iAeris

空氣品質監測系統

2021.07.28
10:35 AM

溫度 25 ℃
濕度 56 %

二氧化碳
680
ppm

PM10
32
μg/m³

Powered by
sysinno

iAeris5 Indoor Air Quality Detector

iAeris

Closely review the user manual before using this product.
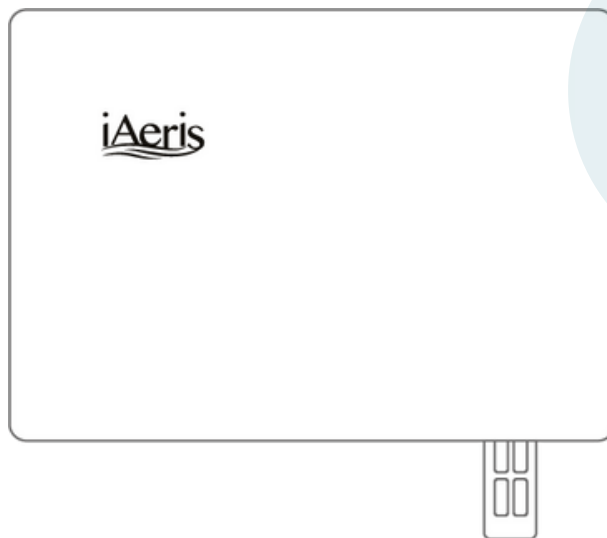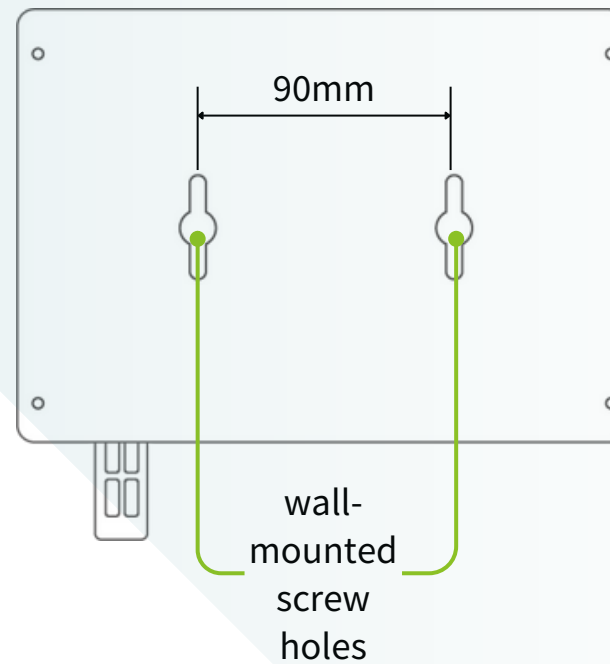
USER MANUAL

www.sysinnotec.com

sysinno

PACKAGE CONTENTS

- iAeris main unit
- Adapter
- Wall mounting screws
- Installation positioning diagram
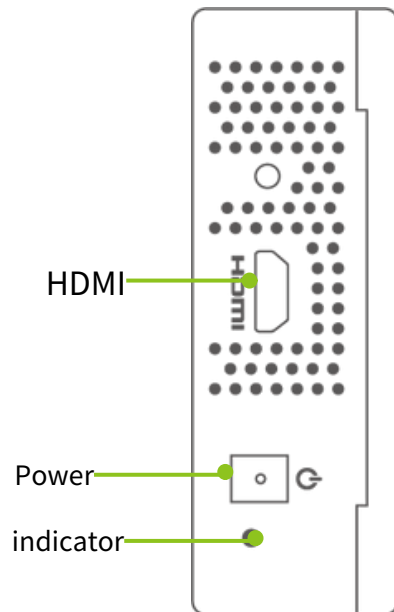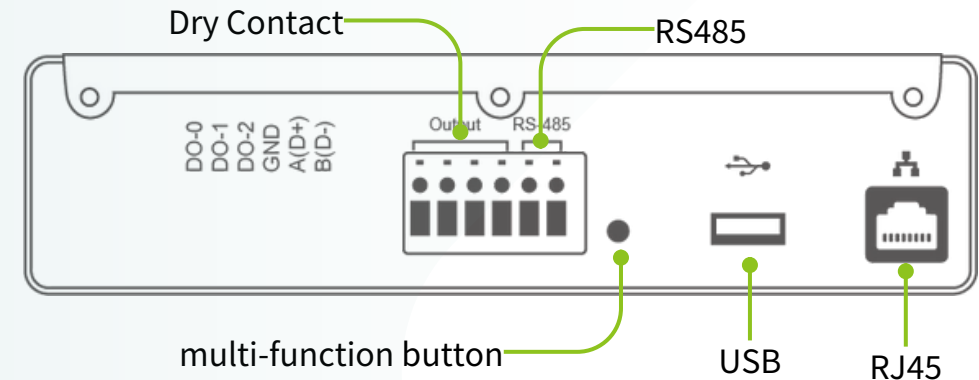
PRODUCT DESIGN / FEATURES

Front View

iAeris

Back View

90mm

wall-mounted screw holes

Adapter

PRODUCT DESIGN / FEATURES

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Right View

HDMI

Power

indicator

Top View

Dry Contact

RS485

DO-0
DO-1
DO-2
GND
A(D+)
B(D-)

Output   RS-485

multi-function button

USB

RJ45

Communication Interface：

Dry Contact Functionality
- This product supports three sets of dry contacts for activating external devices.

RS485 Functionality
- RRS-485 has directionality, please pay attention to the positions of A(+) and B(-) when connecting.
- RS-485 communication adopts the Modbus-RTU format. Please use devices and equipment with Modbus-RTU Master functionality for communication.

Network Functionality
- For Ethernet, use RJ45 connector.
- For wireless, follow WiFi setup instructions.
- iAeris5 supports HTTP and MQTT network communication.

REMARKS:
[1] Communication Cable Recommendations:
    RS485: AWG22 double-insulated control wire.
    Dry Contact: AWG24~AWG19 multi-core power wire.
[2] This product supports IEEE802.3af PoE power supply specification (optional feature)
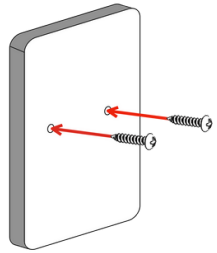
PRODUCT DIMENSIONS
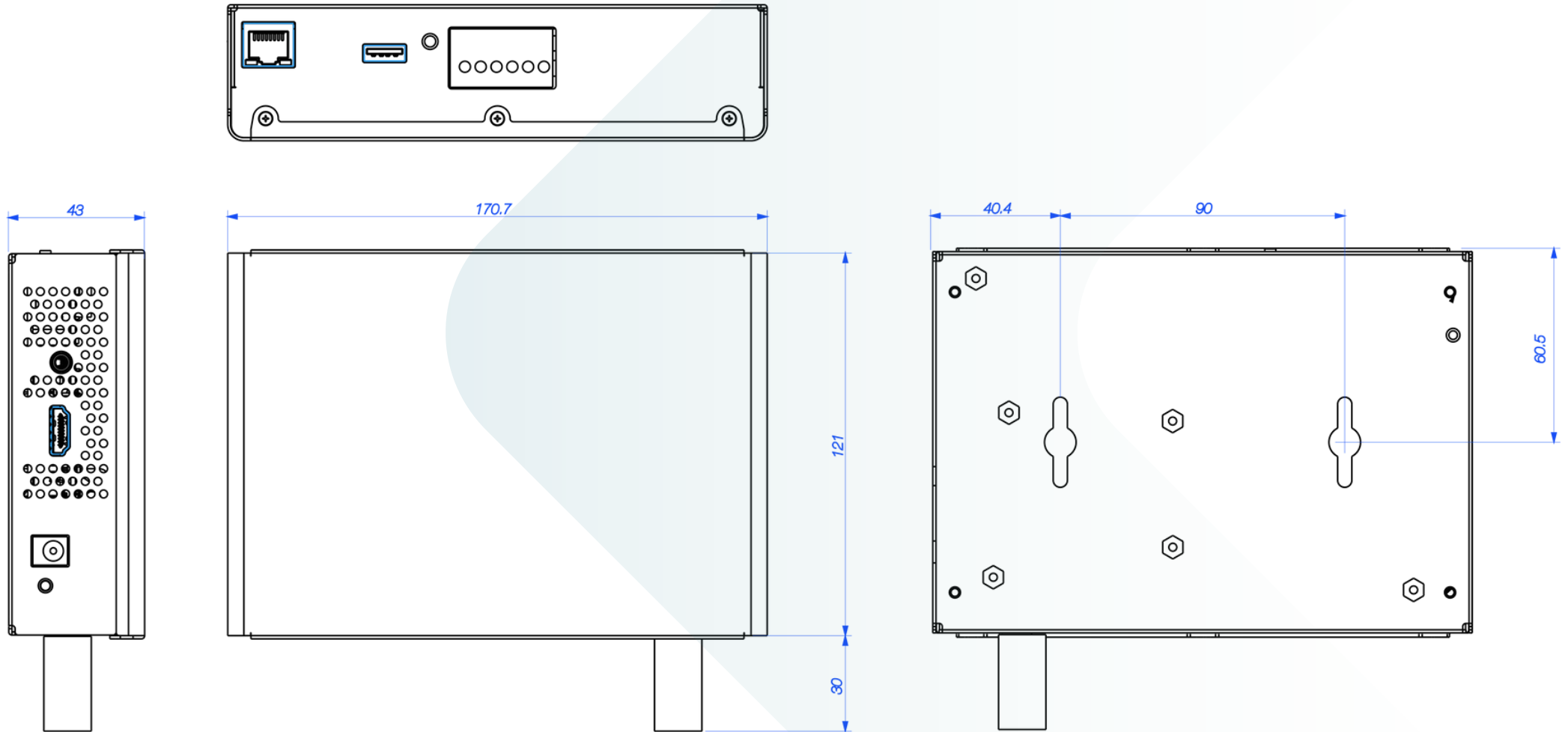
Unit：mm

Wall Mount Installation

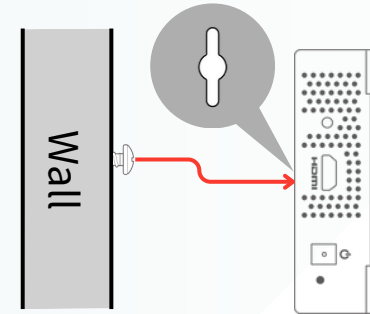**Recommended : Install at a height within the range of human breathing (recommended height 1.5~2.5 meters).**

NOTE

2~3mm

Wall

[1] Leave a 2-3 mm gap when screwing into the wall.

1

Attach the installation diagram to the wall, ensuring it's horizontal. Screw in both of screws with a suitable gap from the wall.[1]

Wall

2

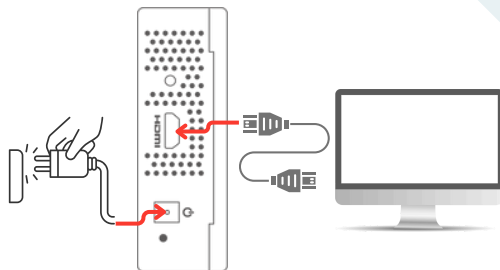Align the iAeris5's wall-mount holes with the screws and fix it to the wall.

3

Power the iAeris5 using the adapter. Connect the HDMI cable from the iAeris5 to the screen.
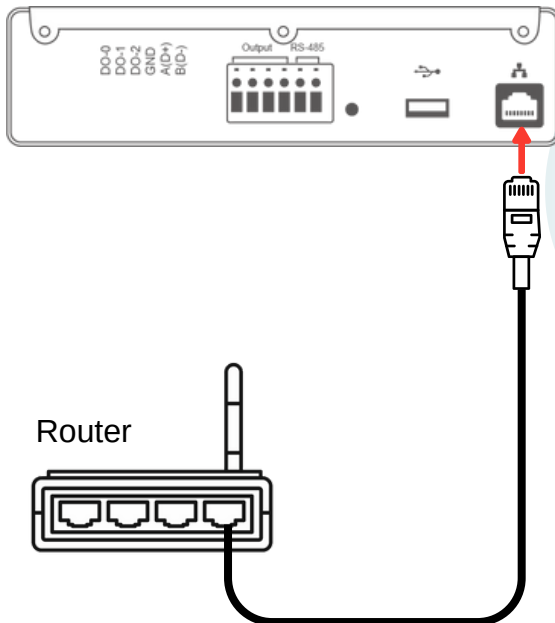

4

Turn on the screen. Start monitoring air quality when the dashboard appears.

Connect to Ethernet

Aeris5 has one RJ45 Ethernet connector. Simply plug in the network cable to connect to the internet.
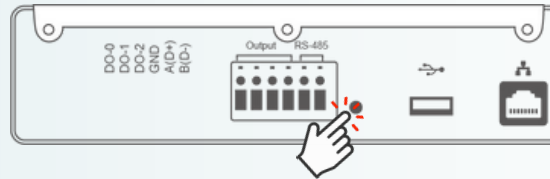
1

Before using Ethernet, power off iAeris5 and plug in the network cable to the RJ45 connector of iAeris5.
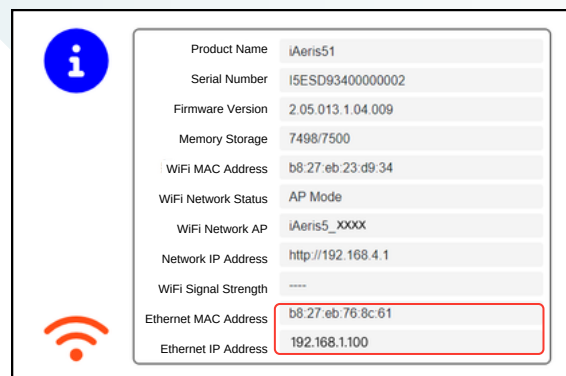
Router

2

Power on iAeris5 until boot up completely, then press the multi-function button.

The screen shows device info. Confirm the Ethernet IP address, indicating a successful connection. Users can access iAeris5 settings via this IP.[1]

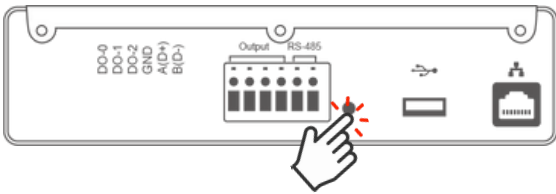|	
Product Name	iAeris51
Serial Number	I5ESD93400000002
Firmware Version	2.05.013.1.04.009
Memory Storage	7498/7500
WiFi MAC Address	b8:27:eb:23:d9:34
WiFi Network Status	AP Mode
WiFi Network AP	iAeris5_XXXX
Network IP Address	http://192.168.4.1
WiFi Signal Strength	----
Ethernet MAC Address	b8:27:eb:76:8c:61
Ethernet IP Address	192.168.1.100

NOTE

[1] iAeris5 Ethernet defaults to DHCP. Users can set a static IP in the Ethernet settings webpage if need.
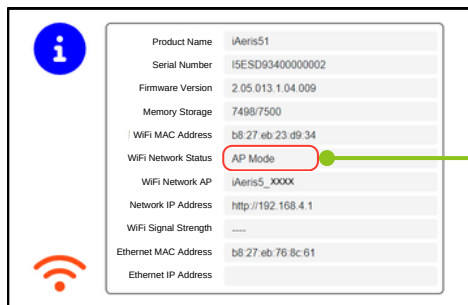
Connect to a wireless network hotspot

iAeris5's default is to enable the wireless network hotspot, allowing users to connect directly using their phone or computer.

1.

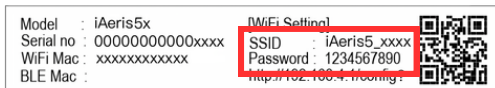Power on iAeris5 until boot-up, then press the multi-function button.

Confirm iAeris5 is in hotspot (AP) mode.[1]

Product Name	iAeris51
Serial Number	I5ESD93400000002
Firmware Version	2.05.013.1.04.009
Memory Storage	7498/7500
WiFi MAC Address	b8:27:eb:23:d9:34
WiFi Network Status	AP Mode
WiFi Network AP	iAeris5_XXXX
Network IP Address	http://192.168.4.1
WiFi Signal Strength	----
Ethernet MAC Address	b8:27:eb:76:8c:61
Ethernet IP Address	

AP Mode

Find the WiFi hotspot and key on the label on the side of the device.
SSID: iAeris5_xxxx
Password 1234567890

Model : iAeris5x
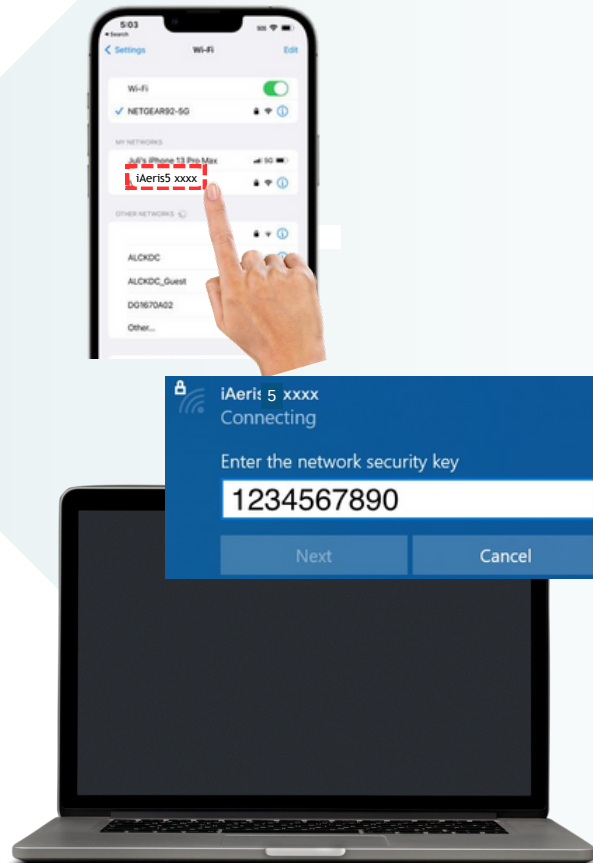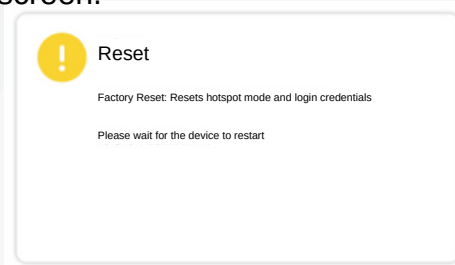Serial no : 00000000000xxxx
WiFi Mac : xxxxxxxxxxxx
BLE Mac :
[WiFi Setting]
SSID : iAeris5_xxxx
Password : 1234567890

2.

Search and connect to the iAeris5 WiFi hotspot on your computer or phone

iAeris5 xxxx

iAeris5 xxxx
Connecting

Enter the network security key
1234567890

Next   Cancel

NOTE

[1] If unable to find iAeris5 WiFi hotspot, press and hold multi-function button for 10 seconds until prompt appears on screen.

Reset

Factory Reset: Resets hotspot mode and login credentials

Please wait for the device to restart

Afterward, restart to enter setup mode, and the WiFi hotspot function will automatically activate.
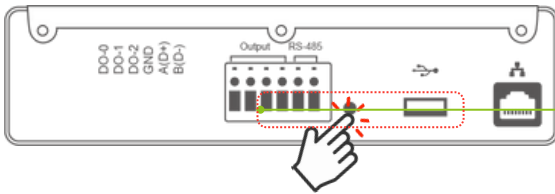
Login to the settings webpage

iAeris5 enables remote connection settings, accessed via computer or phone when connected to the network.

1___.

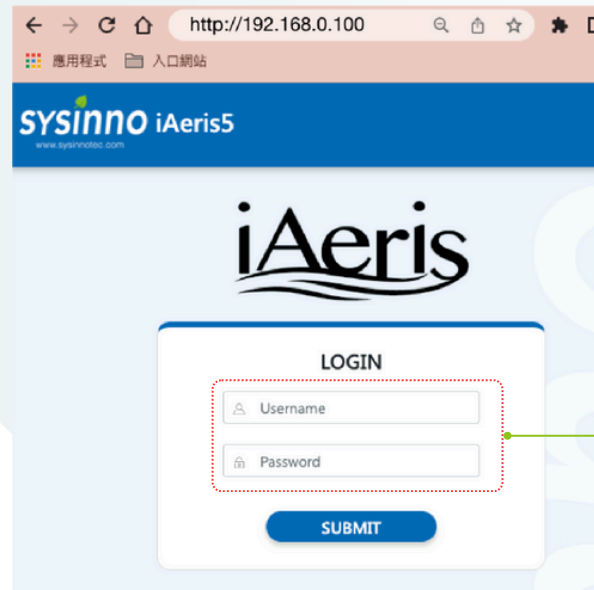Power on iAeris5 until boot-up, then press the multi-function button [1]

The screen shows iAeris5 connection info and network IP address.[2]

Product Name	iAeris51
Serial Number	I5ESD93400000002
Firmware Version	2.05.013.1.04.009
Memory Storage	7498/7500
WiFi MAC Address	b8:27:eb:23:d9:34
WiFi Network Status	connected
WiFi Network AP	sysinno-test-AP
Network IP Address	http://192.168.0.100
WiFi Signal Strength	-73db
Ethernet MAC Address	b8:27:eb:76:8c:61
Ethernet IP Address	http://192.168.0.101

WiFi IP Address

Ethernet IP Address

2___.

Use a computer or phone's web browser and enter the network address "http://xx.xx.xx.xx" in the address bar.[3]Access the settings page.

http://192.168.0.100

應用程式   入口網站

SYSINNO iAeris5
www.sysinnotec.com

iAeris

LOGIN

Username

Password

SUBMIT

3___.

Enter username and password to log in:
Factory Default
username: admin
password: admin

NOTE

[1] For initial setup, connect to iAeris5 WiFi hotspot or Ethernet network.
[2] Connection info shows wireless and Ethernet IP addresses. Choose alternative based on actual connection.
[3] Use the actual IP address, "http://xx.xx.xx.xx" is just an example.

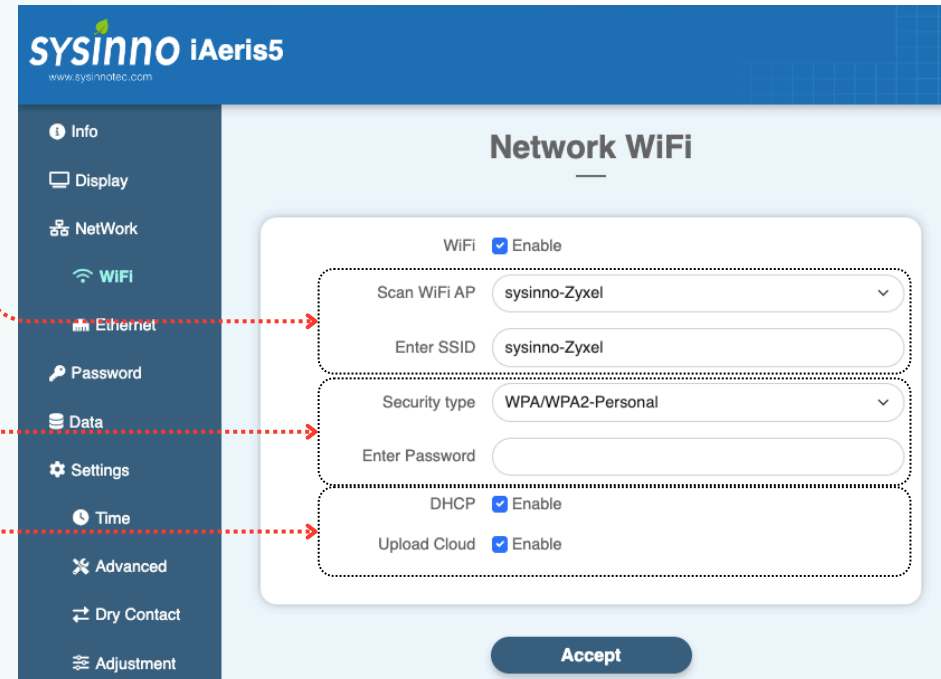# Wireless Network (WiFi) Setup

sysinno

1   Choose the WiFi AP you want to connect to

⚠ • Note: "AP" refers to your WiFi access point. "sysinno-Zyxel" is just an example.
• If iAeris5 can't find your WiFi AP, you can enter the specified "SSID" manually.

2   Enter the password

⚠ • Note: The password here is for your WiFi AP, not for iAeris5 hotspot mode. Use your WiFi AP password, not "1234567890".

3   Check the settings options

⚠ • Upload Cloud /DHCP, read the explanations on the right for individual options

4   Once settings are complete, click "Accept."

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sysinno iAeris5
www.sysinnotec.com

- ⓘ Info
- 🖥 Display
- 🖧 NetWork
  - 📶 WiFi
  - Ethernet
- 🔑 Password
- 🗄 Data
- ⚙ Settings
- 🕐 Time
- 🛠 Advanced
- ⇄ Dry Contact
- ☰ Adjustment

Network WiFi

WiFi ☑ Enable
Scan WiFi AP   sysinno-Zyxel
Enter SSID   sysinno-Zyxel
Security type   WPA/WPA2-Personal
Enter Password
DHCP ☑ Enable
Upload Cloud ☑ Enable

Accept

DHCP ☑ Enable   Checking DHCP : IP will be assigned by AP/Router.

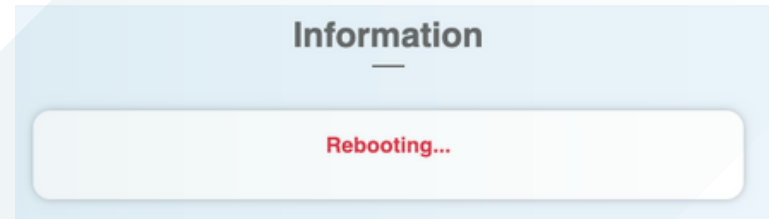DHCP ☐ Enable   Unchecking DHCP : the static IP assignment setup screen.

IP Address   192.168.1.100
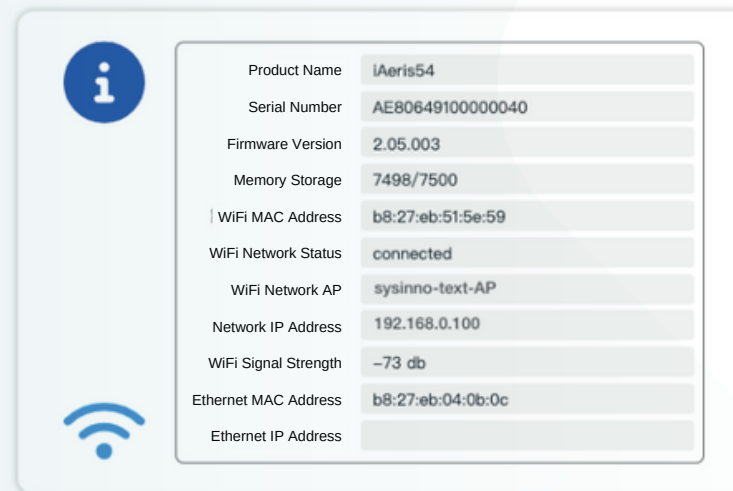Netmask (CIDR)   24
Gateway   192.168.1.1

Upload Cloud ☑ Enable   Checking enables external network connection and upload data to cloud.

8

Wireless Network (WiFi) Setup

5 System will reboot after settings are completed.

Information

Rebooting...

6 After Aeris5 reboot, press the multi-function button to check WiFi connection status.[1]

Product Name	iAeris54
Serial Number	AE80649100000040
Firmware Version	2.05.003
Memory Storage	7498/7500
WiFi MAC Address	b8:27:eb:51:5e:59
WiFi Network Status	connected
WiFi Network AP	sysinno-text-AP
Network IP Address	192.168.0.100
WiFi Signal Strength	−73 db
Ethernet MAC Address	b8:27:eb:04:0b:0c
Ethernet IP Address	

NOTE

[1] Upon successful connection, the IP Address field will show the IP. If setup fails, press and hold the multi-function button for 10 seconds to reset to factory settings, then return to step 1.

Screen template and Multimedia settings

sysinno

Display Settings

1. Click "Display" on the menu to access display settings.
2. Select Templates[1], Language, Date format, and Time format you want.
3. You can customize your own image files for Logo, Title, and Background[2]
4. After setting, click "Save". The device needs to reboot for changes to take effect.
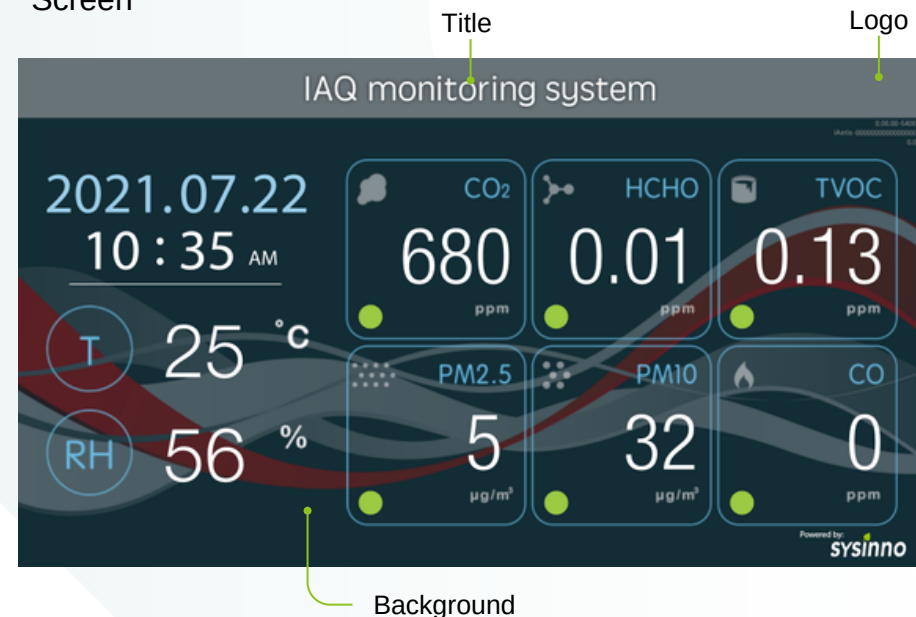
> **NOTE**
>
> [[1] iAeris5 currently supports several templates, including Simple and Multimedia, for user selection.
> [2] Some templates do not allow background image customization.

Settings Webpage
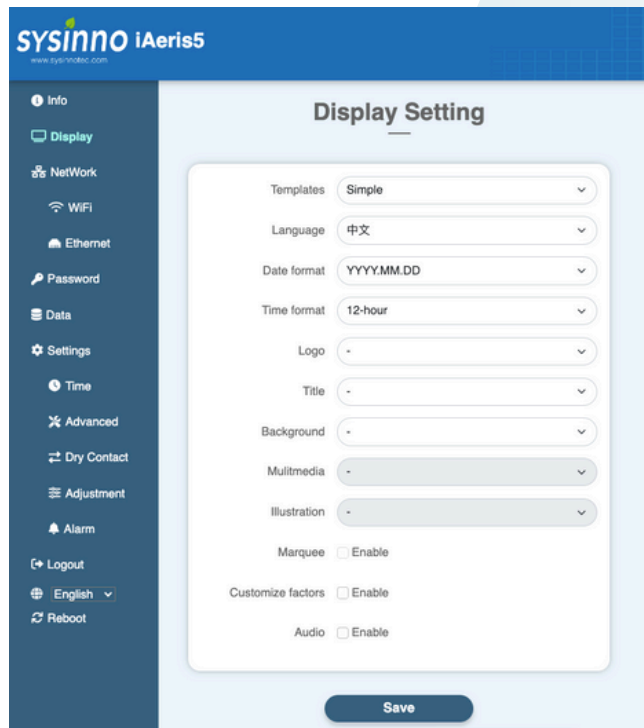
Screen

Screen template and Multimedia settings

Multimedia Template Settings

In addition to air quality monitoring, it can also play videos or photos simultaneously.

1. Select the Multimedia layout in the Templates settings.
2. In the Multimedia options menu, choose to play local media or YouTube.
3. You can select your own image files for illustrations
4. Enable subtitle scrolling (Marquee)[1] and enter the phrases content and delay time.
5. After setting, click "Save". The device needs to reboot for changes to take effect.

NOTE

[1] Subtitle scrolling (Marquee) allows entry of up to 5 sets of phrases.

Settings Webpage
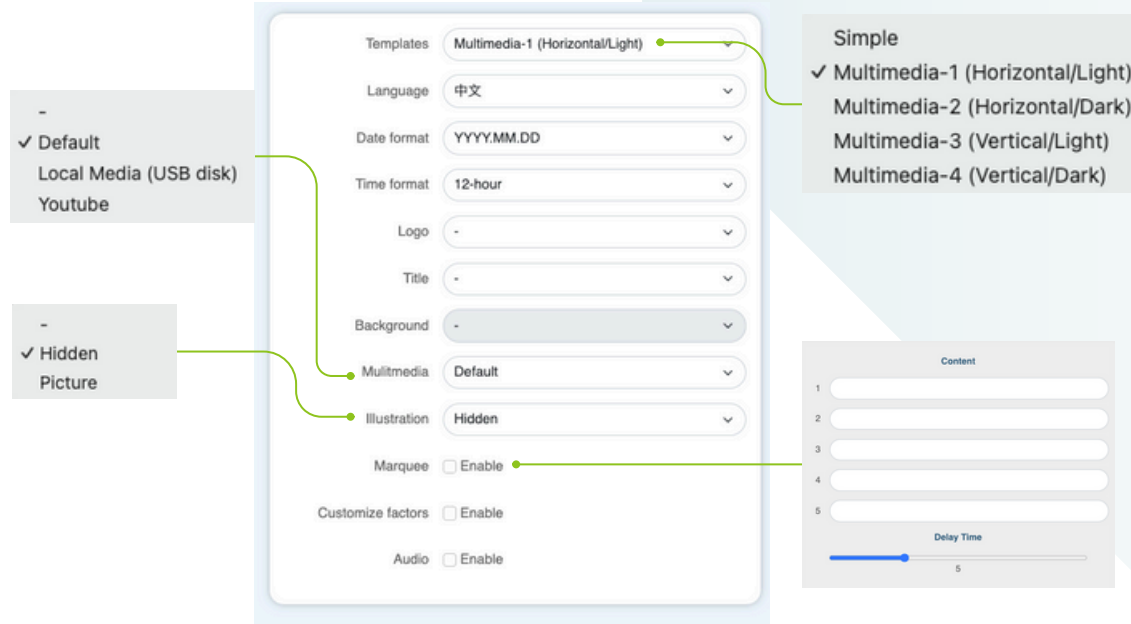
Multimedia Screen Display

Multimedia

Subtitle scrolling

Illustration

Screen template and Multimedia settings

SYSINNO

Local media Playback

1. Select local media playback in the multimedia options
2. Prepare a suitable capacity USB drive (iAeris5 supports FAT32, ExFAT, and NTFS formats).
3. Place the multimedia files [2] in the root directory of USB drive [1].
4. Insert the USB drive into iAeris5's USB port and reboot
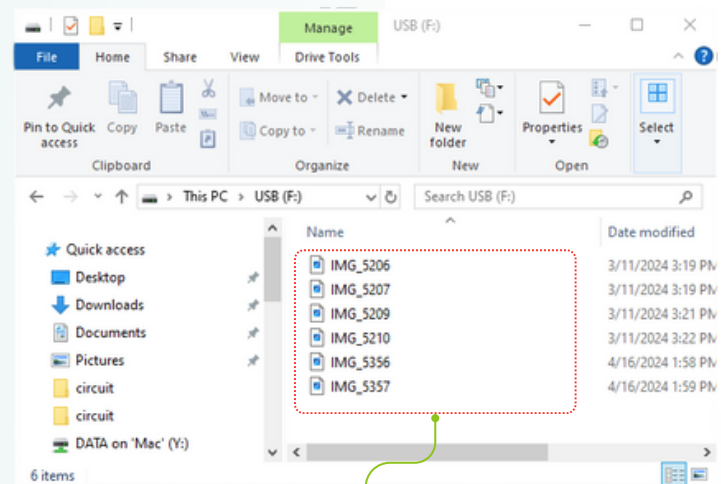5. After rebooting, iAeris5 will automatically play the files of the USB drive.

Setting webpage
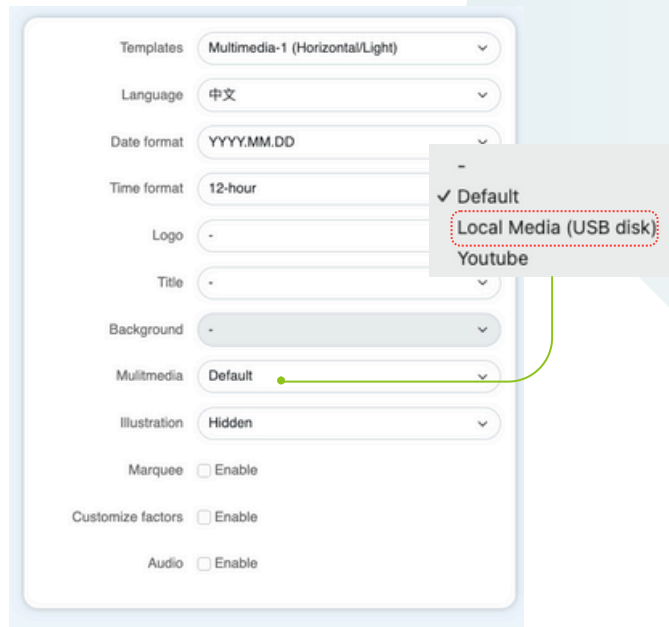
USB drive

NOTE
[1] Multimedia files must be in the root directory for play correctly.
[2] Multimedia file formats : jpg/jpeg, png, bmp, mp4, mov, gif

Multimedia files

Screen template and Multimedia settings

YouTube video Playback

1. Select YouTube in the multimedia options.
2. Open the YouTube website in a browser, find the video or playlist[1], and copy the YouTube URL
3. Paste the YouTube URL[2] into the "YouTube URL" field.
4. After setting, click "Save". After rebooting, iAeris5 will automatically play the YouTube video.

NOTE

[1] Please create a playlist on the YouTube website.
[2] Due to commercial and copyright reasons, some YouTube videos may not play properly.

setting webpage
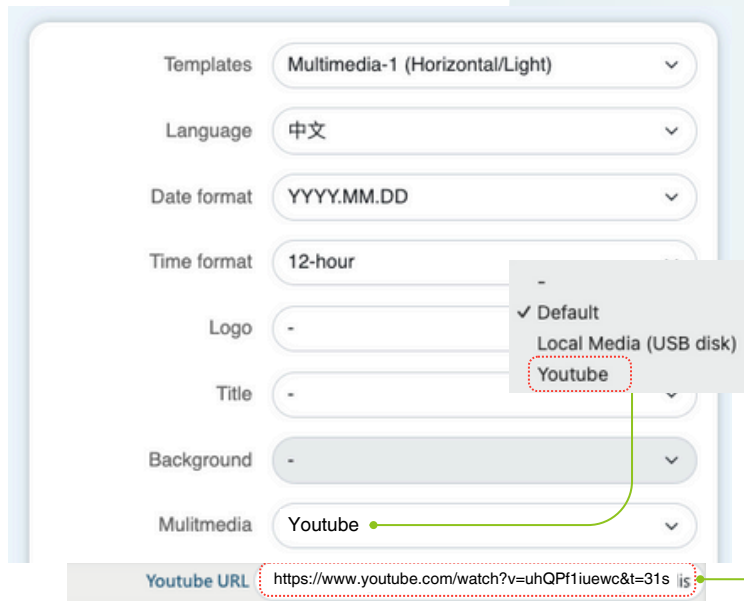
YouTube website

Advanced Settings

In addition to the aforementioned "Wireless Network" and "Screen template and Multimedia settings", the settings webpage also provides the other functions and explain in this section.

Device Information

1. Click "Info" on the menu.
2. View detailed information about iAeris5.

Change Username and Password

1. Click "Password" in the menu to access the username and password settings page.
2. Change the user name[1]
3. Change the password[2] and confirm the new password.
4. After setting the password, the page will automatically log out.
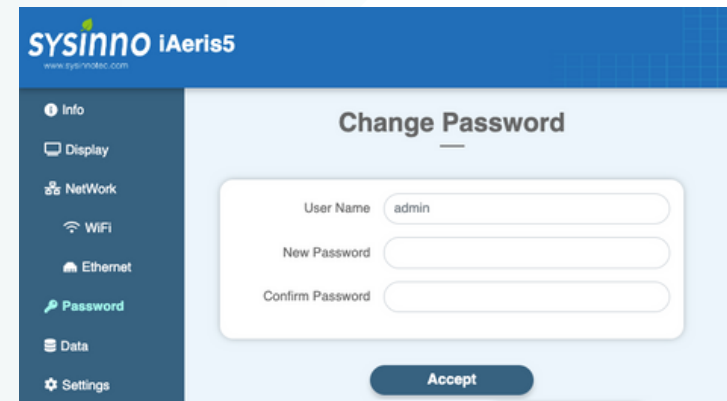
NOTE

[1] If forgot username and password, press and hold the multi-function button for 10 seconds to switch to factory hotspot mode and reset the login.
[2] Passwords must be at least 8 characters.

Advanced Settings

Device Time Settings

1. Click "Settings" -> "Time" in the menu to enter the time settings page.
2. Enable NTP [1]： Enable network time synchronization service and set the time zone, or set the time server address manually.
3. Disable network time synchronization, manually set device time: Uncheck the option of network time synchronization, then set the device time and date manually.
4. Set device sleep cycle[2]： Define start and end times, HDMI can be turned off during this period.

NOTE

[1] iAeris5 needs an internet connection for network time synchronization.
[2] iAeris5 will keep monitors air quality during sleep cycle (HDMI turn off).

Check NTP

Uncheck, Manually Set Time
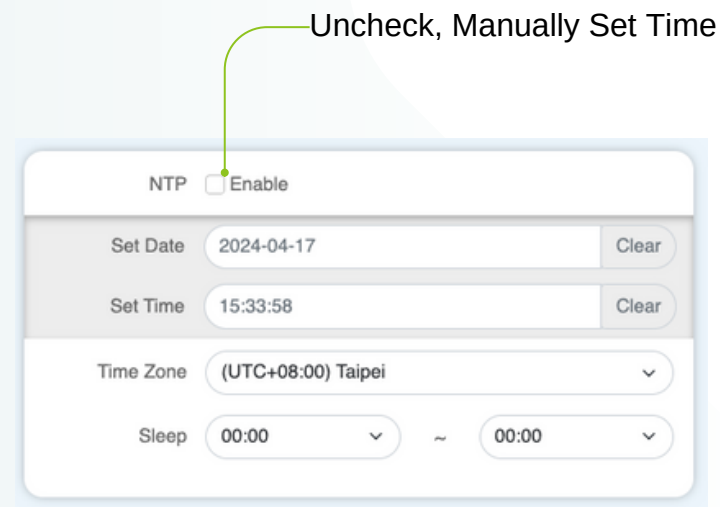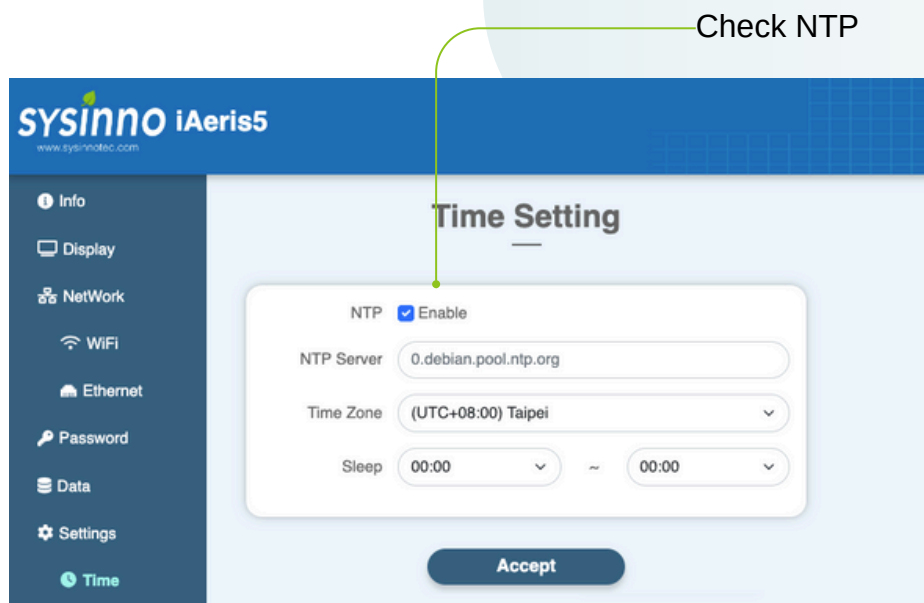
Advanced Settings
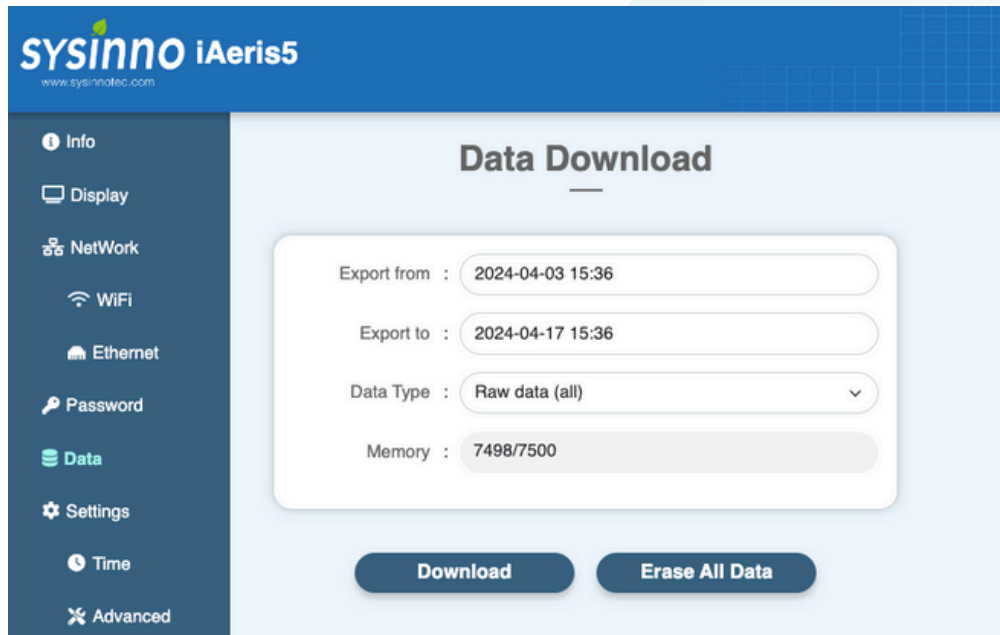
Device Data Download

1. Click "Data" in the menu to enter the data download page
2. Select the export start and end times, choose the data type[1] and click "Download".
3. Choose the location to save the file[2]

NOTE

[[1] Users can choose the data type based on the purpose, including raw data, hourly average, and daily average.

[2] The exported type is CSV file.

Cloud Platform Interface (Optional)

Go to https://xsize.net/iaeris/login.php in your browser.

Cloud Platform Interface (Optional)

Register Account

Historical Data Trend Curve

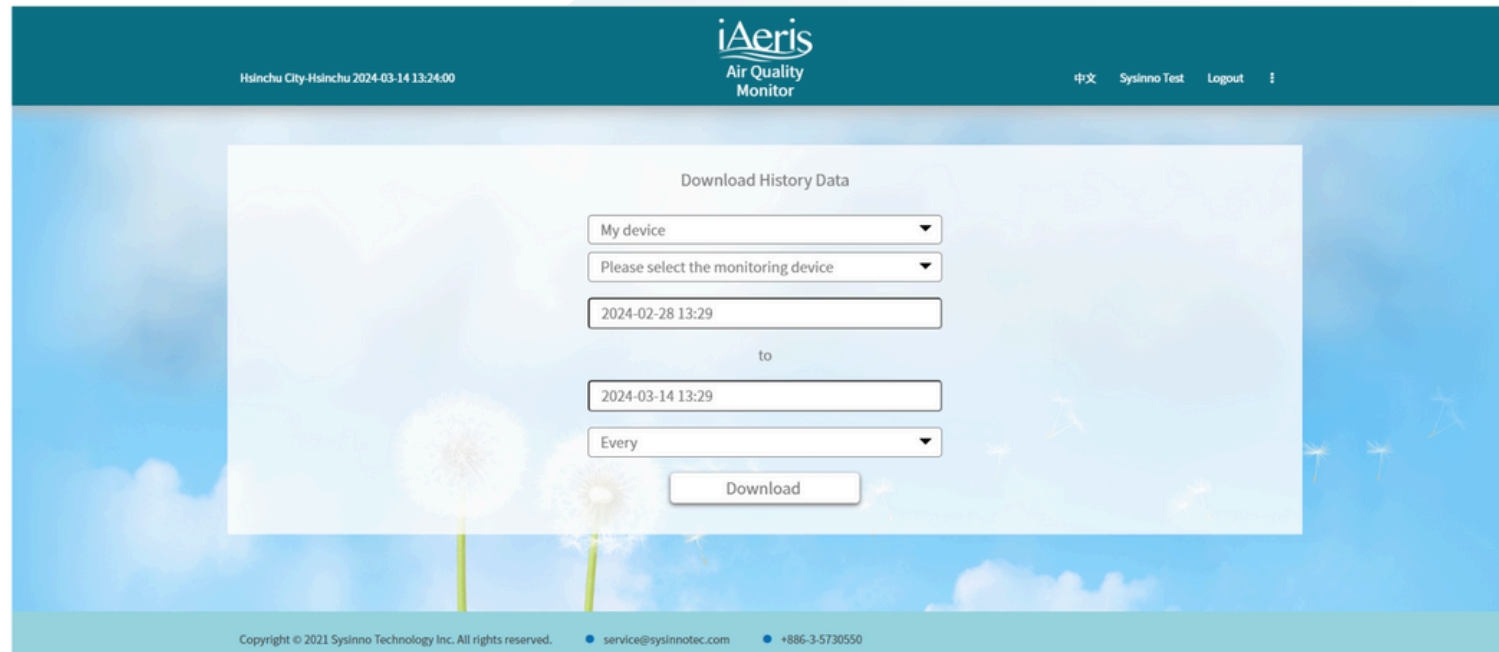- Click "Sensing Factors" on the homepage to access the historical curve interface.
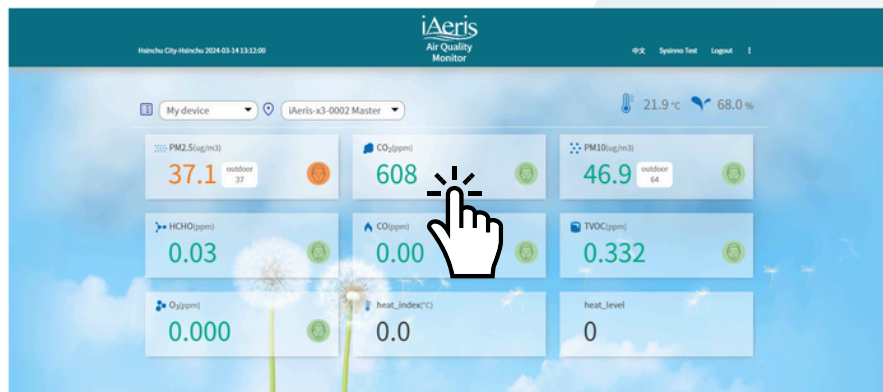
- This page shows hourly averages and up to seven days of sensing data.

Customer Area Functionality

- The cloud platform provides customer-oriented features for data recording and managing easily.
- Before service expires, contact the device vendor to purchase additional usage years for continued data download functionality.

Installation Position Recommendations

For accuracy, we recommend installing one detector for every 200 square meters of enclosed space.
For example:
- Each open space of 200 square meters requires one detector.
- Each individual partitioned meeting room or space requires one detector.
- For spaces larger than 200 square meters, consider installing multiple detectors throughout the entire area to achieve optimal coverage.
- Detectors should be installed near indoor areas where people are active or near ventilation (air conditioning) equipment return air vents.
- Detector placement should be away from operable doors, windows, and air conditioning vents, at least 2 meters away.

- We recommend installing the detector at a height of 1.5 meters to 2.5 meters.
- Position the detector at least 2 meters away from doors, windows, and air vents.
- Ensure that the device's ventilation holes are not obstructed, allowing for proper airflow.
- To ensure accuracy and longevity, ceiling-mounted installation on the ceiling is not recommended.

Precautions

- This product provides general indoor air quality information only and is not intended to determine individual health impacts or serve as a fire alarm.
- Keep the product away from heat sources and areas prone to water splashes or dripping.
- Avoid using the product in environments with vibrations or direct sunlight.
- Ensure proper airflow by not blocking the ventilation holes around the device.
- Do not insert external objects into the ventilation holes to prevent sensor malfunction or electric shock.
- Non-technical personnel should not attempt to disassemble, modify, or repair the product.
- Use correct connectors and cables during installation and avoid forcing connectors into ports to prevent damage not covered by warranty.

【 Attention】 Power Supply Notice:
This product can be powered using the included power adapter or Ethernet network via PoE (Power over Ethernet). (PoE power supply is optional)

【 Attention 】
- This product supports energy recovery ventilation (ERV) and single-directional intake fans. Before purchasing, consult local distributors for compatibility and technical support.
- The control logic for RS485 or dry contact output is fixed and intended only for ventilation equipment control.

Use the correct connectors and ports
- Avoid forcing connections. Check for obstructions. Ensure proper alignment.
- Damage from mishandling, like inserting wrong pins, isn't covered by warranty.

Power Supply Specifications:
The included adapter outputs 5V DC with a DC Jack (Ø2.5mm) connector. Do not modify or extend the power adapter cable arbitrarily, as it may damage the equipment.
For PoE power supply, this product follows the IEEE802.3af standard, with an input voltage range of 36V to 57V and a rated power of 10W. Please use compliant power sourcing equipment (PSE) for power supply.

Dry Contact Specification
This product supports three sets of independent dry contact points (DO-0, DO-01, DO-02). Dry contacts are electronic passive normally open switches with a rated voltage resistance of DC 24V and a current resistance of 0.5A. The voltage at the endpoints of DO-0, DO-01, and DO-02 must be higher than the voltage at the COM endpoint. Do not operate directly using AC power. High-voltage devices must be driven through relays.

Prohibited Live Operations
When changing power and port terminals, make sure to disconnect the power before wiring. After completing the settings, reconnect the power.