Every school will receive 5 state-of-the-art air quality monitors. You can choose the model that best suits your building's needs.

Meet Your Air Quality Sensors



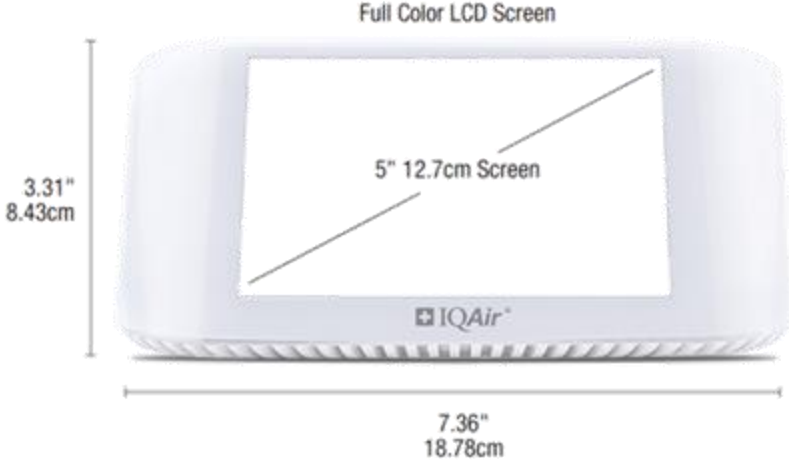
AirVisual Pro



AirVisual Ethernet

AirVisual Pro: Optimized for Interaction & Education





- **Key Measurements:**
  - High precision sensors measure PM2.5, carbon dioxide (CO2), temperature, and relative humidity.
- **Educational Display**:
  - Large 5-inch color display shows easy-to-read, real-time, and the past 24 hours of data.
- **Instant Feedback**:
  - Provides highly visible, educational feedback directly to occupants about their air quality.
- **Power**:
  - Uses microUSB or AC wall adapter, with 4 hours of battery for portable use.
- **Connectivity**:
  - Requires 2.4G Wi-Fi or a local hotspot to upload data. Note: 2.4G Wi-Fi may be restricted on some networks.
- **Data Access:**
  - View uploaded data easily via the free app (iOS and Android) and Web dashboard; API, IFTTT
- **Storage**:
  - Internal data storage capacity is 1 year.
- **Dimensions**:
  - H 3.25"×W 7.25"×D 4".



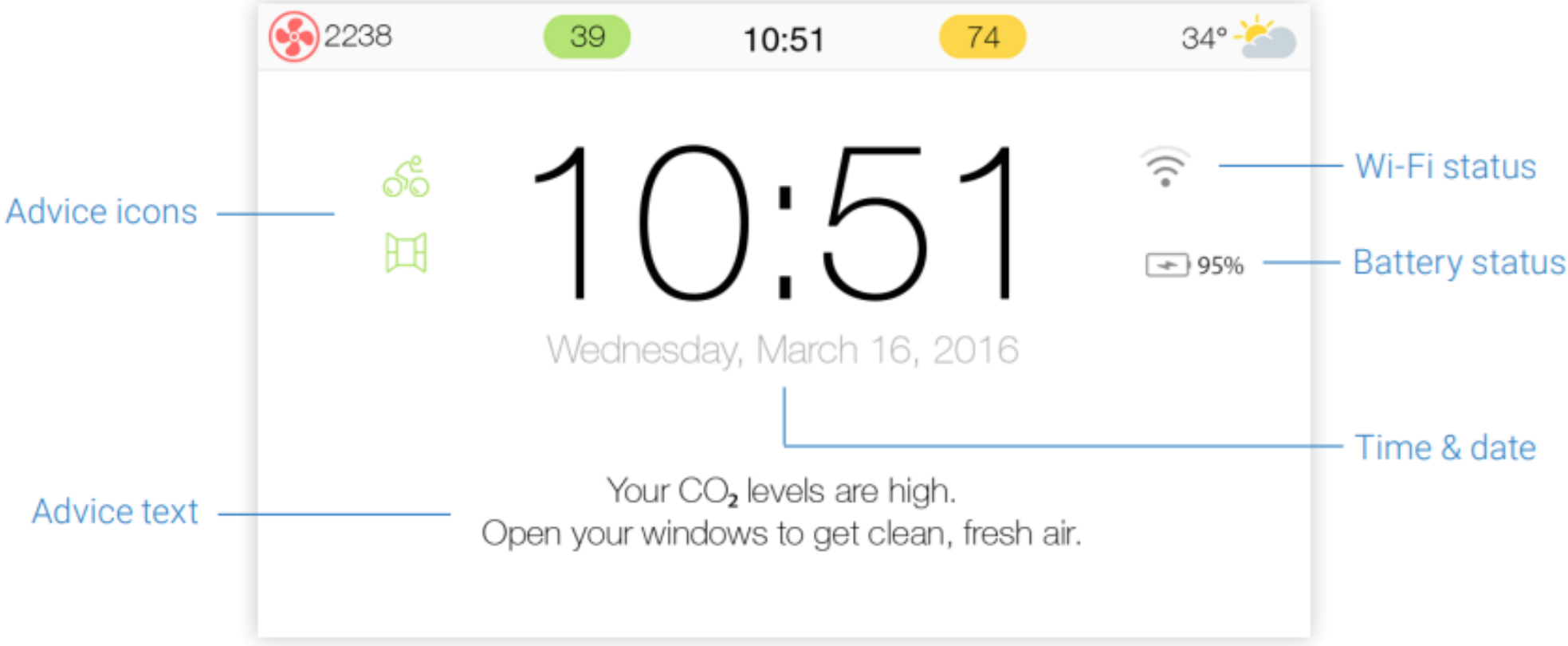
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Highly Informative Display



Highly Informative Display



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Advice and Status Icons



Open your windows to bring in fresh, clean air



Close your windows



Enjoy your outdoor activities



Avoid outdoor activities



Run an air purifier to lower indoor pollution



Wear a mask outside



Connected to Wi-Fi and the internet



Not connected to Wi-Fi



Connected to Wi-Fi but not to the internet



100% Remaining battery life

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Easy to Operate



Power Button

- Switch the AirVisual Pro on/ off with a 3-second press.
- Enter/exit the device's sleep mode with a quick press.
- Go back in the menu settings with a quick press.

Menu Button

- Access your AirVisual Pro's menu and settings.
- Make selections in the menu for: setting your clock, units, change languages, brightness and power saving mode.

Navigation Button

- Navigate through your AirVisual Pro's settings.
- Navigate between slideshow screens.

Real Time, Educational Guidance



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Lockable Screen



LOCK: hold UP for 3 seconds, then hold DOWN for 3 seconds.

UNLOCK: hold UP for 3 seconds -> quick press MENU-> quick press POWER -> hold DOWN for 3 seconds

Note: while locked, if the screen slideshow is set to 'automatic', the screens will continue to rotate through different information.

If you want to display only one screen while locked, first change your monitor's display settings. From the Menu button > Display >Screen> Slideshow > Manual, then use the UP/DOWN arrows to navigate to the screen display on which you want to 'lock' the device, before following the steps below.

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AirVisual Ethernet: Optimized for Robustness & Connectivity





- **Key Measurements:** High precision sensors measure PM1, PM2.5, PM10, carbon dioxide (CO2), barometric pressure, temperature, and relative humidity.
- **Robust Design**: Features a weatherproof design for use in all environments.
- **Online Data Visualization**: Data viewed only via the free App or web dashboard
- **Power**: Uses microUSB, AC wall adapter, or a Power-over-Ethernet (PoE) Ethernet Cord for continuous connection in all settings.
- **Connectivity**: 2.4G Wi-Fi or Ethernet cord.
- **Data Access**: View uploaded data easily via the free App or web dashboard.
- **Storage**: Internal capacity is 2 years.
- **Dimensions**: H 6.4"×W 2.7"×D 8.0".

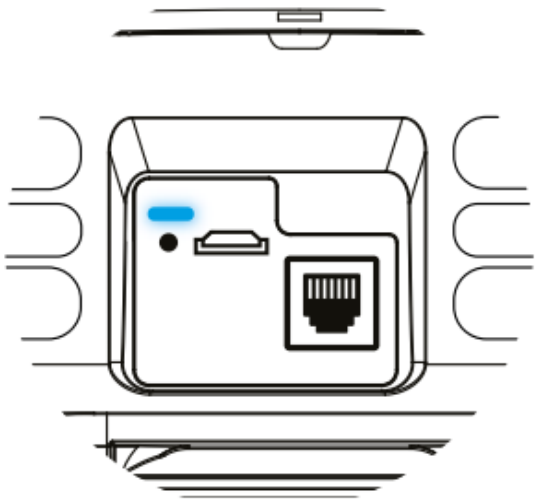


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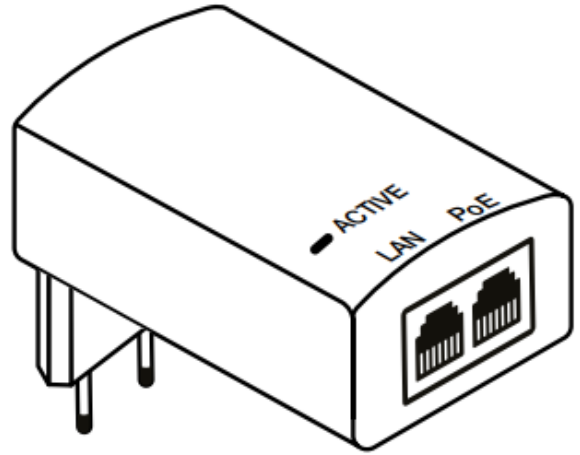
Connect To The Internet Via An Ethernet Cord

AirVisual Outdoor LED indicator



- Blue = Connected to the IQAir cloud platform
- Red = Not connected to cloud or network
- Red, blinking = Resetting / updating / self-testing
- Green = Wi-Fi setup, Wi-Fi hotspot paired
- Green, blinking = Wi-Fi setup, Wi-Fi hotspot open

PoE power adapter LED indicator



- Red = Power ready
- Green = Power connected
- Green & Red blinking = Error*

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INDOOR AIR QUALITY INITIATIVE



Installing the Monitors

Achieve Maximum IAQ Insight with 5 Monitors

- Prioritize High-Risk Areas Indoors:
  - Monitor the classrooms with the highest and most consistent student density
  - Science or art room to monitor areas with specialized pollutants (e.g., chemicals, soldering, glues, or burning) that may not be present elsewhere.
  - Main office area due to the high foot traffic

- Identify Different HVAC Zones:
  - Place units in rooms served by different ventilation systems to check system performance across the building.

- Install 1 Monitor Outdoor:
  - Establish a baseline to compare indoor pollution and ventilation against local outdoor air quality.

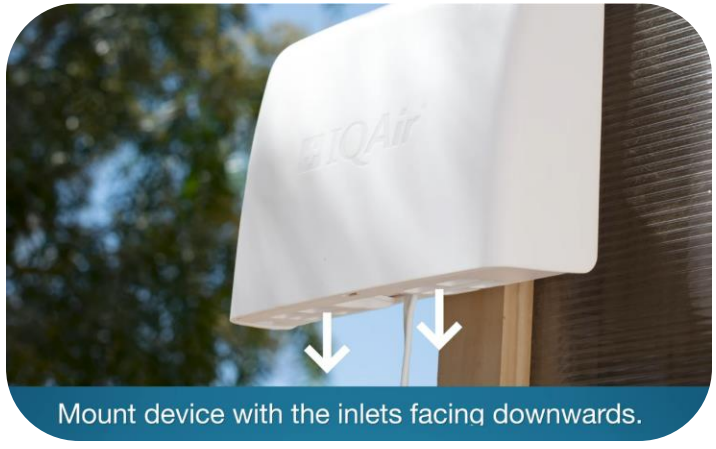
- Install 1 monitor in a room without air purifying boxes.
  - This allows you to see a real-time, long-term comparison of the air purification improvements in your school.

The key is to place the monitor where it accurately represents the air the students and teachers are breathing in the space.

- The AirVisual Pro is designed for indoor use
- The AirVisual Ethernet can be used for either indoor or outdoor use

- For the most accurate representation of the air you are breathing, place the AirVisual Pro:
  - A central location in your office or classroom with unobstructed airflow
  - Away from localized sources of pollution like an air vent or window
  - Near breathing height (about 3-5 feet above the floor)
  - On a stable surface
  - Near a power outlet
  - Avoid placing the sensor right next to where a person sits since human breath can cause an extremely localized and temporary spike in CO2 that doesn't reflect the whole room's ventilation level.
  - Avoid direct sunlight or sources of heat/cold (radiators, portable heaters) to ensure accurate temperature and humidity readings.

Where should you set up an AirVisual Ethernet?





- Ensure the monitor is wall-mounted, with air inlets completely clear.
- Always mount in an outdoor monitors in a location with good air circulation.
- Place under an awning, overhang, or covered area.
- Do not place near car/bus idling areas or HVAC exhausts.
- Place the unit between 4 to 6 feet above the ground to measure the air people breath.

Accessing your Data

How to View and Utilize Your Air Quality Data

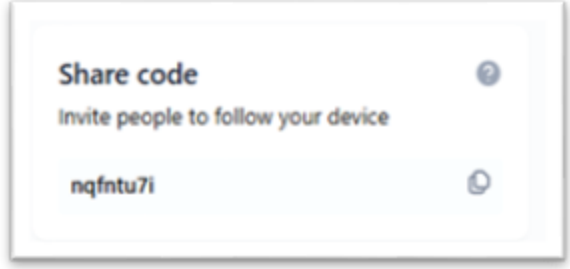
	Method	Where to Access	What It Provides	School Application
1.	View Data on the Device Screen Directly	AirVisual Pro Device Screen (In Classroom)	The past 24-hours of data is shown directly on the screen.	Allows immediate discussion and interaction.
2.	Mobile Access	IQAir AirVisual App (on Staff Phone/Tablet)	Real-time and historical data for all units on a single, centralized App dashboard.	Easily check all high-risk areas and compare indoor rooms to the outdoor baseline unit, all from a remote location.
3.	Online Dashboard	Any internet browser Online Dashboard	Real-time and historical data for all units and customizable alerts.	Use historical data to evaluate HVAC system schedules and long-term air quality trends.
4.	Raw Data Access	Local Network (Samba)	CSV log files containing raw sensor data on a minute-by-minute basis.	Provides raw data sets for advanced students or school engineers to conduct detailed analysis and research.

View Data on the Device Screen Directly



How to Add a Monitor to Your App Using the Share Code

The Share Code allows administrators or facility managers to grant other staff view-only access to a specific AirVisual Pro unit without needing the primary account login.



Identify the Monitor's Share Code

- On the specific monitor page on the dashboard, you can find the share code for the unit.
- The device will have an 8-digit Share Code.

Add the Monitor to the Staff Member's App

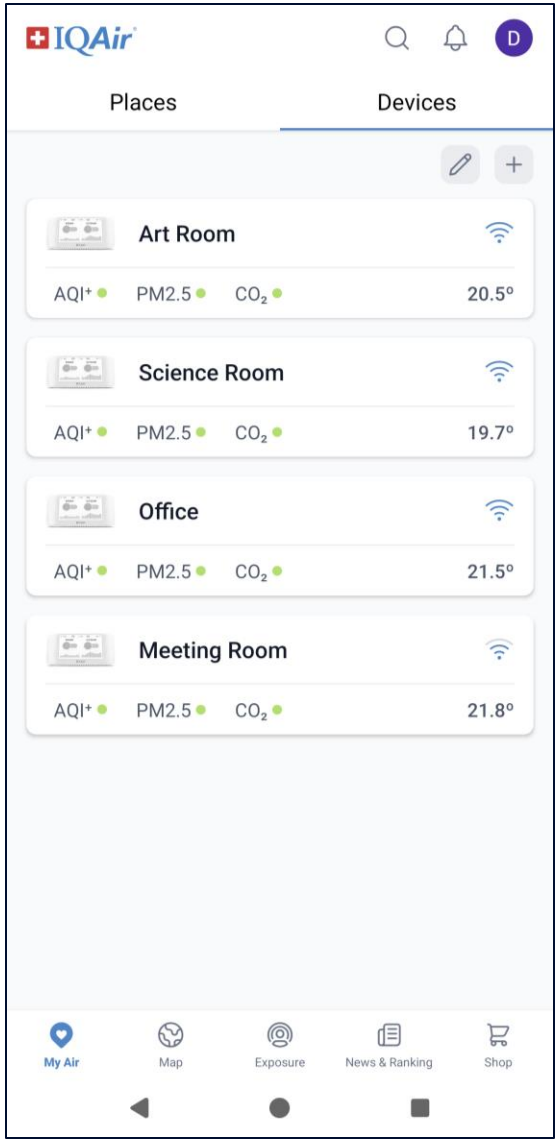
- The staff member opens the IQAir AirVisual App on their mobile device.
- Navigate to the Home Screen (or Dashboard view).
- Tap the "+" icon (usually in the top corner) to add a new device.
- Select the option to Add a Pro or Connect to a Pro (follow on-screen prompts).
- When prompted, select the option to Enter Share Code.
- Enter the 8-digit Share Code obtained in Step 1.

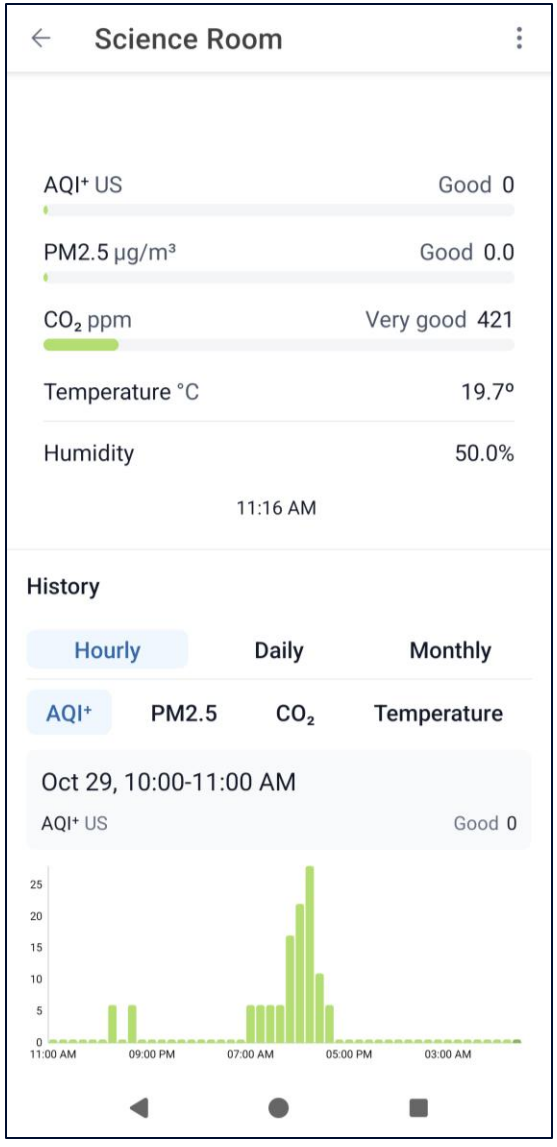


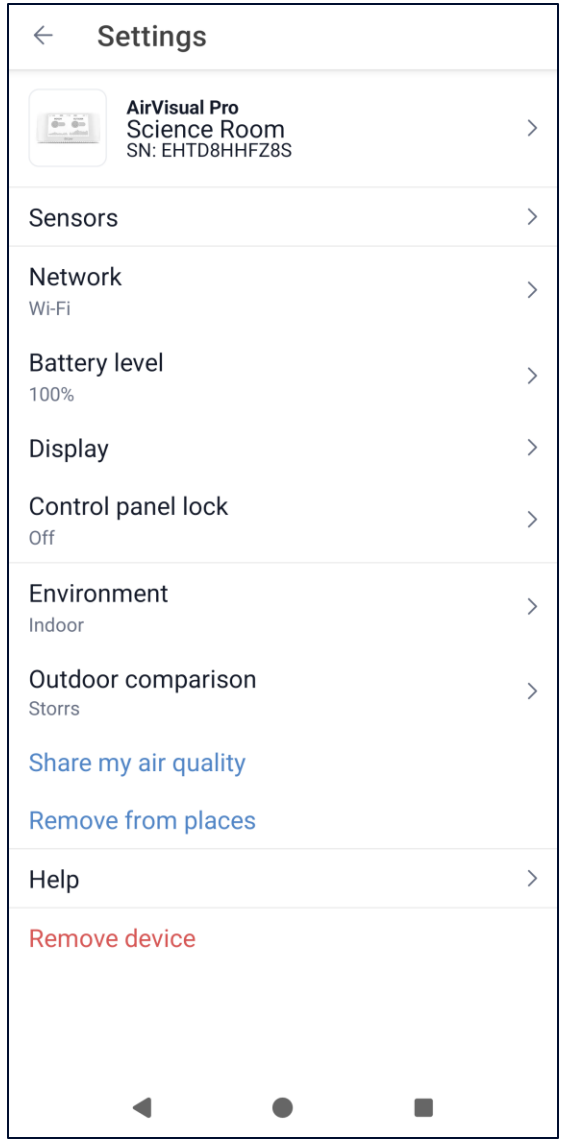
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The AirVisual App Examples







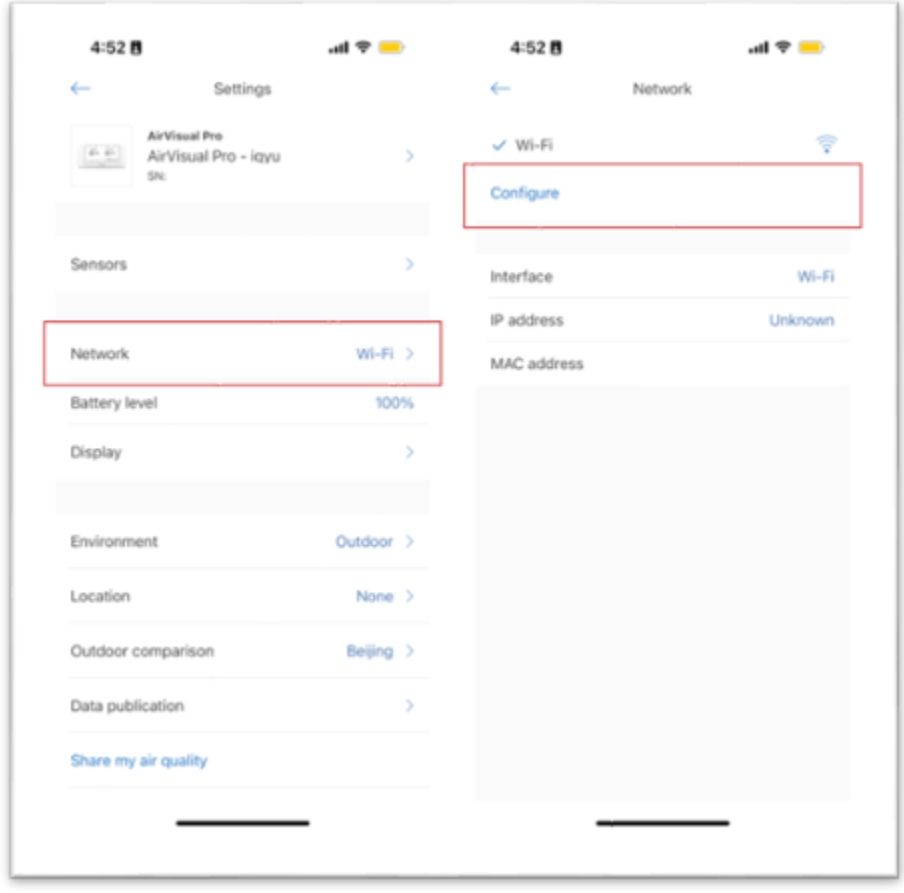
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How to connect the AirVisual Pro to Wi-Fi?

- Using the AirVisual app: Open the AirVisual app, click the "Devices" tab on your "My Air" page > click on your device information to open its detailed screen > click on the setting button in the right-hand corner> press "Network ” and “Configure” Wi-Fi. Follow the instructions.

- Using the Pro itself: Press the center button for settings menu > 'Network', you should see the available networks. Select the Wi-Fi you want and use the virtual keyboard to enter the Wi-Fi password to join.



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How to connect the AirVisual Pro to Wi-Fi?

- The AirVisual Pro requires connection to a 2.4 GHz Wi-Fi network.
  - It is not compatible with the 5 GHz Wi-Fi band.
- Make sure that your Wi-Fi network doesn't require web authentication (this is common in hotels, offices and public Wi-Fi hotspots). Web authentication is not supported by the AirVisual Pro.
- Action for IT Staff: When connecting the monitors, ensure the school's wireless access points (WAPs) are configured to broadcast a 2.4 GHz network that the devices can access. On dual-band routers, the 2.4 GHz band is often a separate network name (SSID).

Intermittent Data Syncing Method

- The AirVisual Pro is a "Data Bank": If a unit goes offline (e.g., during a school break or if the school only supports a 5g network), the device stores all air quality readings locally since the last time it successfully synced with the IQAir cloud.
- The AirVisual Pro can store up to one year of historical data internally.
- To sync the data, connect it to a 2.4 GHz Wi-Fi network or a personal mobile hotspot.
- Once connected to a network, the device will automatically begin uploading all stored historical data to the cloud.
- After connecting, wait for visual confirmation or refresh the dashboard to see if the data has been uploaded.
- It may take about 10 minutes from connection before the full history is visible on the web dashboard and app.



Accessing Online Dashboard

- Your school has been provided a username and password that will grant you access to the dashboard: Click Here to access the Dashboard
- Rename your units (e.g., "Lab 205," "Cafeteria," "Outdoor ") via the dashboard (double click on the name on the monitor's page) to enable easy, centralized monitoring for all users.
- On the website you can:
  - View historical data hourly, daily, weekly, or monthly trends for all measured things; CO2, PM2.5, Temperature, and RH.
  - Access data export tools
  - Set up advanced alerts that trigger email notifications or SMS messages to facility managers when specific thresholds are breached
  - Access the worldwide network of IQAir monitoring stations.
  - Compare the school's outdoor sensor to official government stations and monitor regional events like wildfire smoke.
  - Generate widgets to embed real-time indoor or outdoor air quality data directly onto the school's public website or display screens in the lobby.

Viewing the Online Dashboard



Device	Connection	Environment	Fan speed	Particle count (/L)	AQI* (US)	PM2.5 (µg/m³)	PM10 (µg/m³)	PM1 (µg/m³)	CO_2 (ppm)
Art Room 3OXEZ1HQBJZ		Indoor	--	--	0	0	--	--	485
Science Room EHTD8HHFZ8S		Indoor	--	--	0	0	--	--	423
CGSO1 GHR Room 315 LRS69ET5UQS		Indoor	--	4973	6	1	2	1	422
HEEO1 CHS Chemistry SMT946FQT90		Indoor	--	5536	6	1	2	1	909

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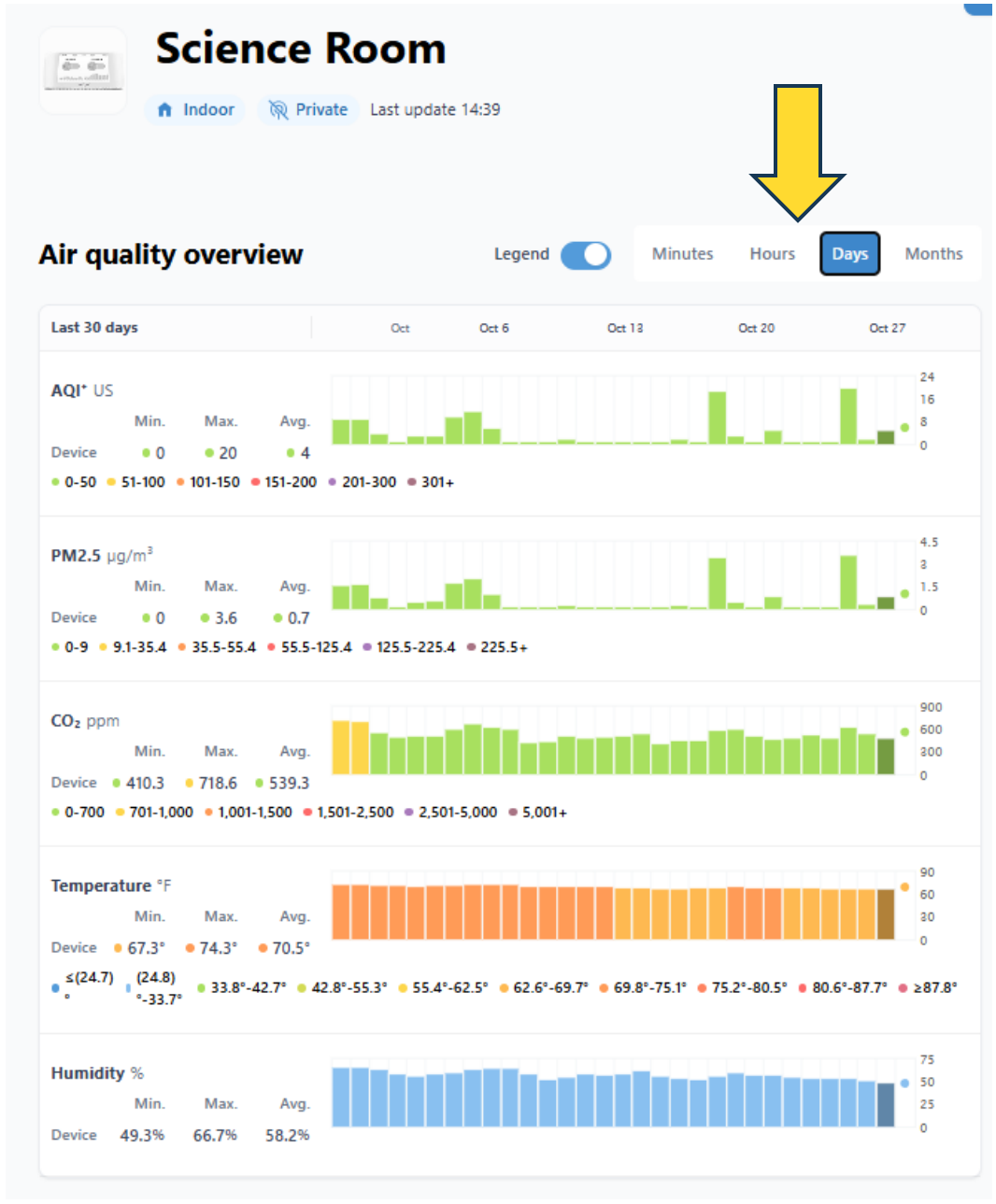
[IQAir AirVisual Platform Tools - YouTube]

Viewing historical data on the IQAir platform

A range of historical air quality data is freely available on the IQAir platform, for each location it reports on.

Here's how to view different timescales of historical data:

- Past 60 minutes shown in minutely averages
- Past 48 hours shown in hourly averages
- Past 30 days shown in daily averages
- Yearly and monthly average data since 2018



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Raw Data Access via a Local Network (Samba)

It is possible to retrieve all of your device's data by wirelessly downloading the comma delimited files via Samba.

1) Connect the Pro to a Wi-Fi network.

2) Connect your computer to the **same** Wi-Fi network with the Pro.

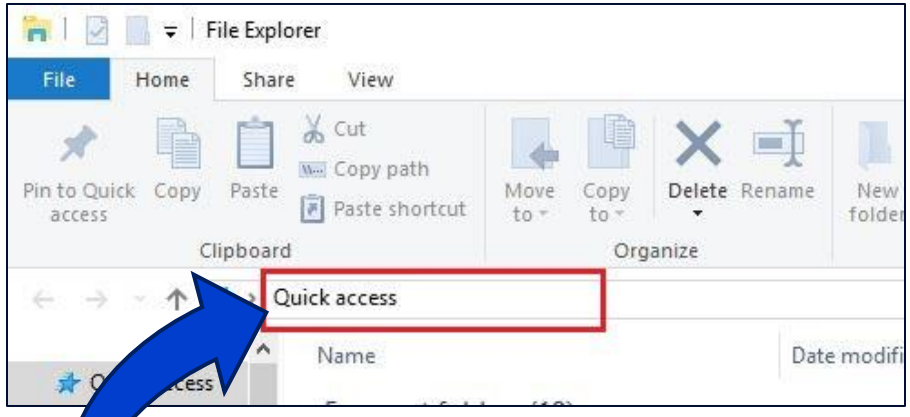
3) On the Pro, press the center button for "Settings Menu" > "Network" > "Access Pro data". This displays the information needed to access your data.

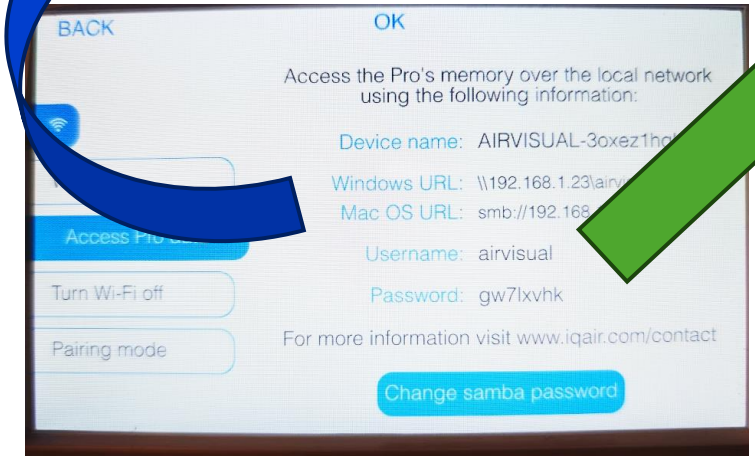
- **3a**- **Windows** Open File Explorer and type the displayed Windows URL (e.g. '\\192.168.1.xxx\airvisual') into the search bar, and hit Enter. "Start" > Enter the displayed username and password when prompted.
    - Check that for you are entering the device Windows URL into **File Explorer**, not Internet Explorer.
- **3b**- **Mac** Open Finder, click the 'Go' dropdown menu at the top of your screen and choose 'Connect to Server'. Type the displayed Mac OS URL (e.g. 'smb://192.168.1.xxx/airvisual') into 'Server Address' box and click 'Connect'. Enter the username and password when prompted.
- **3c**- **Linux** Open your file navigator and click on "Connect to server" with the IP address. Enter the username and password when prompted.

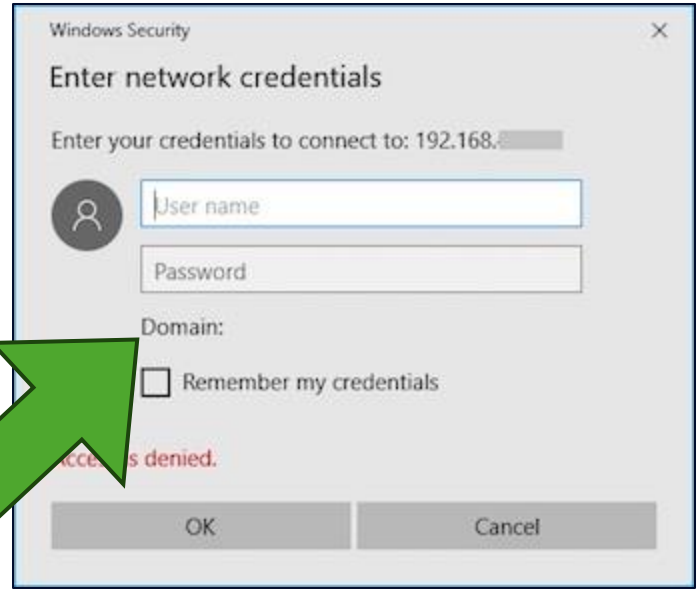
4) The files are saved as monthly CSV text files with names like “202509_AirVisual_values.txt”

For more troubleshoot, check out this resource: Samba data download troubleshooting

Raw Data Access via a Local Network (Samba) – Windows example



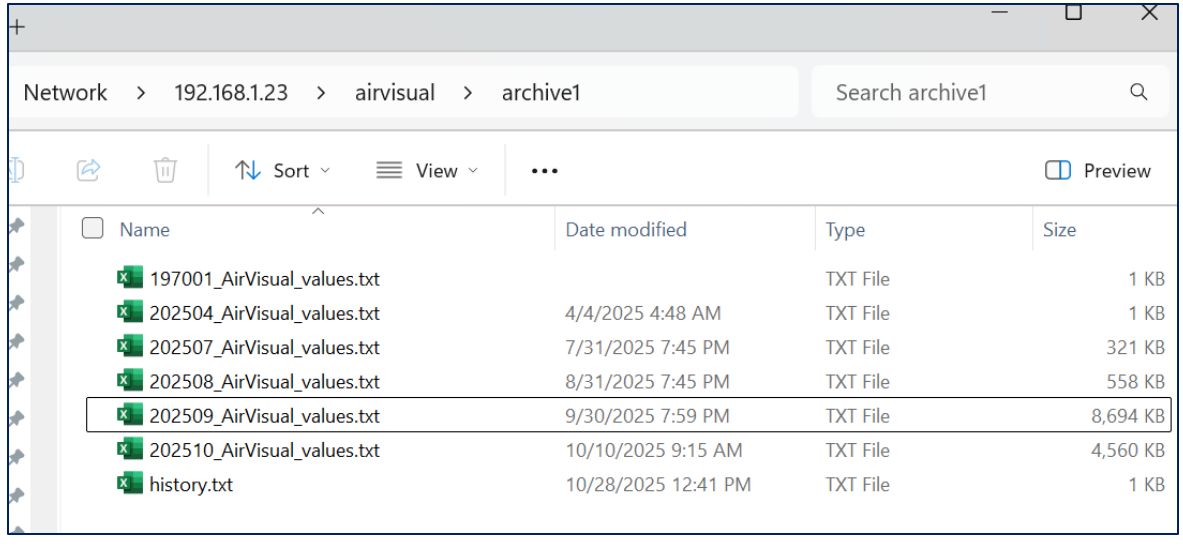




Raw Data Access via a Local Network (Samba) – Windows example

To import to Excel, first copy the text files to your computer, and open Excel.

Windows Click the 'Data' tab, then from 'Get External Data' choose 'From Text' and select the saved text files. In the Text Format Wizard, choose 'Delimited' as Original Data Type > for Delimiters, select 'Semicolon' > choose your column data preferences, and Finish.



Mac - From the File menu, choose 'Import' and 'CSV', and follow the steps.

Understanding your Data

Monitoring CO_2 ensures we have fresh air for focused minds.

Monitoring $PM_{2.5}$ ensures we have clean air for healthy bodies.

What is the Air Quality Index (AQI)?

The AQI is a system for reporting the severity of air quality levels in a way that is easy to understand.



Good
0 - 50
Little to no health risk



Moderate
51 - 100
Sensitive individuals may experience irritations



Unhealthy for Sensitive Groups**
101 - 150
Sensitive groups should limit outdoor exertion



Unhealthy
151 - 200
Harmful for sensitive groups, reduced outdoor activity



Very Unhealthy
201 - 300
Everyone can be affected. Avoid heavy outdoor activity



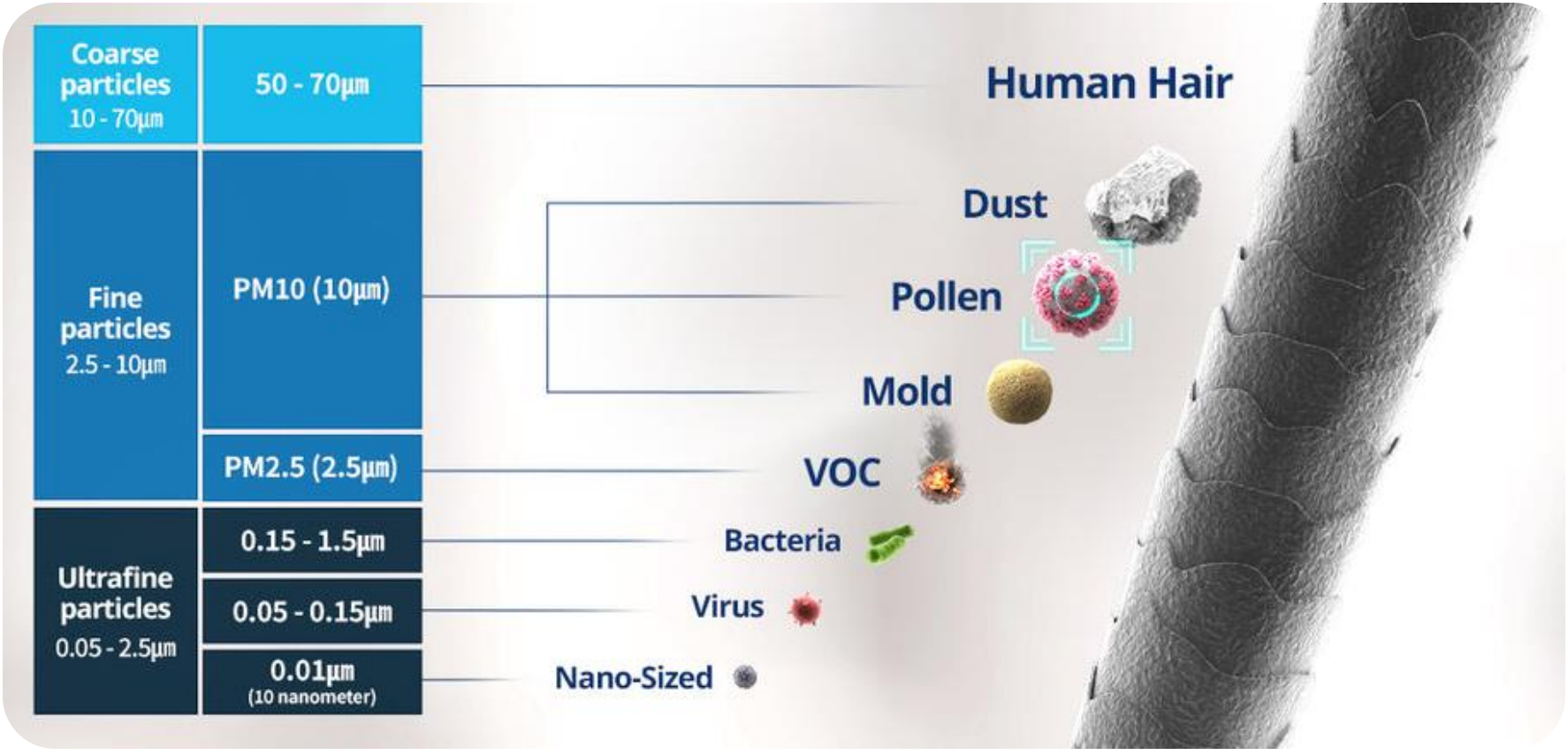
Hazardous
301+
Serious risk of respiratory effects. Everyone should avoid outdoor activities

** Following US EPA Standards for Particle Pollution to calculate AQI*
***Sensitive groups include people with respiratory or heart disease, children and the elderly*

What Your Monitor Tracks (and Why it Matters)

- Carbon Dioxide (CO_2): a proxy for ventilation.
  - It is a natural byproduct of student and staff respiration. When CO_2 is high, it indicates stale, poorly exchanged air.
- Particulate Matter ($PM_{2.5}$): Concentration of particles smaller than 2.5 microns in the air
  - External Sources: Pollution comes in through windows from traffic, bus idling, pollen, or wildfire smoke outdoors.
  - Internal Sources: Fumes from cooking in the cafeteria, chemicals in art/science labs, room dust, or aerosols used in cleaning.
- Temperature & Humidity
- AQI (Air Quality Index)

Particle Size Comparison



Coway mega

The relationship between PM2.5 concentrations and AQI values

US AQI Level		PM2.5 ($\mu g/m^3$)	Health Recommendation (for 24 hour exposure)
WHO PM2.5 ($\mu g/m^3$) Recommended Guidelines as of September 22, 2021: **0-5.0**			
Good	0-50	0-12.0	Air quality is satisfactory and poses little or no risk.
Moderate	51-100	12.1-35.4	Sensitive individuals should avoid outdoor activity as they may experience respiratory symptoms.
Unhealthy for Sensitive Groups	101-150	35.5-55.4	General public and sensitive individuals in particular are at risk to experience irritation and respiratory problems.
Unhealthy	151-200	55.5-150.4	Increased likelihood of adverse effects and aggravation to the heart and lungs among general public.
Very Unhealthy	201-300	150.5-250.4	General public will be noticeably affected. Sensitive groups should restrict outdoor activities.
Hazardous	301+	250.5+	General public at high risk of experiencing strong irritations and adverse health effects. Should avoid outdoor activities.

PM2.5 Concentrations



The fan and its color represent your indoor CO2 levels.



Good
$CO_2 \leq 700$ ppm*
Ideal comfort level



Unhealthy
1,501 - 2,500 ppm
Fatigue and reduced concentration

Moderate
701 - 1,000 ppm
May experience odors and reduce ability for complex thinking



Very Unhealthy
2,501 - 5,000 ppm
Headaches and adverse health effects



High
1,001 - 1,500 ppm
General drowsiness



Hazardous
5,001 - 10,000 ppm
Quickened breathing, nausea

** ppm: parts per million*

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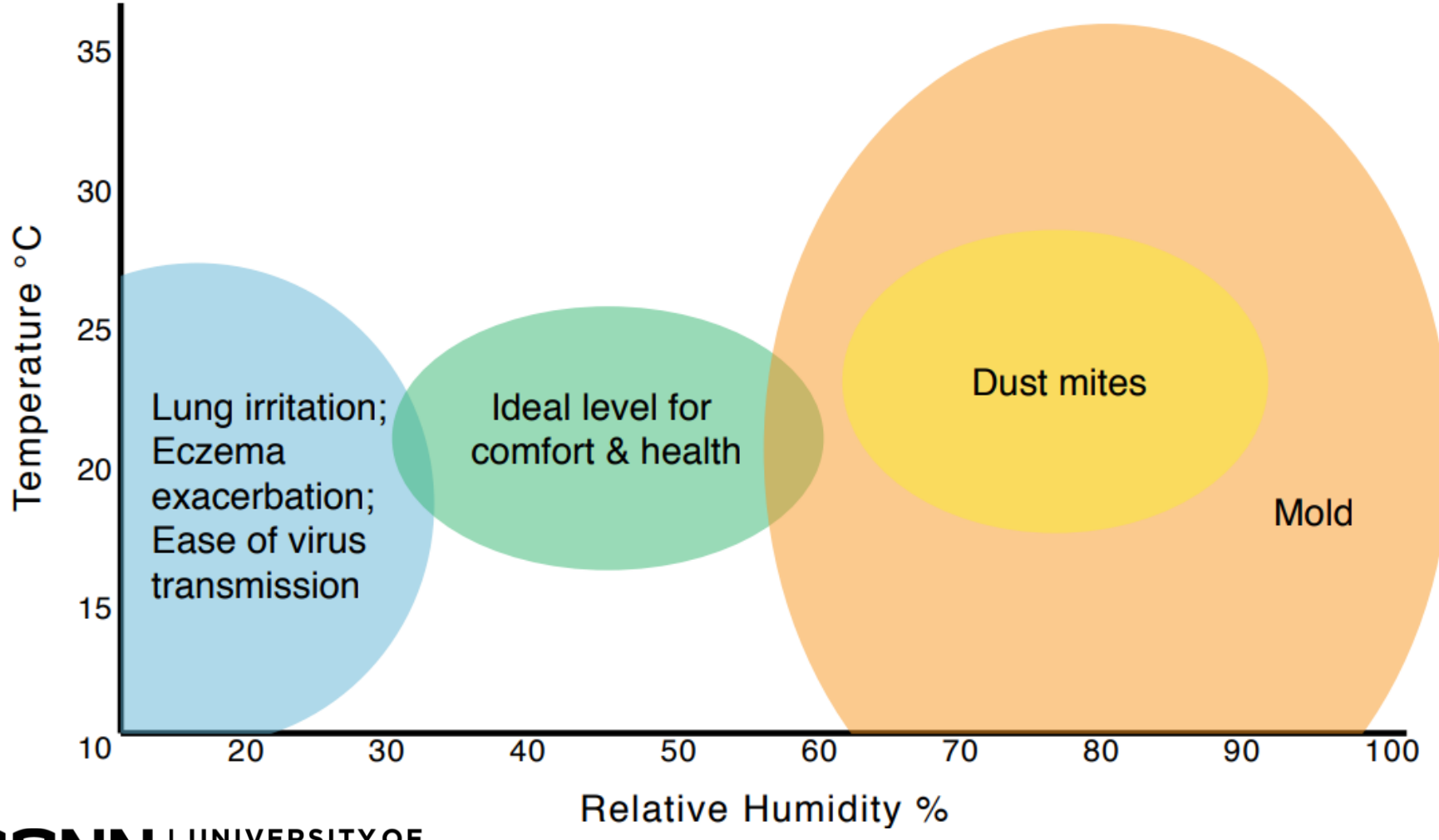
CO2 Concentrations



Temperature & Humidity: More Than Comfort

- The AirVisual Pro's temperature and humidity sensors are critical for maintaining a healthy and productive school environment.
- Temperature affects student comfort, alertness, and ability to focus on learning tasks.
- Low RH (<30%): Can dry out mucous membranes, making students more susceptible to respiratory infections (colds, flu).
- High RH (>60%): Creates an ideal breeding ground for mold, mildew, dust mites, and bacteria.
    - Also contributes to “stuffiness”.

The relationship between temperature and humidity, and the long-term related effects



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How to Compare Your Outdoor Readings

Compare your outdoor data against two of the largest public air quality networks:

1. Install one of the Ethernet Monitors outside your school.
2. Community Network (PurpleAir):
   - Access the global, real-time map of citizen air quality sensors at https://map.purpleair.com/.
   - Teachers' Tip: Use this map to quickly check for local spikes and see how many monitors in your immediate neighborhood show similar values.
3. Commercial/Government Network (IQAir):
   - Access the IQAir World Air Quality Map on their website (or via the AirVisual App).
   - This map aggregates data from official government stations and commercial partners, providing a scientifically validated perspective.

Maintaining the Units

Sensor Maintenance

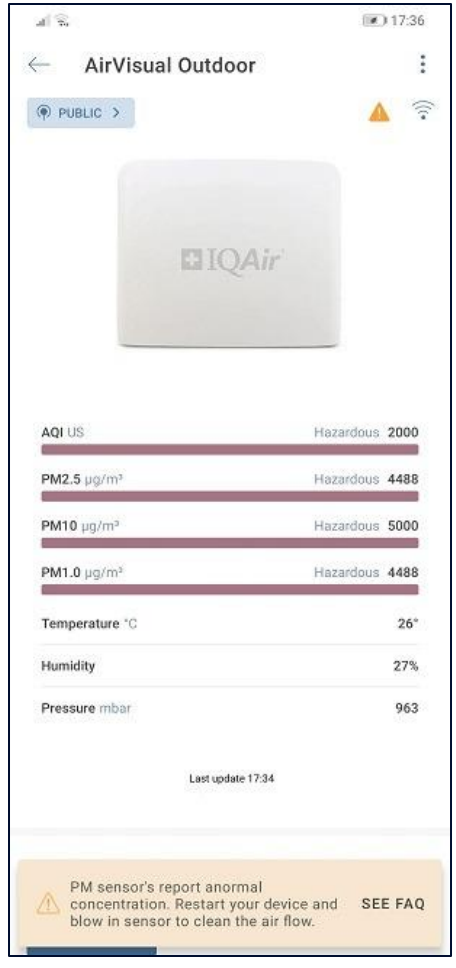


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What to do if your sensor has gets 'stuck' on a very high number

- Due to the function of the AirVisual air monitor's PM2.5 sensor, to constantly pull air and particulates through its sensor chamber, sometimes it is possible that a large particle, such as a piece of dust or similar, may enter the sensor chamber, and get stuck there.
- This can result in a very high AQI number (e.g., AQI 1358) or text notifications about cleaning your sensor being displayed on devices.





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If the PM2.5 number gets stuck high, turn the monitor OFF and gently blow compressed air into the inlet to clear any dust





Please turn off the monitor before using compressed air to clean it, to avoid any possible damage to the fan inside the sensor.

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INDOOR AIR QUALITY INITIATIVE



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Next Steps

Work with our team of experts to install your air monitors

- Step 1: Create a list of where you would like to install the five monitors
  - Prioritize classrooms with the highest and most consistent student density
  - Place units in rooms served by different ventilation systems to check system performance across the building.
  - Install 1 monitor outdoor
  - Install 1 monitor in a space without air purifying boxes

- Step 2: A team member will come to your school to help install the air monitors to ensure proper placement and connectivity.