

## Section 1 How to integrate Monigear series network sensors into Home Assistant

Home Assistant is an open-source smart home automation platform focused on localized control and privacy. It integrates with thousands of smart devices and services, allowing users to manage and automate a wide range of IoT devices, such as lights, sensors, cameras, and thermostats, through a unified interface.

Home Assistant's core advantages include:

- Local operation: Reduce dependence on cloud services and improve response speed and privacy.
- Cross-platform support: Compatible with multiple protocols and devices such as Zigbee, Z-Wave, MQTT, and Wi-Fi.
- Powerful automation: Supports automation rules based on time, device status or external events.
- Extensibility: Flexibly extend functionality through add-ons and custom integrations.

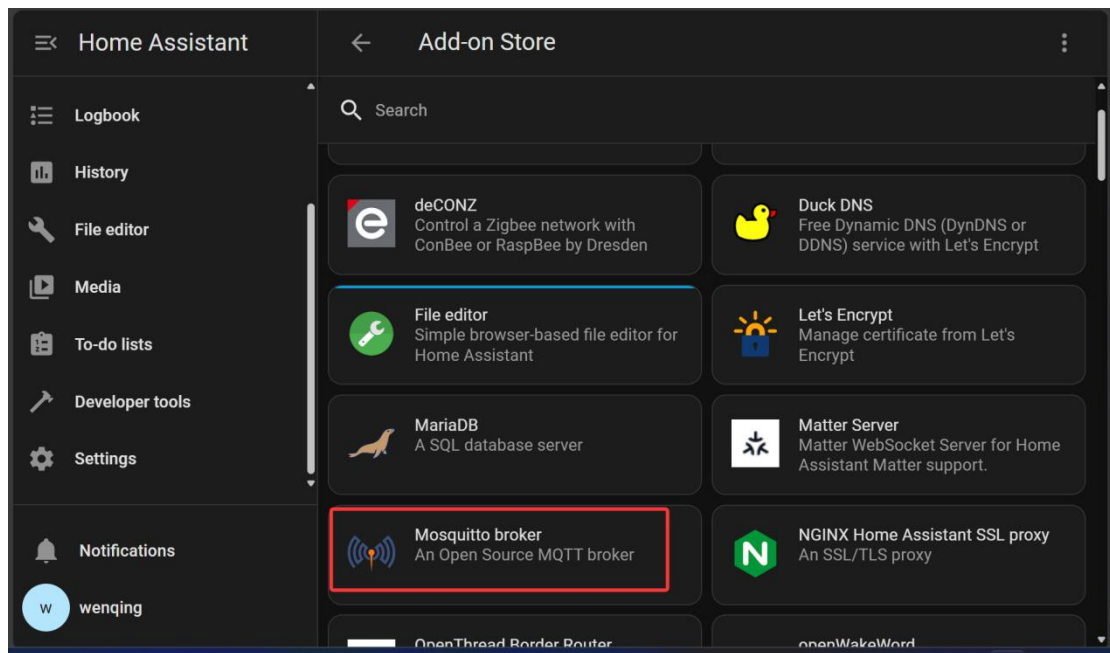
Our Monigear series of network sensors can be easily integrated into Home Assistant via MQTT, allowing users to:

- Monitor sensor data (such as temperature, humidity, and air quality) in real time on a unified dashboard.
- Create automation rules (such as triggering alarms or linking other devices when sensors detect anomalies).
- Work seamlessly with the existing smart home ecosystem to enhance the overall intelligent experience.

Our devices are compatible with Home Assistant after August 2025. If you don't see this option during configuration, please contact our technical support to enable this feature by upgrading firmware of your device. If you don't want to upgrade, you can still integrate with Home Assistant using the method described in Section 2.

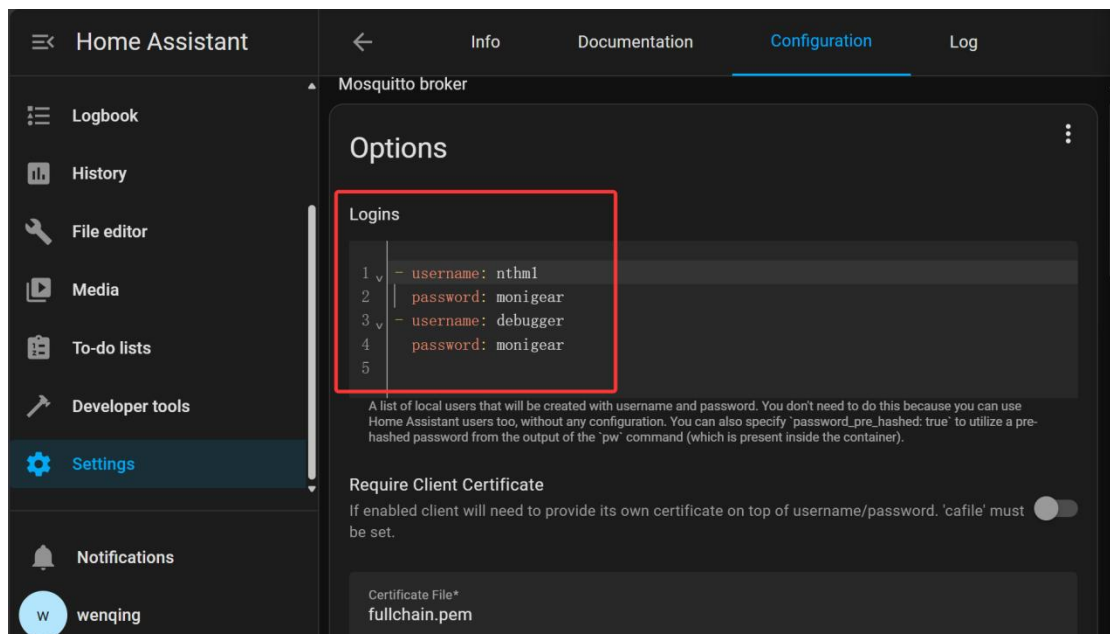
### 1、Install MQTT-related addons on Home Assistant

If you have already installed it, you can skip this step. You can install Mosquitto or EMQX. Here we take Mosquitto as an example



As shown above, go to the Add-on Store in Home Assistant's settings and select "Mosquitto broker" to install. After installation, don't start it immediately. Instead, add two users as shown below: one for device connections and one for debugging and viewing data with the MQTTFX tool. In real-world use, it's best not to set such a simple password. The Mosquitto broker allows multiple devices to login simultaneously using the same username and password.

If you want to use a digital certificate for TLS connection, you can refer to the Home Assistant documentation and add the corresponding certificate file on our device.



In addition, the MQTT service must be started during the system boot, and Watchdog can be enabled for long-term operation, as shown below

# Mosquitto broker


Current version: 6.5.1 ([Changelog](#))

7 Rating

Auth

Signed

An Open Source MQTT broker.  
Visit the [Mosquitto broker](#) page for more details.



Start on boot

Make the add-on start during a system boot

☒

Watchdog

This will restart the add-on if it crashes

☐

After setting up, start the service, the situation after startup is as follows.

Home Assistant

Logbook

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File editor

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Log

visit the [Mosquitto broker](#) page for more details.



Start on boot

Make the add-on start during a system boot

☒

Watchdog

This will restart the add-on if it crashes

☐

Hostname

core-mosquitto

Add-on CPU usage

19.6 %

Add-on RAM usage

0.5 %

STOP

RESTART

UNINSTALL

## 2、Configure monigear devices

Configure NTHM21 via network

☒ Use current certificates
 ☐ Use previous certificates
 Password:

[Device configure](#)
[IO state](#)
[Technical support information](#)

[Detect](#)
[Blink](#)
[Save](#)
[Reboot](#)
[Sys reboot](#)
[Read configure](#)
[Apply changes](#)

[Factory Upgrade](#)
[Check Update](#)

[Basic configure](#)
[IOT center1 configure](#)
[IOT center2 configure](#)
[GNC center configure](#)
[SNMP configure](#)
[Email notification configure](#)

Property	Value
Enabled	Yes
MQTT version	Default
QOS	Almost once
Keep alive time(sec)	60
Clean session	No
Retain publish	No
Enable will option	No
Will QOS	Almost once
Will retain	No
Center type	Home assistant

Property	Value
Home assistant server IP	192.168.1.3
Port	1883
Client ID	nthm21
User name	nthm1
Password	monigear
Topic prefix	homeassistant
node ID	room1
node name	Dinning room

In our configuration tool software, select one of the IoT to configure, as shown above.

The most important settings are circled in red. The connection parameters must match those of the HomeAssistant server. If the "Topic prefix" setting is unchanged, it should be as shown in the image. If it has been modified in Home Assistant, it should be set accordingly. The Node name is for display purposes only, and the Node ID must be unique for each device, otherwise it will conflict with other entities in Home Assistant.

Another setting related to the reporting interval is within "Basic configure" category. The "Report interval" setting affects several protocols that actively report data, including MQTT. It also determines the interval for GNC protocol/SNMP traps. It's important to note that in addition to sending data regularly, analog supervisory points can also be configured to automatically send data when the data changes by a certain amount. This allows for notification of data changes in time. For more information, refer to the documentation for email event generation.

Configure NTHM21 via network

☒ Use current certificates
 ☐ Use previous certificates
 Password:

[Device configure](#)
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[Detect](#)
[Blink](#)
[Save](#)
[Reboot](#)
[Sys reboot](#)
[Read configure](#)
[Apply changes](#)

[Factory Upgrade](#)
[Check Update](#)

Property	Value
Host IPv4 address	IP:192.168.1.21, Mask:255.255.255.0, GateWay:192.168.1.1
IPv4 DNS server	192.168.1.1
Enable NTP synchronize time	Yes
NTP server	pool.ntp.org
NTP port	123
Time zone	Asia/Shanghai
Enable Modbus TCP	Yes
Modbus Tcp port(502)	502
Modbus tcp mode	Server mode
Modbus tcp server IP for client mode	
Modbus tcp idle timeout(minutes)	10
Enable bacnet	No
Bacnet device ID	1
Report interval(seconds)	300
ca-bundle	ca-bundle,file size: 222971, date: 06-23-2025 17:17:53
Enable IFTTT	Yes

After setting everything up, click "Apply changes"->Save->Reboot to make the configuration take effect. If there are no abnormalities, you can immediately see the newly added sensor data on Home Assistant.

Below is an example of what the home assistant overview looks like after I set up the MN-NTHM, MN-NVOC 4in1 sensor.

Home Assistant Overview

wenqing Unknown

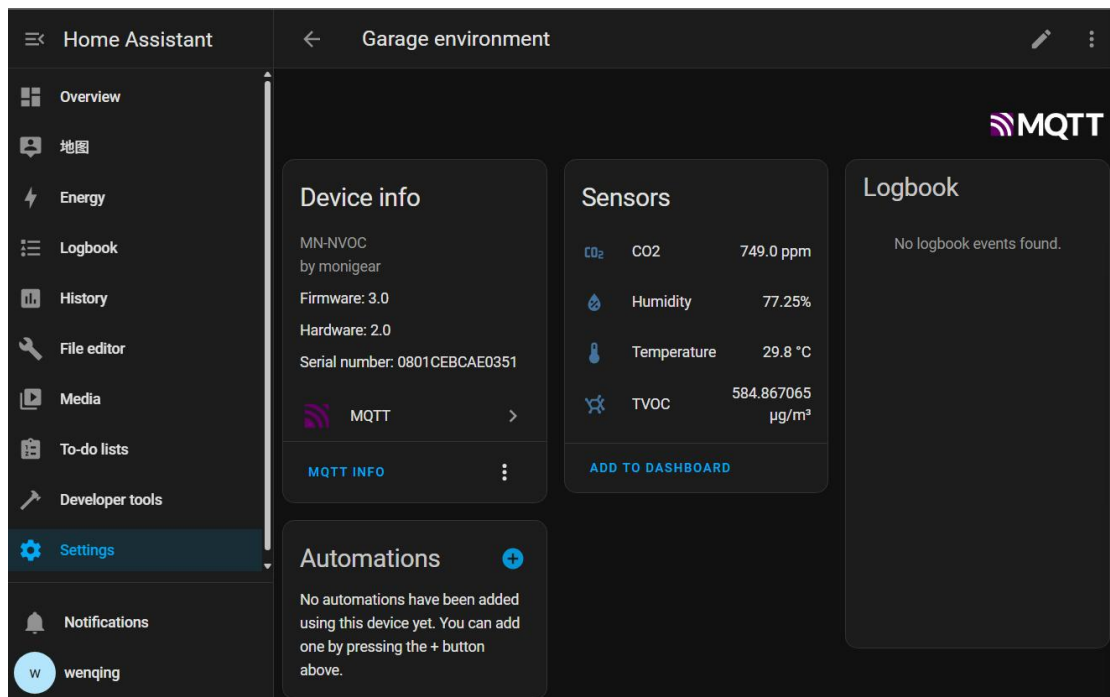
**Dinning room**

- Humidity: 78.394997%
- Temperature: 30.0 °C

**Garage environment**

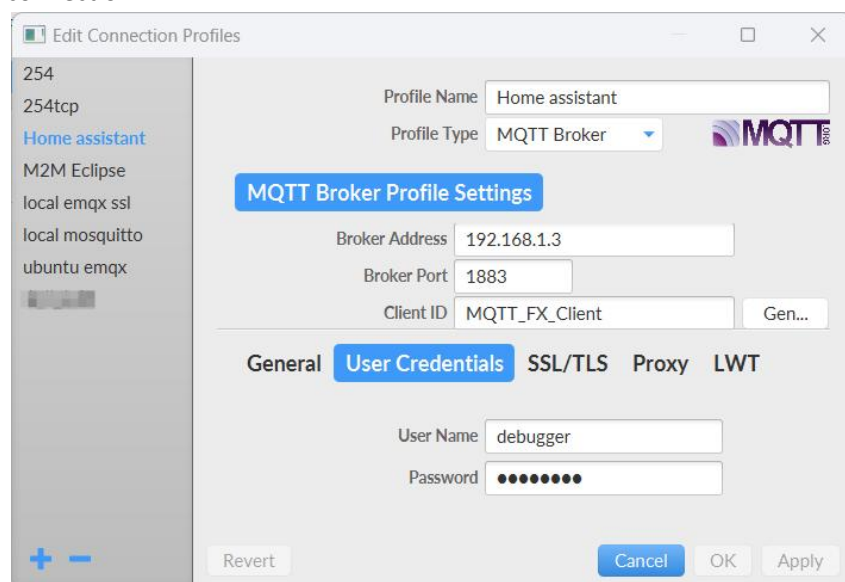
- CO2: 720.0 ppm
- Humidity: 75.949997%
- Temperature: 29.6 °C
- TVOC: 560.327209 µg/m³

In Home Assistant's Settings->"Devices & Services"->MQTT, click on a single device to view the detailed information of our automatically discovered device, as shown below.

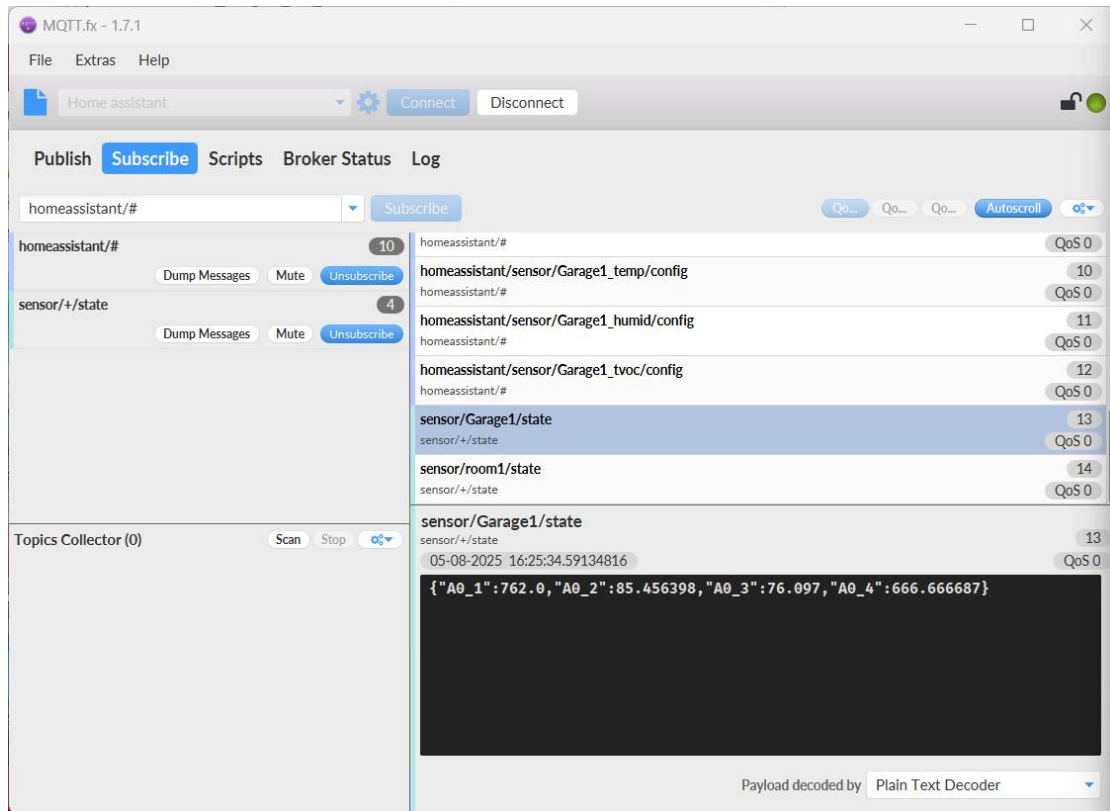


### 3、Debug(Optional)

On the Home Assistant server, you can view connection information through the Mosquitto addon's log. MQTT debugging and testing are also convenient. You can use the mqttfx tool. As shown below, set the connection parameters based on the HA broker's actual situation and then establish a connection.

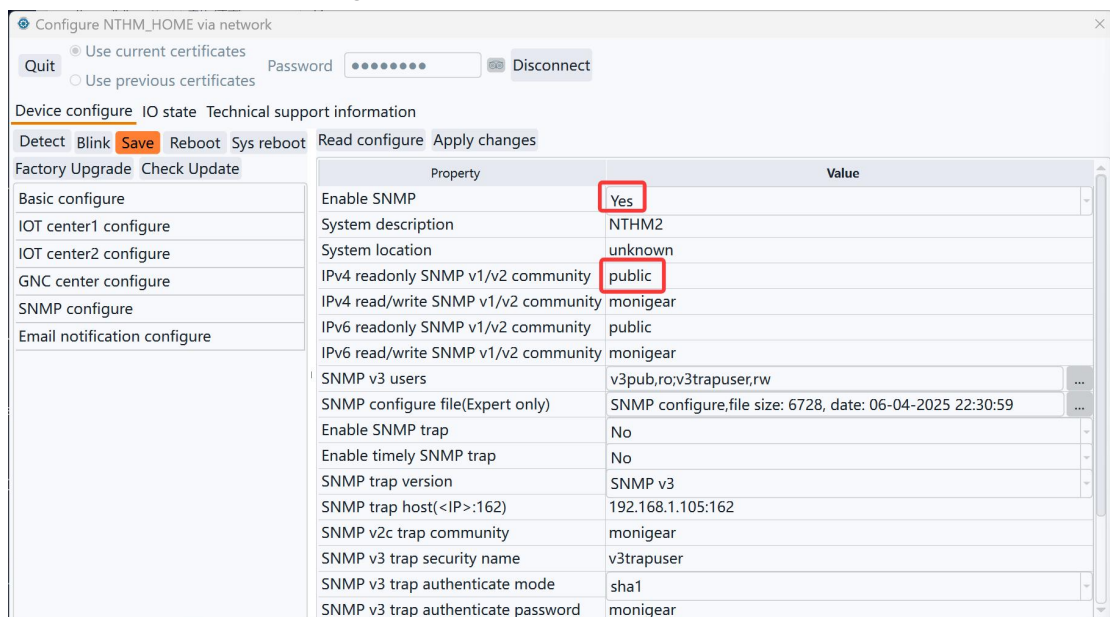


After connecting, subscribe to the "sensor/+state" topic to see the status data sent by all monigear sensors, and subscribe to homeassistant/# to see the registration information of all sensors. As shown in the figure below



## Section2 Add monigear network sensors to HA via SNMP

If the old product you have does not have the option to adapt MQTT to Home Assistant, but you want to use it in Home Assistant, the fastest and easiest way is to use SNMP. Home Assistant supports SNMP by default, so you can get the data from our sensors without installing an add-on. For example, if the MN-NTHM device IP is 192.168.1.4, enable SNMP with the following configuration, save, and reboot for the configuration to take effect. For more detailed SNMP information, refer to the Monigear SNMP documentation.



Modify the home assistant configure file "configuration.yaml". For example, the following is the configuration file I modified. The content before the blue font is the original content, and the blue font part is the added sensor configuration.

```
# Loads default set of integrations. Do not remove.
```

```
default_config:
```

```
# Load frontend themes from the themes folder
```

```
frontend:
```

```
  themes: !include_dir_merge_named themes
```

```
automation: !include automations.yaml
```

```
script: !include scripts.yaml
```

```
scene: !include scenes.yaml
```

```
sensor:
```

```
- platform: snmp
  host: 192.168.1.4
  version: 2c
  community: public
  baseoid: .1.3.6.1.4.1.22853.1.3.1.2.1
  scan_interval: 20
  name: "Home1 Temperature"
  unit_of_measurement: "F"
  device_class: temperature
```

```
- platform: snmp
  host: 192.168.1.4
  version: 2c
  community: public
  baseoid: .1.3.6.1.4.1.22853.1.3.1.2.2
  scan_interval: 20
  name: "Home1 Humidity"
  unit_of_measurement: "%"
  device_class: humidity
```

If there are multiple devices, just add them by referring to the above format.

Apply the configuration on the HA WEB manage page and restart Home Assistant to see the added sensor data.



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Developer tools

YAMLStatesActionsTemplateEventsStatisticsAssist

Backup 备份管理器状态

device\_class: enum  
friendly\_name: Backup 备份管理器状态

sensor.backup\_last\_attempted\_automatic\_backup

Backup 上次尝试自动备份

unknown

device\_class: timestamp  
friendly\_name: Backup 上次尝试自动备份

sensor.backup\_last\_successful\_automatic\_backup

Backup 上次成功的自动备份

unknown

device\_class: timestamp  
friendly\_name: Backup 上次成功的自动备份

sensor.backup\_next\_scheduled\_automatic\_backup

Backup 下一次计划的自动备份

unknown

device\_class: timestamp  
friendly\_name: Backup 下一次计划的自动备份

sensor.home1\_humidity

Home1 Humidity

49.953999

unit\_of\_measurement: %  
device\_class: humidity  
friendly\_name: Home1 Humidity

sensor.home1\_temperature

Home1 Temperature

83.668999

unit\_of\_measurement: F  
device\_class: temperature  
friendly\_name: Home1 Temperature

sensor.sun\_next\_dawn

Sun 下个清晨

2025-08-03T03:22:20+00:00

device\_class: timestamp  
friendly\_name: Sun 下个清晨

sensor.sun\_next\_dusk

Sun 下个黄昏

2025-08-02T20:11:34+00:00

device\_class: timestamp  
friendly\_name: Sun 下个黄昏

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Settings

Home Assistant Cloud

Control home when away and integrate with Alexa and Google Assistant

Devices & services

Integrations, devices, entities, and helpers

Automations & scenes

Automations, scenes, scripts, and blueprints

Areas, labels & zones

Manage locations in and around your house

Dashboards

Organize how you interact with your home

Voice assistants

Manage your voice assistants

Tags

Set up NFC tags and QR codes

People

Manage who can access your home

System

Create backups, check logs, or reboot your system

