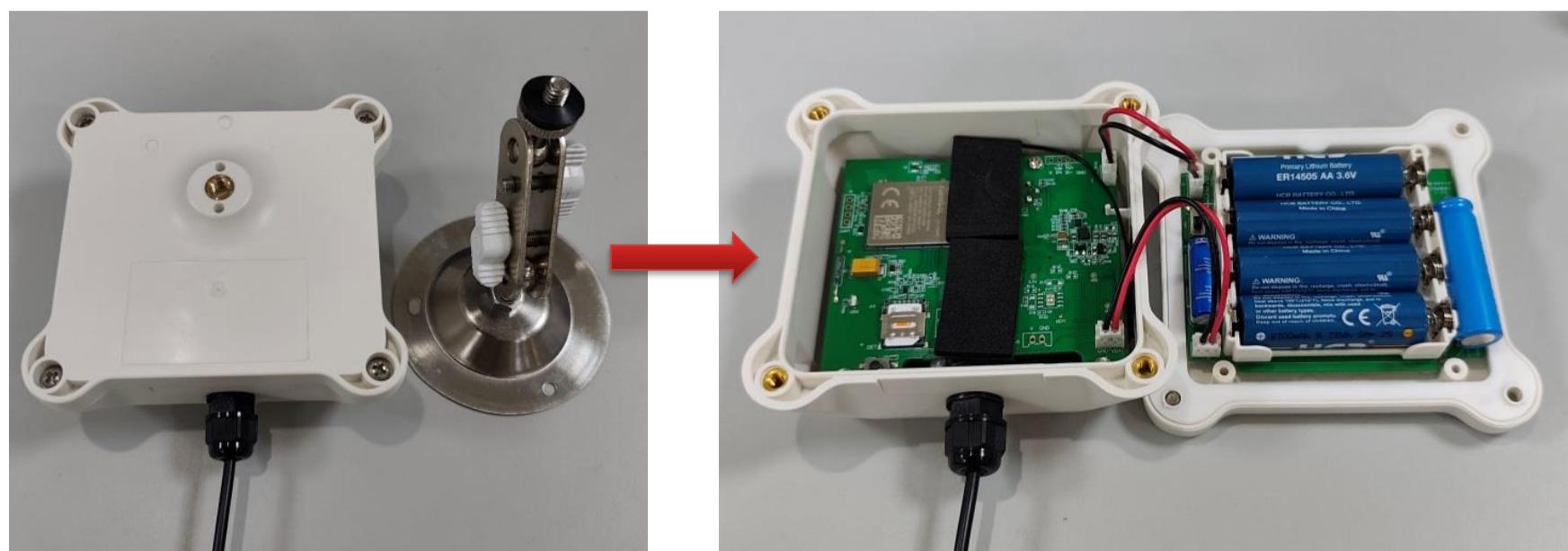
⑧ Cellular (for 4G connection only)



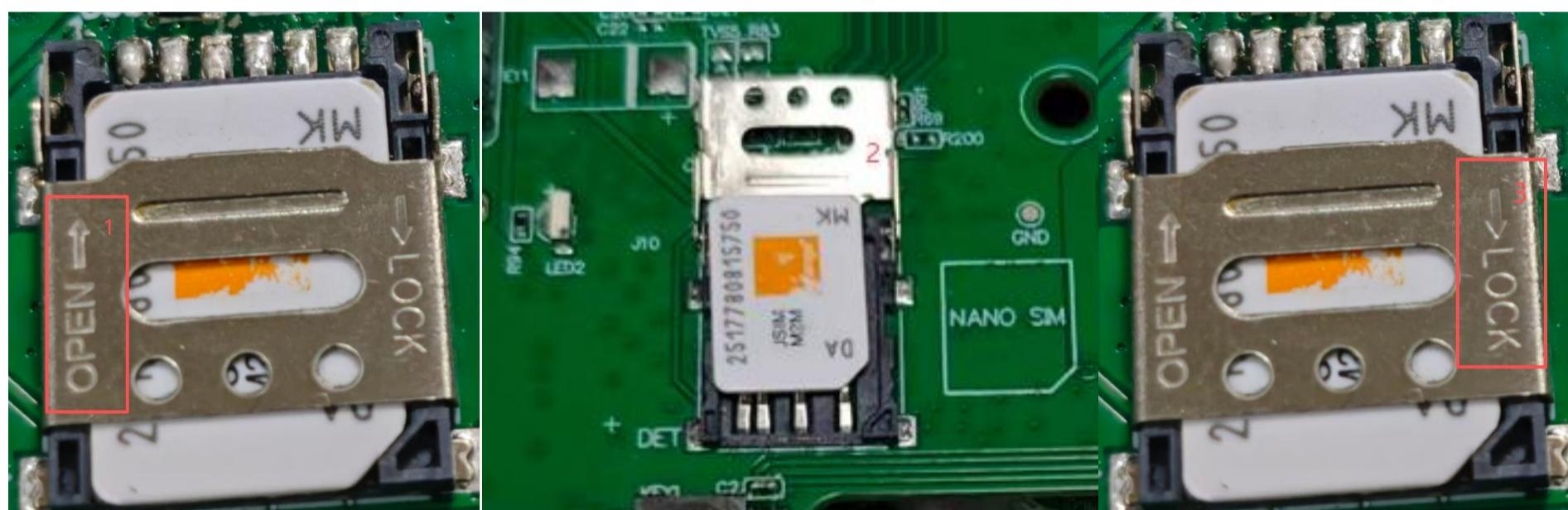
- Status
Show the connection status of 4G network
- IMEI
Show the IMEI of this device
- Access Point
Enter your cellular APN.
- Username
Enter your APN username.
- Password
Enter your APN password.
- PIN Code
Enter your SIM PIN (4 – 8 digits).

8. Installation

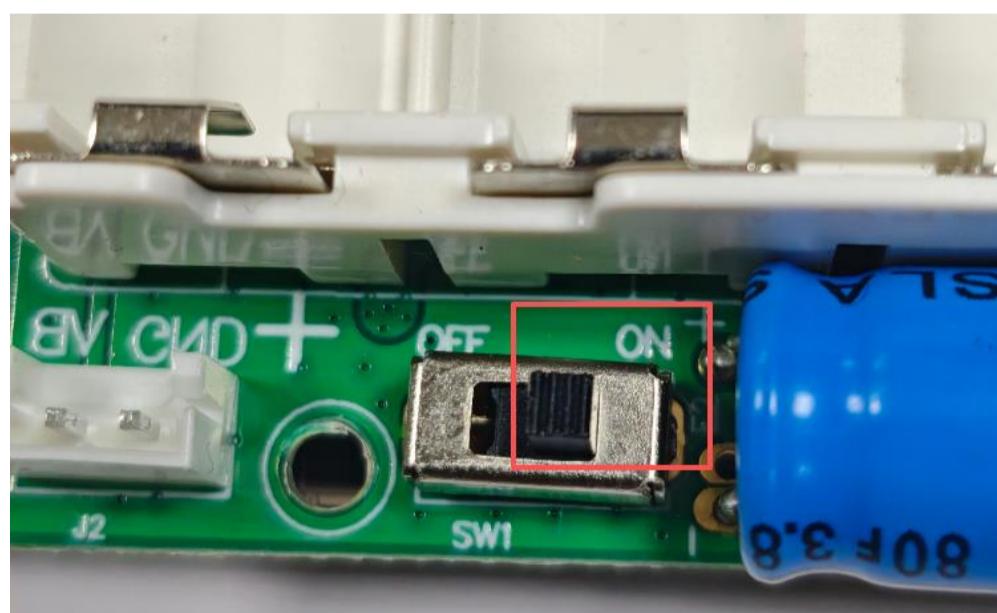
1. Remove the WA08/WA08A/WA08B device base and bottom cover.



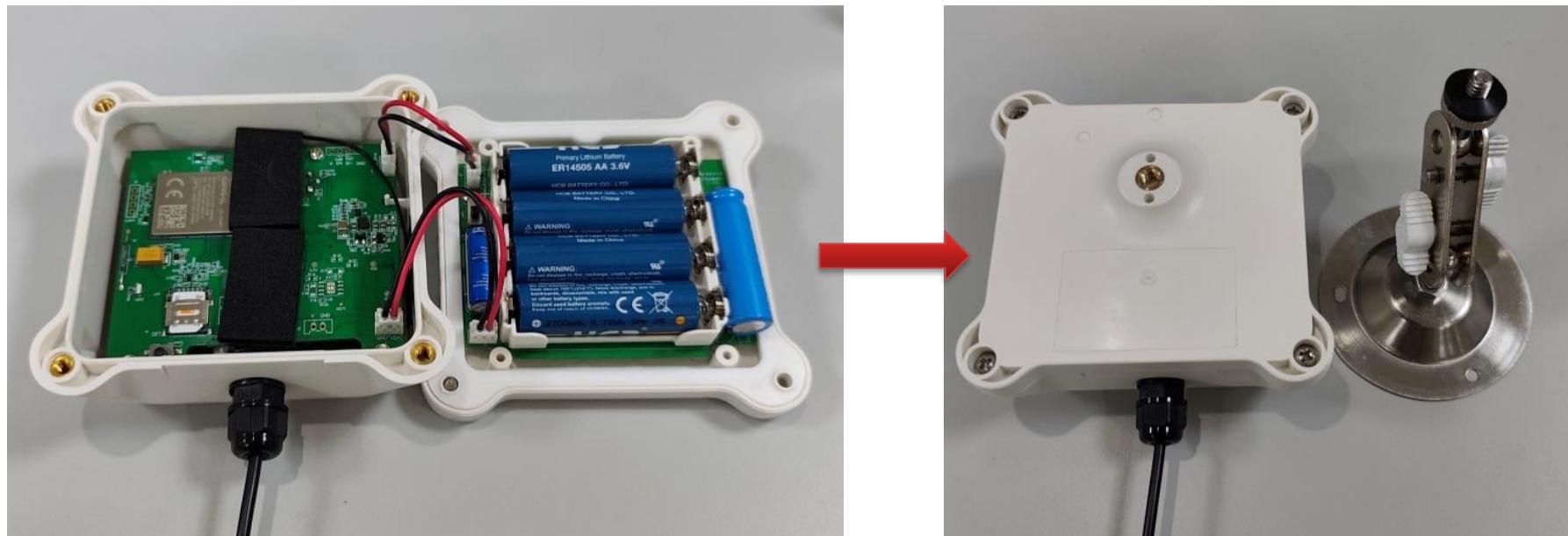
2. For WA08A/WA08B, insert the SIM card.



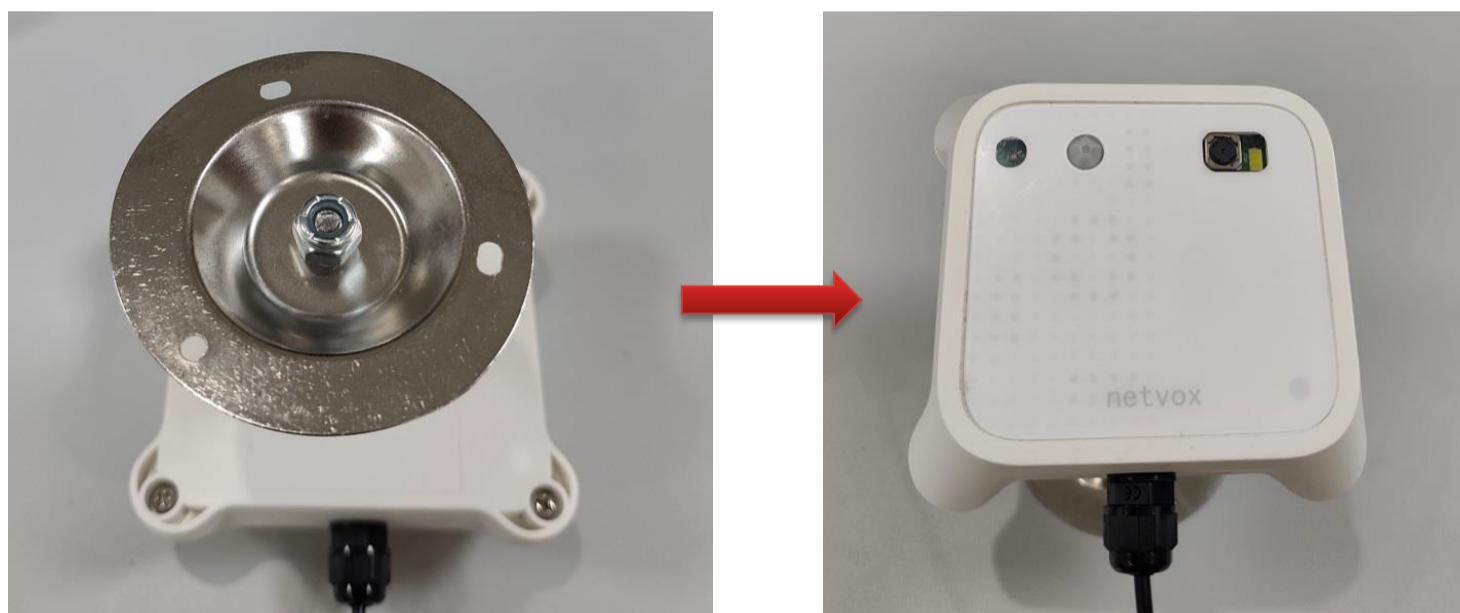
3. Set the capacitive switch to the ON position.



4. Insert 4* 3.6V batteries (please note the polarity; do not insert incorrectly) and reattach the bottom cover, tightening the screws.



5. Reattach the WA08 device base and secure it by tightening the screws.



6. Follow the WA08 user manual to perform operations such as network joining and function testing.

7. Once the network joining test is successful, place the WA08 in an appropriate location.

9. Important Maintenance Instructions

Kindly pay attention to the following to achieve the best maintenance of the product:

- Keep the device dry. Rain, moisture, or any liquid might contain minerals and thus corrode electronic circuits. If the device gets wet, please dry it completely.
- Do not use or store the device in a dusty or dirty environment. It might damage its detachable parts and electronic components.
- Do not store the device under extremely hot conditions. High temperatures can shorten the life of electronic devices, destroy batteries, and deform or melt some plastic parts.
- Do not store the device in places that are too cold. Otherwise, when the temperature rises, moisture that forms inside the device will damage the board.
- Do not throw, knock, or shake the device. Rough handling of equipment can destroy internal circuit boards and delicate structures.
- Do not clean the device with strong chemicals, detergents, or strong detergents.
- Do not apply the device with paint. Smudges might block the device and affect the operation.
- Do not throw the battery into the fire, or the battery will explode. Damaged batteries may also explode.

All of the above applies to your device, battery, and accessories. If any device is not operating properly, please take it to the nearest authorized service facility for repair.