

iAeris

iAeris5 Indoor Air Quality Detector



Closely review the user manual
before using this product.

USER MANUAL

www.sysinnotec.com

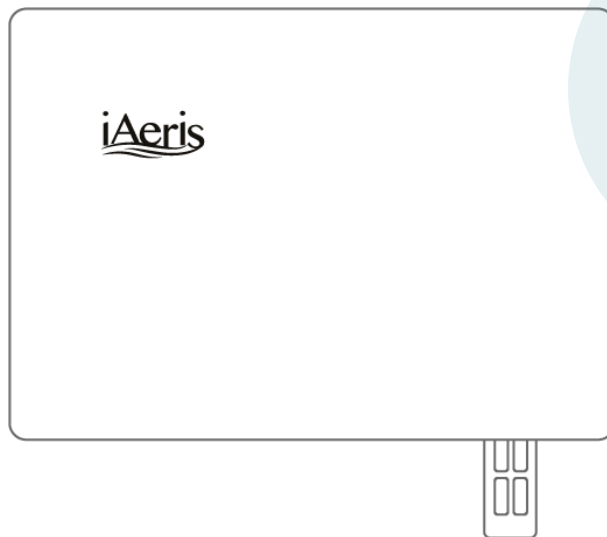
sysinno

PACKAGE CONTENTS

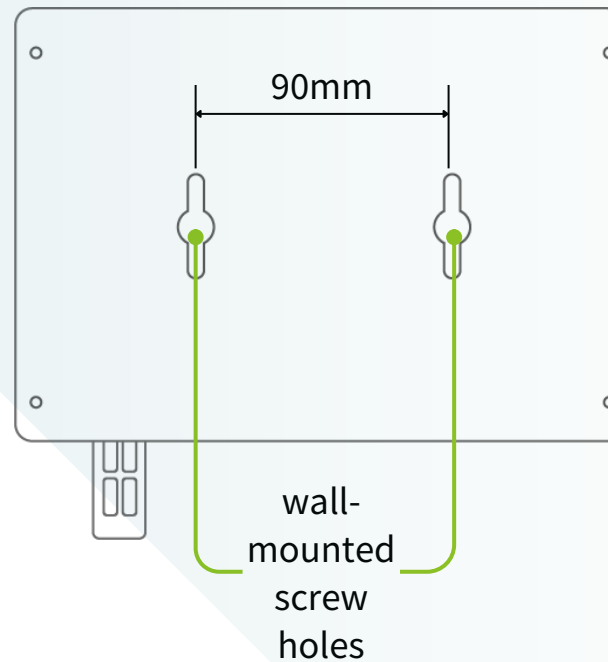
- iAeris main unit
- Adapter
- Wall mounting screws
- Installation positioning diagram

PRODUCT DESIGN / FEATURES

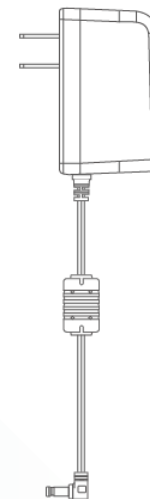
Front View



Back View

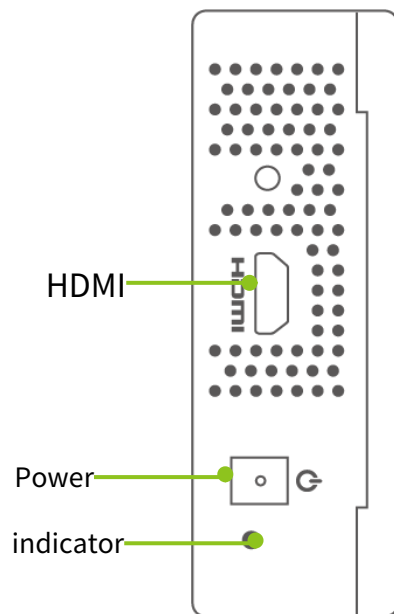


Adapter

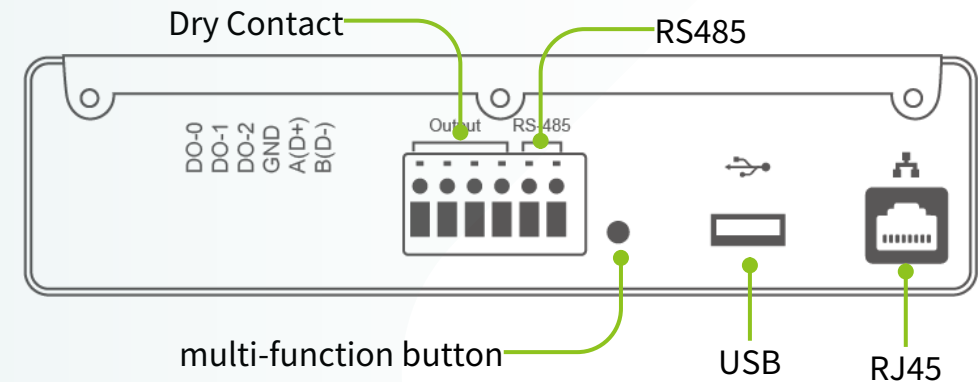


PRODUCT DESIGN / FEATURES

Right View



Top View



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:

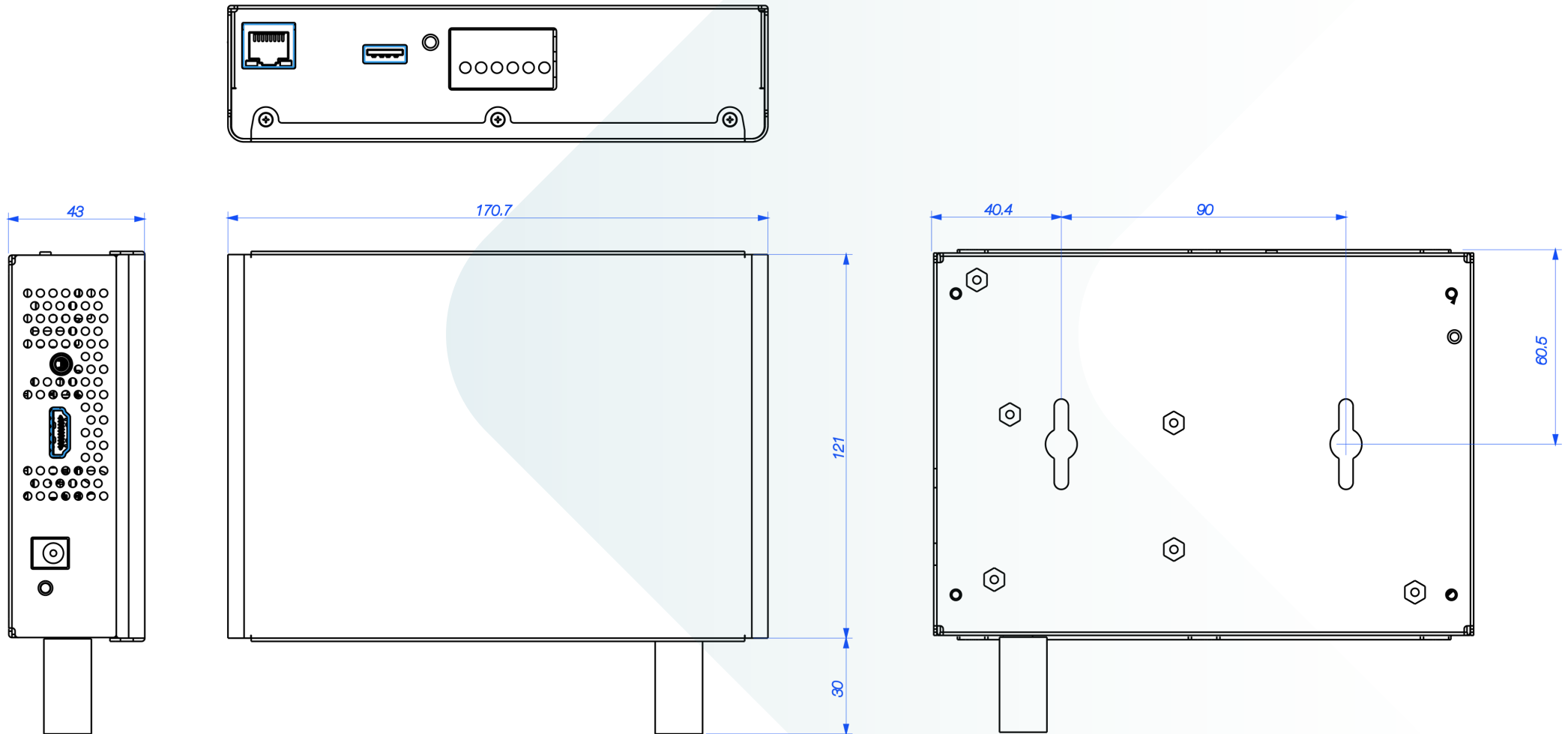
[1] Communication Cable Recommendations:

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)

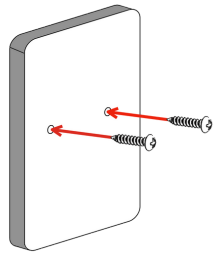
PRODUCT DIMENSIONS



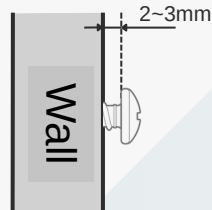
Unit: mm

Wall Mount Installation

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



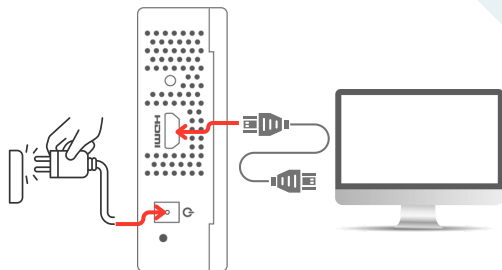
NOTE



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

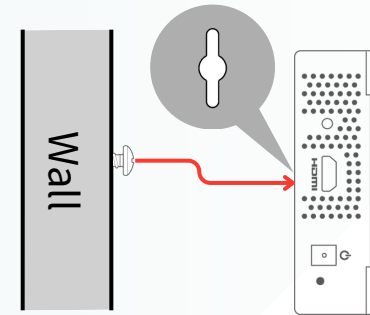
1.

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



3.

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



2.

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



4.

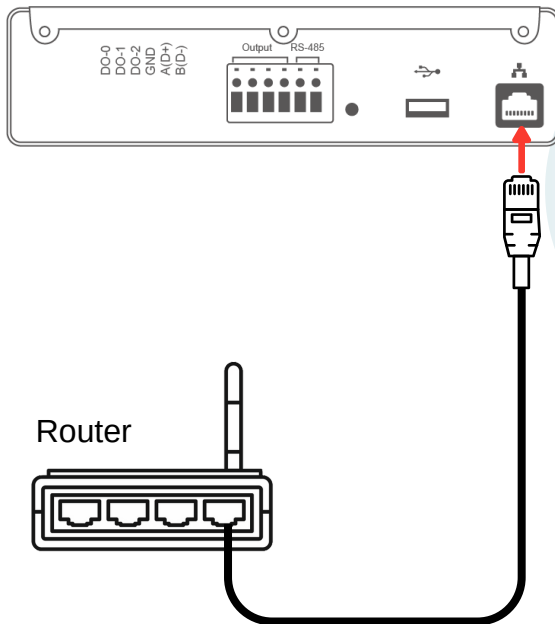
Turn on the screen. Start monitoring air quality when the dashboard appears.

Connect to Ethernet

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

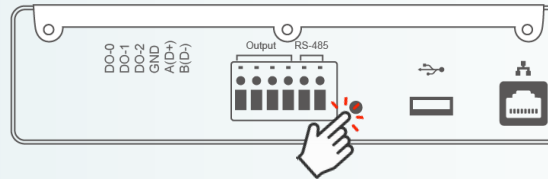
1.

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

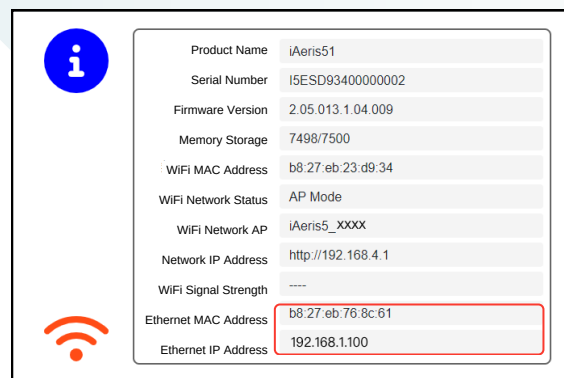


2.

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.[\[1\]](#)



NOTE

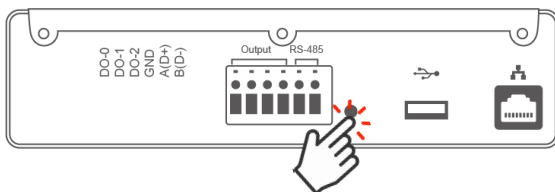
[1] iAeris5 Ethernet defaults to DHCP. Users can set a static IP in the Ethernet settings webpage if need.

Connect to a wireless network hotspot

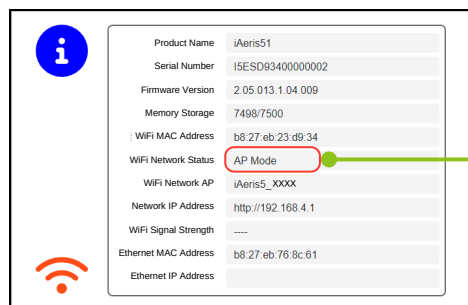
iAeris5's default is to enable the wireless network hotspot, allowing users to connect directly using their phone or computer.

1.

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



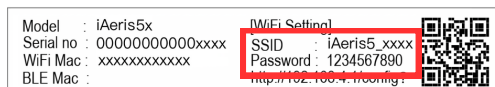
Confirm iAeris5 is in hotspot (AP) mode.[1]



Find the WiFi hotspot and key on the label on the side of the device.

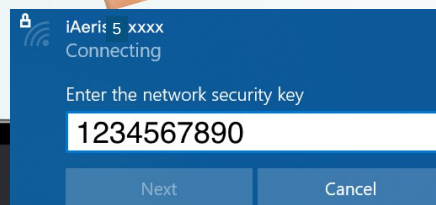
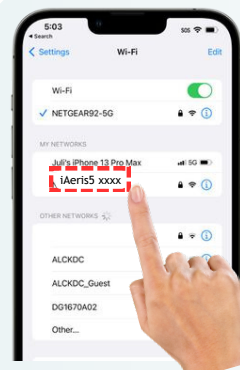
SSID: iAeris5_XXXX

Password 1234567890



2.

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



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.

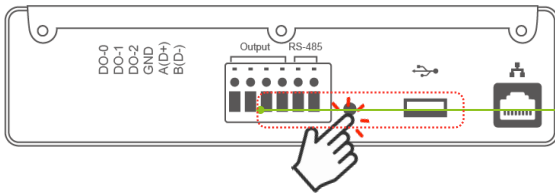
Login to the settings webpage

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

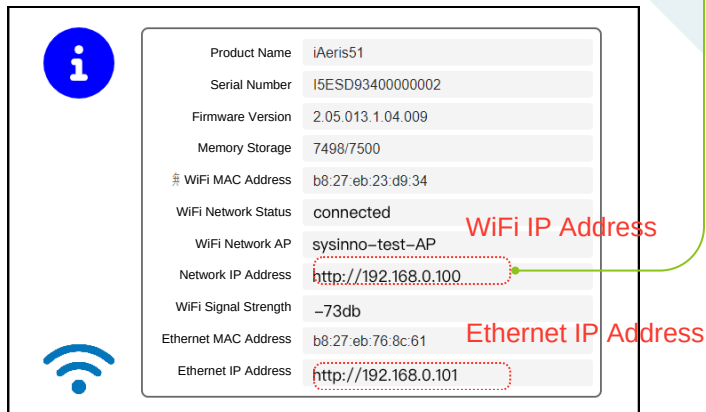


1.

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

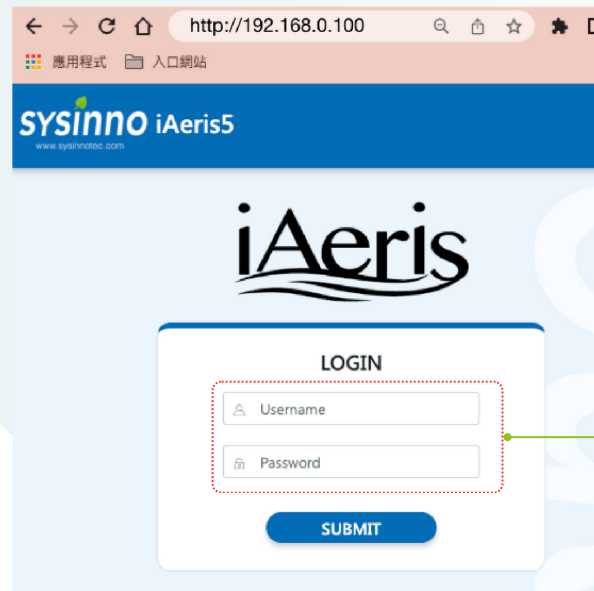


The screen shows iAeris5 connection info and network IP address.[2]



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.



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

After logging in, click "Network" > "WiFi" in the menu

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."

sysinno iAeris5
www.sysinnotec.com

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.

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]

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.



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	



Screen template and Multimedia settings

Display Settings

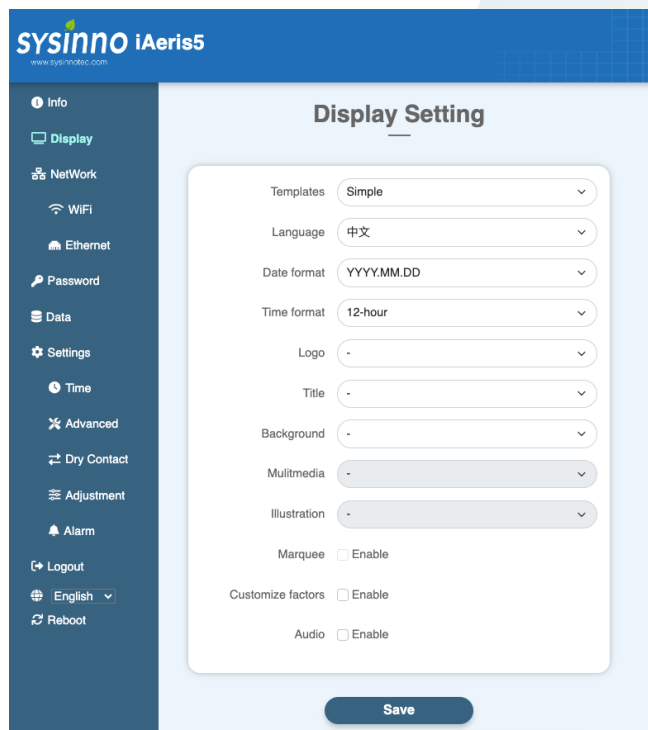
1. Click "**Display**" on the menu to access display settings.
2. Select Templates^[1], Language, Date format, and Time format you want.
3. You can customize your own image files for Logo, Title, and Background^[2]
4. After setting, click "**Save**". The device needs to reboot for changes to take effect.

NOTE

[[1] iAeris5 currently supports several templates, including Simple and Multimedia, for user selection.

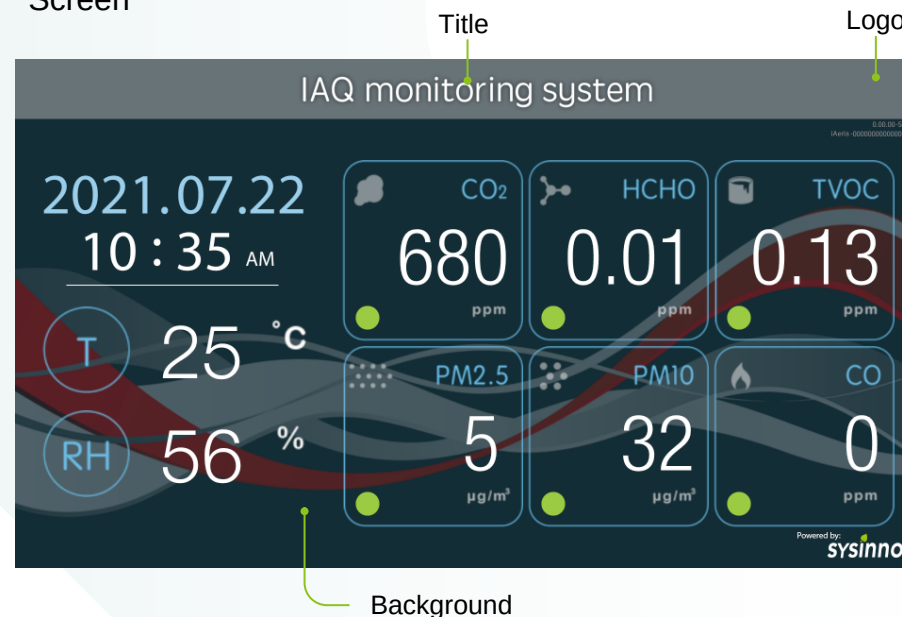
[2] Some templates do not allow background image customization.

Settings Webpage



The screenshot shows the 'Display Setting' page of the sysinno iAeris5 settings interface. On the left is a sidebar menu with options: Info, Display (selected), NetWork, WiFi, Ethernet, Password, Data, Settings, Time, Advanced, Dry Contact, Adjustment, Alarm, Logout, English, and Reboot. The main content area is titled 'Display Setting' and contains several configuration options: Templates (Simple), Language (中文), Date format (YYYY.MM.DD), Time format (12-hour), Logo (-), Title (-), Background (-), Multimedia (-), Illustration (-), Marquee (Enable), Customize factors (Enable), and Audio (Enable). A 'Save' button is at the bottom.

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

Templates: Multimedia-1 (Horizontal/Light)

Language: 中文

Date format: YYYY.MM.DD

Time format: 12-hour

Logo: -

Title: -

Background: -

Multimedia: Default

Illustration: Hidden

Marquee: ☒ Enable

Customize factors: ☐ Enable

Audio: ☐ Enable

Simple

- ✓ Multimedia-1 (Horizontal/Light)
- Multimedia-2 (Horizontal/Dark)
- Multimedia-3 (Vertical/Light)
- Multimedia-4 (Vertical/Dark)

Content

1

2

3

4

5

Delay Time

5

Multimedia Screen Display

Multimedia

IAQ Monitoring system

2022.12.13 4:51

T 25°C RH 52%

CO₂ 850 ppm

PM_{2.5} 40 µg/m³

TVOC 0.15 ppm

CO 0 ppm

iAeris IAQ detector

Subtitle scrolling

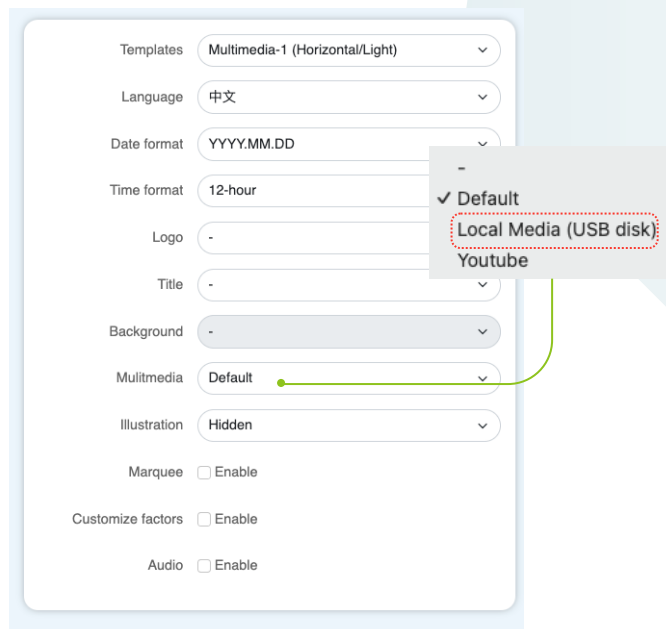
Illustration

Screen template and Multimedia settings

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.

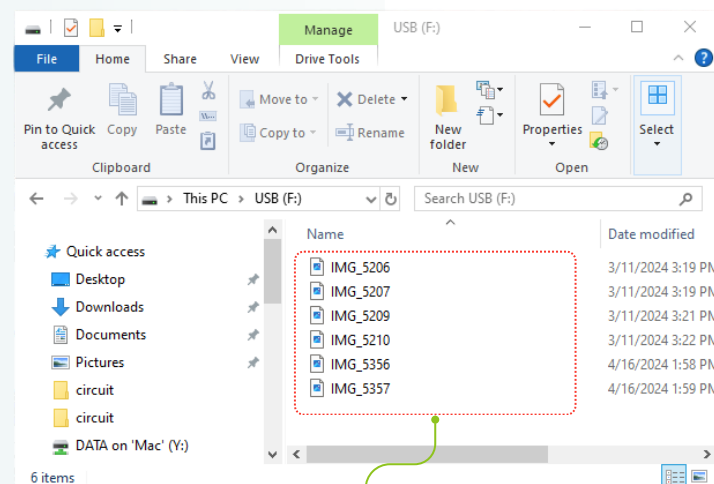
Setting webpage



NOTE

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

USB drive



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

Templates: Multimedia-1 (Horizontal/Light) ▼

Language: 中文 ▼

Date format: YYYY.MM.DD ▼

Time format: 12-hour ▼

Logo: -

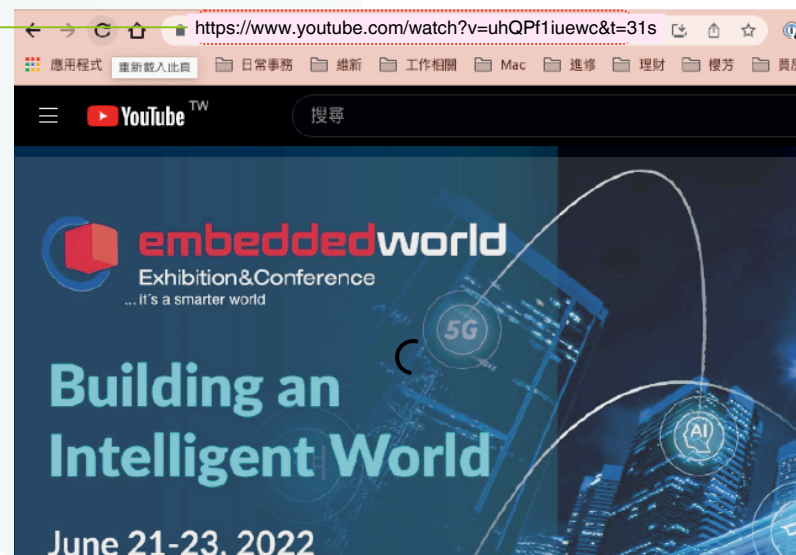
Title: -

Background: - ▼

Multimedia: Youtube ▼

Youtube URL: <https://www.youtube.com/watch?v=uhQPf1iuewc&t=31s>

YouTube website

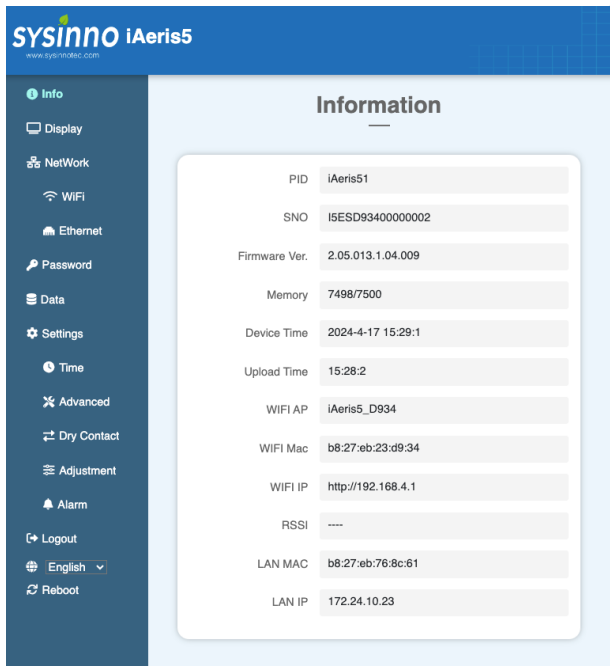


Advanced Settings

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

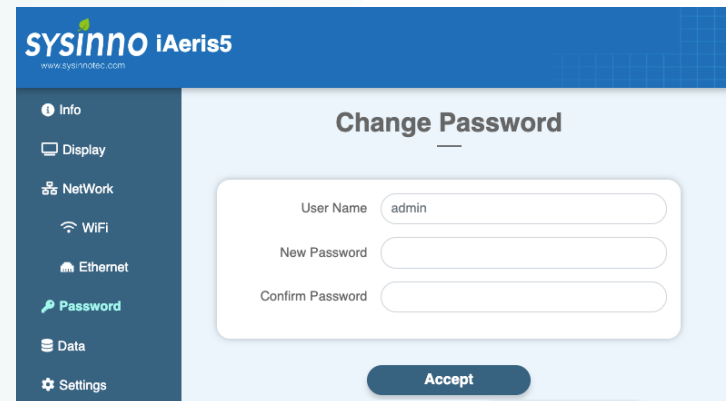
1. Click "Info" on the menu.
2. View detailed information about iAeris5.



PID	iAeris51
SNO	I5ESD93400000002
Firmware Ver.	2.05.013.1.04.009
Memory	7498/7500
Device Time	2024-4-17 15:29:1
Upload Time	15:28:2
WiFi AP	iAeris5_D934
WiFi Mac	b8:27:eb:23:d9:34
WiFi IP	http://192.168.4.1
RSSI	---
LAN MAC	b8:27:eb:76:8c:61
LAN IP	172.24.10.23

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.



User Name

New Password

Confirm Password

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

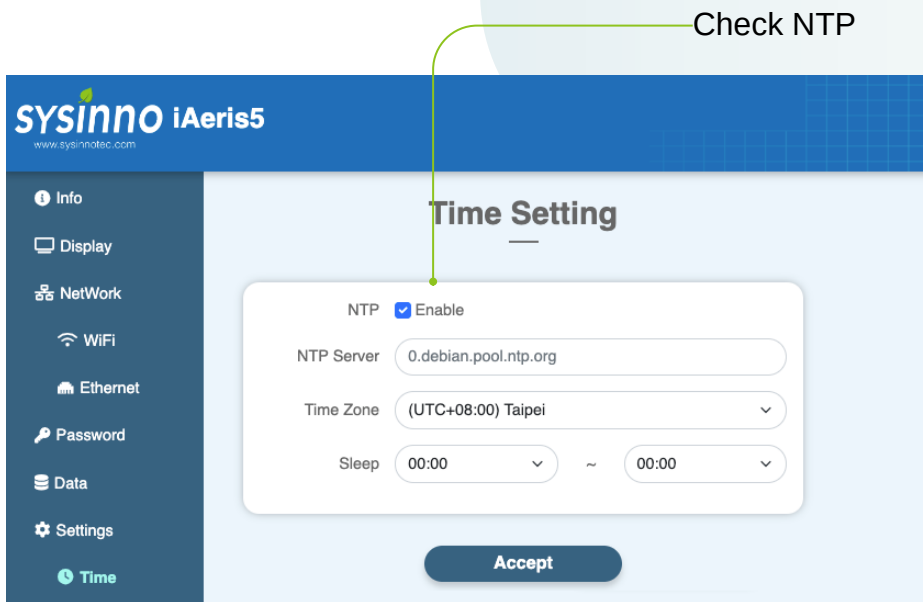
1. Click "Settings" -> "Time" in the menu to enter the time settings page.
2. Enable NTP [1]: Enable network time synchronization service and set the time zone, or set the time server address manually.
3. Disable network time synchronization, manually set device time: Uncheck the option of network time 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.

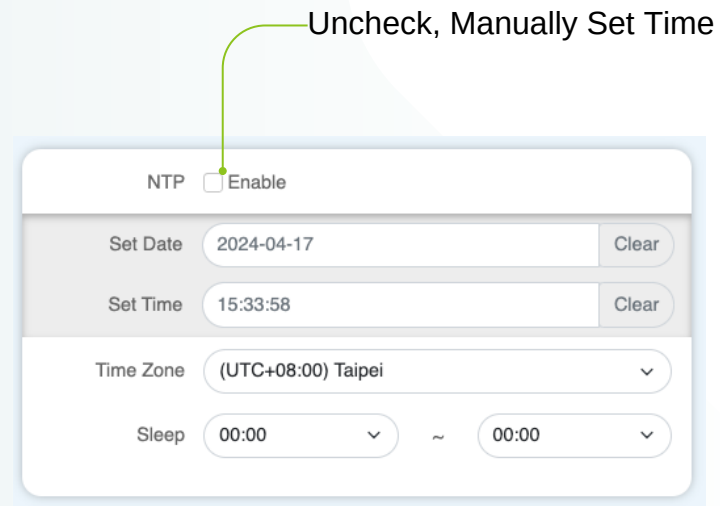
[2] iAeris5 will keep monitors air quality during sleep cycle (HDMI turn off).

Check NTP



The screenshot shows the 'Time Setting' page of the sysinno iAeris5 interface. The left sidebar contains a menu with 'Time' highlighted. The main content area has a title 'Time Setting' and a form with the following fields: 'NTP' with a checked 'Enable' checkbox, 'NTP Server' with the value '0.debian.pool.ntp.org', 'Time Zone' with a dropdown menu showing '(UTC+08:00) Taipei', and 'Sleep' with two dropdown menus both set to '00:00'. An 'Accept' button is at the bottom.

Uncheck, Manually Set Time



The screenshot shows the 'Time Setting' page with 'NTP' disabled (checkbox unchecked). The 'Set Date' field is set to '2024-04-17' and the 'Set Time' field is set to '15:33:58', both with 'Clear' buttons. The 'Time Zone' dropdown is set to '(UTC+08:00) Taipei' and the 'Sleep' dropdowns are set to '00:00'.

Advanced Settings

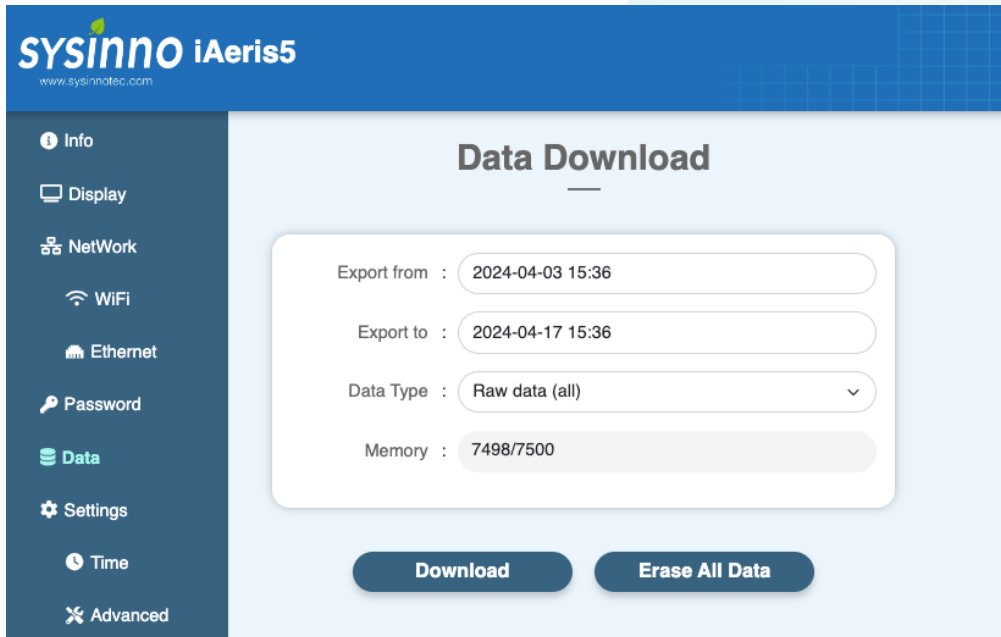
Device Data Download

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.

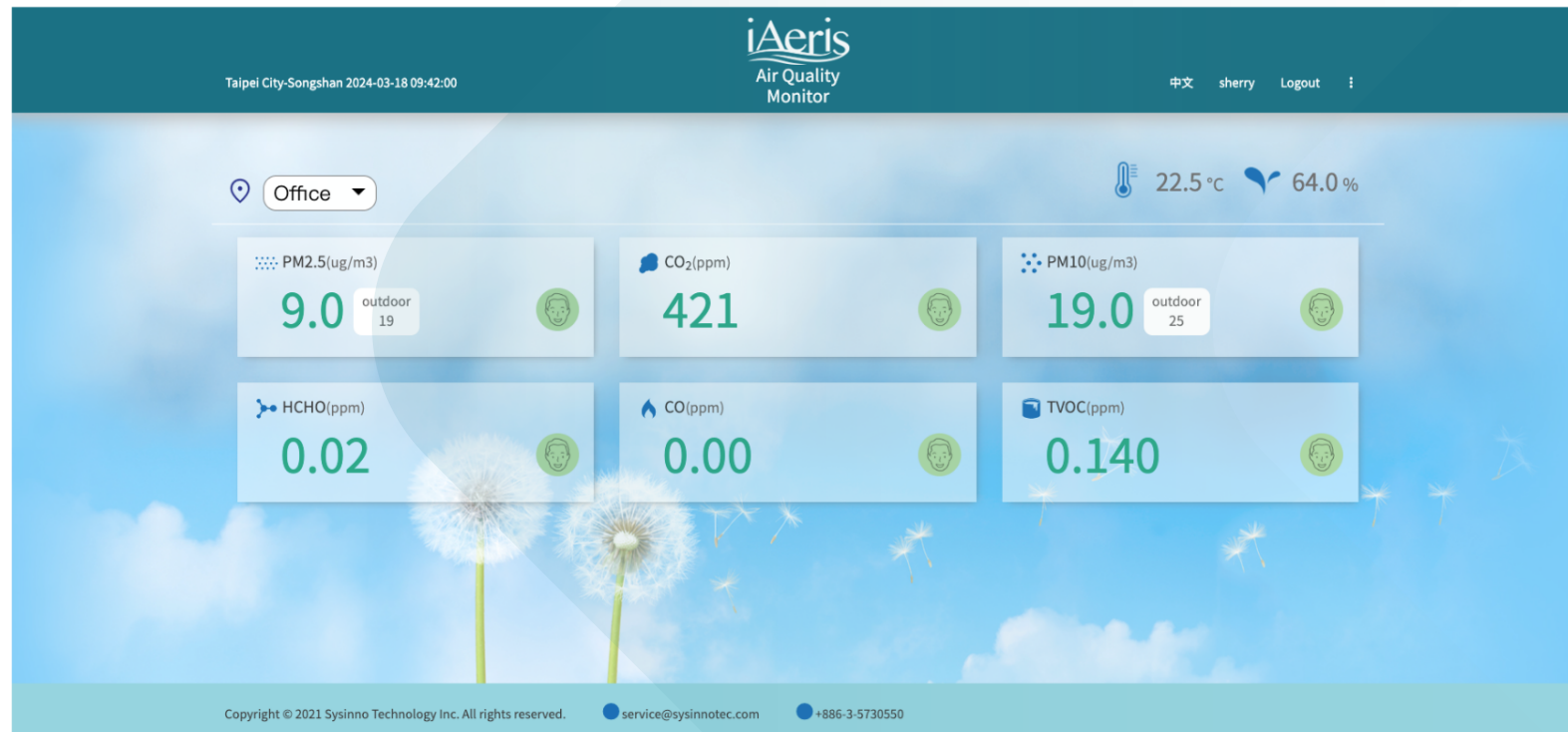
[2] The exported type is CSV file.



The screenshot shows the 'Data Download' interface of the sysinno iAeris5 device. On the left is a dark blue sidebar menu with icons and labels for 'Info', 'Display', 'NetWork', 'WiFi', 'Ethernet', 'Password', 'Data' (highlighted in green), 'Settings', 'Time', and 'Advanced'. The main content area has a light blue background with the title 'Data Download' at the top. Below the title is a white rounded rectangle containing four fields: 'Export from' with the value '2024-04-03 15:36', 'Export to' with '2024-04-17 15:36', 'Data Type' with a dropdown menu showing 'Raw data (all)', and 'Memory' with '7498/7500'. At the bottom of this rectangle are two dark blue buttons: 'Download' and 'Erase All Data'.

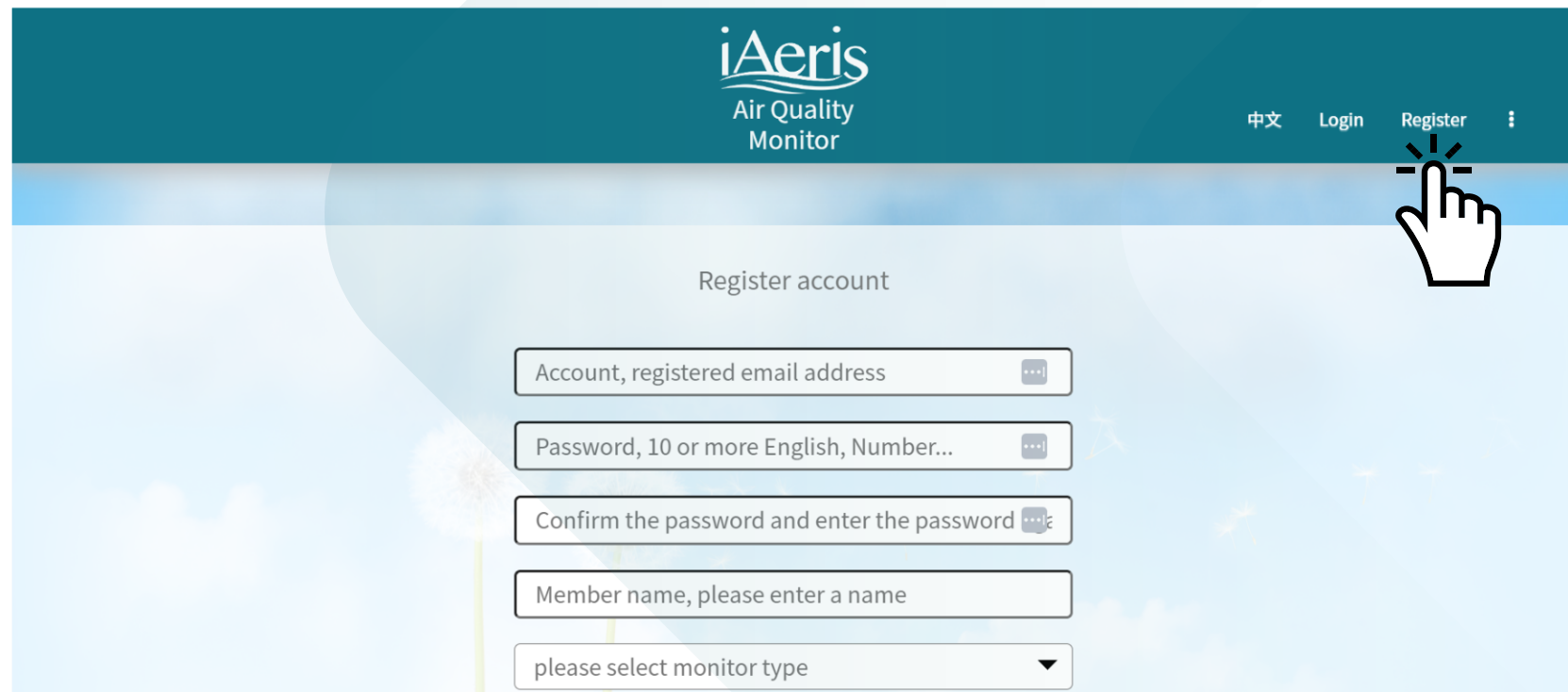
Cloud Platform Interface (Optional)

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



Cloud Platform Interface (Optional)

Register Account



iAeris
Air Quality
Monitor

中文 Login Register

Register account

Account, registered email address

Password, 10 or more English, Number...

Confirm the password and enter the password

Member name, please enter a name

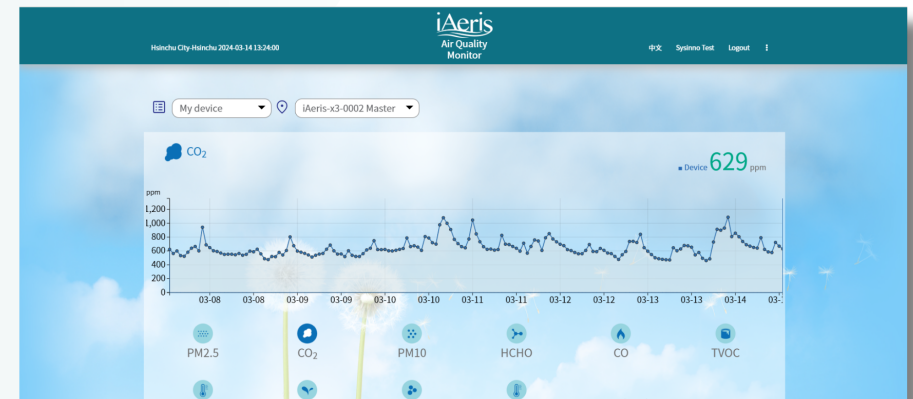
please select monitor type

Historical Data Trend Curve

- Click "Sensing Factors" on the homepage to access the historical curve interface.

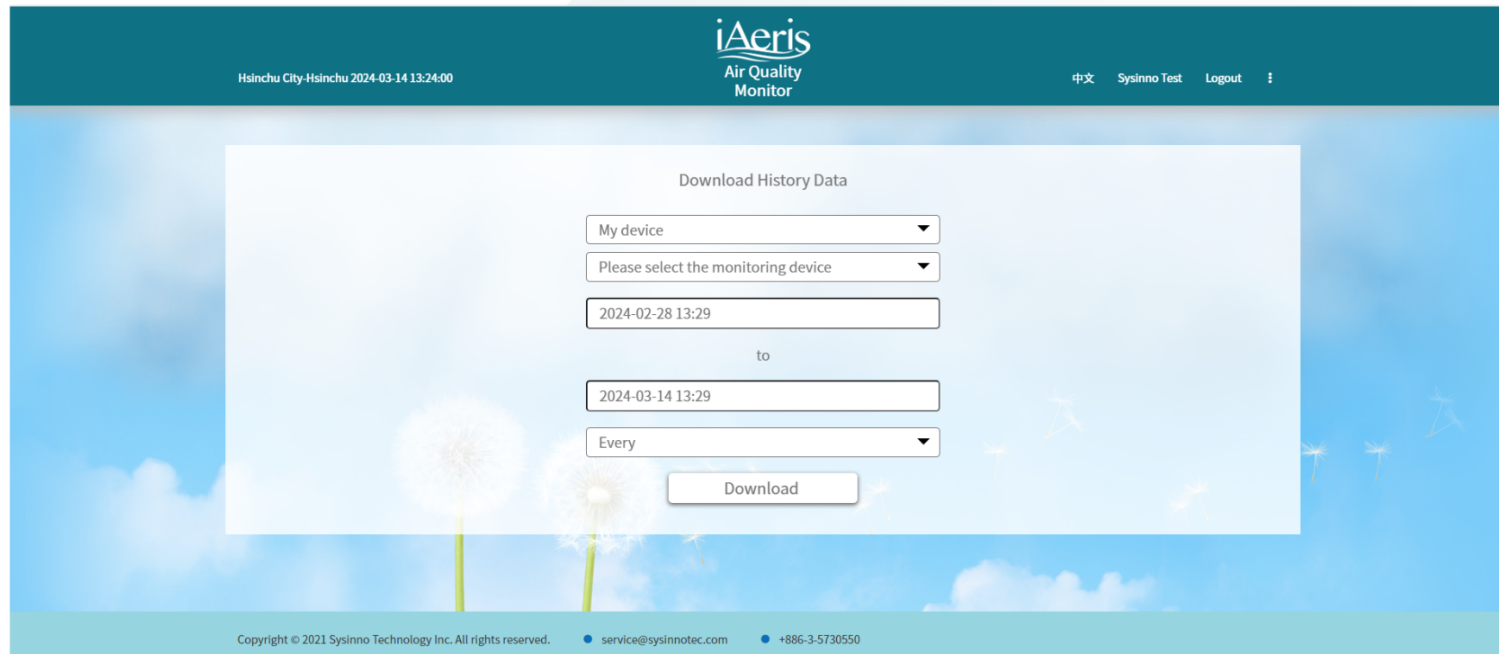


- This page shows hourly averages and up to seven days of sensing data.



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.



The screenshot displays the 'iAeris Air Quality Monitor' web interface. The header bar is dark teal with the 'iAeris Air Quality Monitor' logo in the center. On the left, it shows 'Hsinchu City-Hsinchu 2024-03-14 13:24:00'. On the right, there are links for '中文', 'Sysinno Test', 'Logout', and a menu icon. The main content area has a light blue background with a dandelion illustration. A white form titled 'Download History Data' is centered. It contains the following fields: a dropdown menu for 'My device', a dropdown menu for 'Please select the monitoring device', a text input for the start time '2024-02-28 13:29', the word 'to' as a separator, a text input for the end time '2024-03-14 13:29', a dropdown menu for frequency set to 'Every', and a 'Download' button at the bottom.

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)

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.

【 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.

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.

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.

Prohibited Live Operations

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