**IQ*Air***

# AirVisual Pro

## User Manual

Air Quality Guide

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# Meet the AirVisual Pro

## Congratulations!

You are about to take the first step to controlling the air you breathe!

The AirVisual Pro is a comprehensive solution to optimizing health and well-being through clean and fresh air.

By combining laser technology and artificial intelligence, your AirVisual Pro is able to deliver immediate and accurate air quality levels, as well as intuitive recommendations based on both your indoor and outdoor environments.

Use the AirVisual Pro to see invisible threats in your air and understand where they come from.

*Learn more: airvisual.com*

Want to know your indoor and outdoor air quality on the go?

**Get the app!**
Search: AirVisual

*airvisual.com/app*

Temperature and humidity are often overlooked. Cold, dry environments, however, may cause respiratory irritations and eczema exacerbation, while overly humid environments can produce dust mites and mold.

The diagram below is a rough guide for explaining the relationship between temperature and humidity, and the long-term related effects.
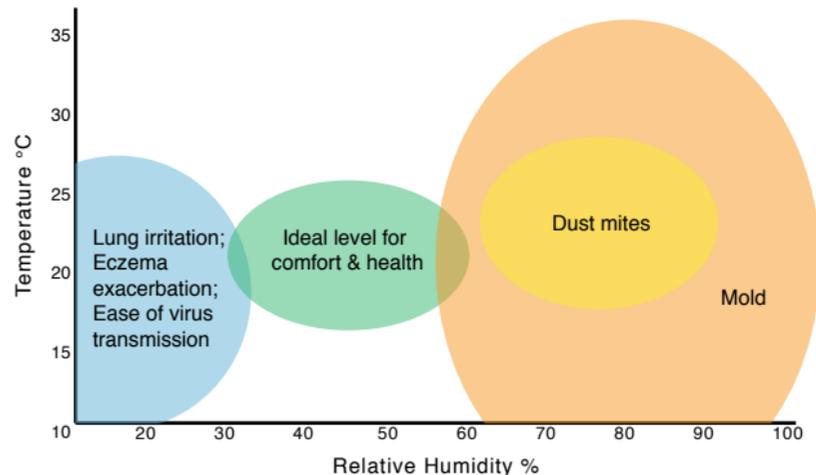
**WHAT IS PM2.5?** PM2.5 refers to particulate matter in the air with a diameter of 2.5 micrometers or less. Due to its size, PM2.5 is considered the most hazardous pollutant to human health as it can be absorbed into the bloodstream via the lungs.

**SOURCES** Outdoor: vehicles, wood burning, industrial activities and other forms of combustion.

Indoor: leaky windows and doors, stove top cooking, fireplaces, incense, cleaning products and fragrances.

**HEALTH RISKS** Short term: eye and nose irritation, irregular heartbeats, chest pain and sore throat.

Long term: asthma, emphysema, lung damage, cancer, strokes, heart attacks and premature death.
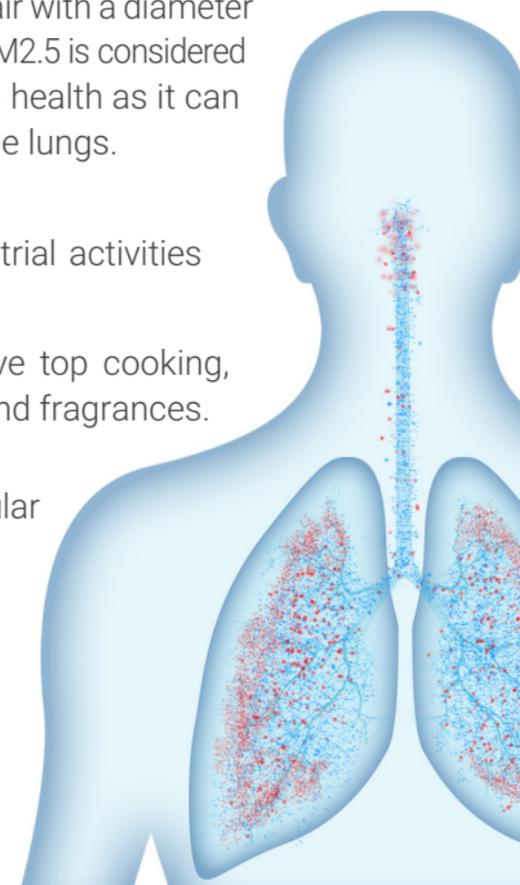
AQI, or Air Quality Index, is a system for reporting the severity of air quality levels in a way that is easy to understand.

The index ranges from 0 to 500, where higher index values indicate higher levels of air pollution.

AQI is computed in different ways around the world. The United States and China, however, represent the two most widely used AQI systems. Your AirVisual Pro supports both systems.

Chinese and USA AQI scales are comparable for values above 200. For lower values, the US AQI is more stringent.*

*AirVisual recommends following the US AQI.

# AQI
## Air Quality Index

**Good**
0 - 50
*Little to no health risk*

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

**Moderate**
51 - 100
*Sensitive individuals may experience irritations*

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

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

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

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

## $CO_2$ introduction

**WHAT IS $CO_2$?**

$CO_2$ (carbon dioxide) is a naturally occurring, odorless gas that occurs outdoors in concentrations between 380 (rural) and 500 ppm (urban). Because humans exhale carbon dioxide ($CO_2$), concentrations of $CO_2$ in occupied indoor spaces are higher than concentrations outdoors. High $CO_2$ means you need fresh air!

**SOURCES**

Outdoors: burning fossil fuels, such as gas and oil - transport, industry, electricity generation

Indoors: human respiration

$CO_2$
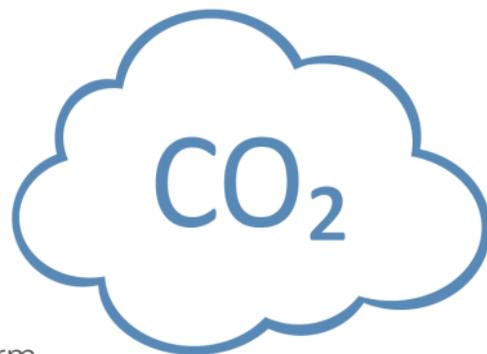
**HEALTH RISKS**

High $CO_2$ levels rarely cause long term health effects. In the short term, however, it is attributed to headaches, drowsiness, decreased productivity and difficulty concentrating. More importantly, high $CO_2$ is an indication of stagnant air which tends to have less oxygen, and more bacteria, mold and other harmful particles, like VOCs.

## $CO_2$ icons

The fan and its color represent your indoor $CO_2$ levels. Any color beyond green is an indication to open your window to get clean, fresh air (assuming outdoor air is clean).

**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*

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

**High**
1,001 - 1,500 ppm
*General drowsiness*

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

*Health effects valid for long term exposure*
*\* ppm: Parts Per Million*

## AirVisual Pro controls

### Power / Sleeping Mode / Back

- 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 / OK

- Access your AirVisual Pro's menu and settings
- Make selections in the menu

### Up / Down / Left / Right

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

## Status bar

Get a quick overview of your air quality on the top of each screen.

**OFFLINE DEVICE**
**(or no selected monitoring station)**

| 55% | 39 | 10:51 PM | 2238 | 24°C |
|-----|-----|----------|------|------|
| Humidity | AQI | Time | $CO_2$ | Temperature |

**ONLINE DEVICE**

| 2238 | 39 | 10:51 PM | 74 | 34° |
|------|-----|----------|-----|-----|
| $CO_2$ | AQI | Time | Selected outdoor AQI | Outdoor temp & weather |
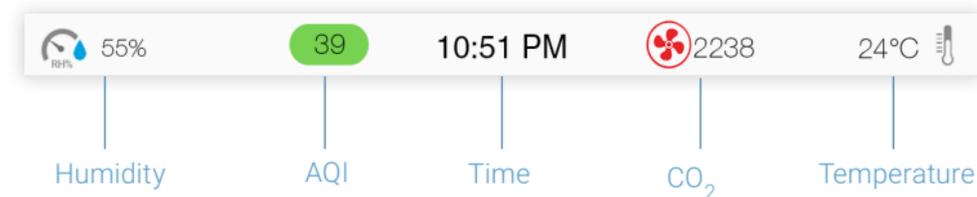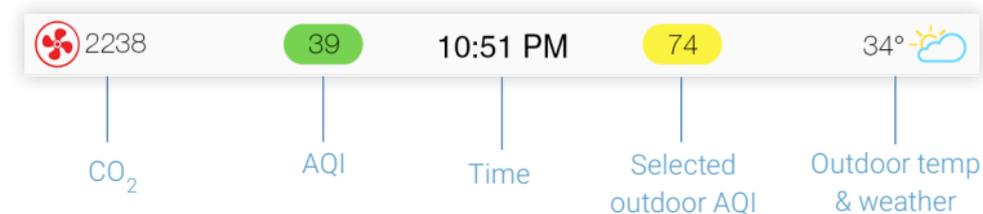
Familiarize yourself with the offline home screen. This display provides all the information you need to achieve the perfect balance of clean and fresh air.

55% | 39 | 10:51 PM | 2238 | 24°C

OFFICE

Device name

AQI icon

39

CO$_2$ gauge

2238
CO$_2$

CO$_2$ value
(ppm)

AQI value

AQI history
(last 24H)

9AM  2PM  7PM  12AM  5AM

9AM  2PM  7PM  12AM  5AM

CO$_2$ history
(last 24H)

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When connected to Wi-Fi, the home screen display will shift so that the left side depicts collected AirVisual Pro data, and the right side depicts outdoor air quality information.

2238 | 39 | 10:51 PM | 74 | 34°

OFFICE          HONG KONG

Device name

Selected outdoor station

AQI icon

39

74

Outdoor AQI icon & value

AQI value

AQI history
(last 24H)

9AM  2PM  7PM  12AM  5AM

9AM  2PM  7PM  12AM  5AM

Outdoor AQI history
(last 24H)

13
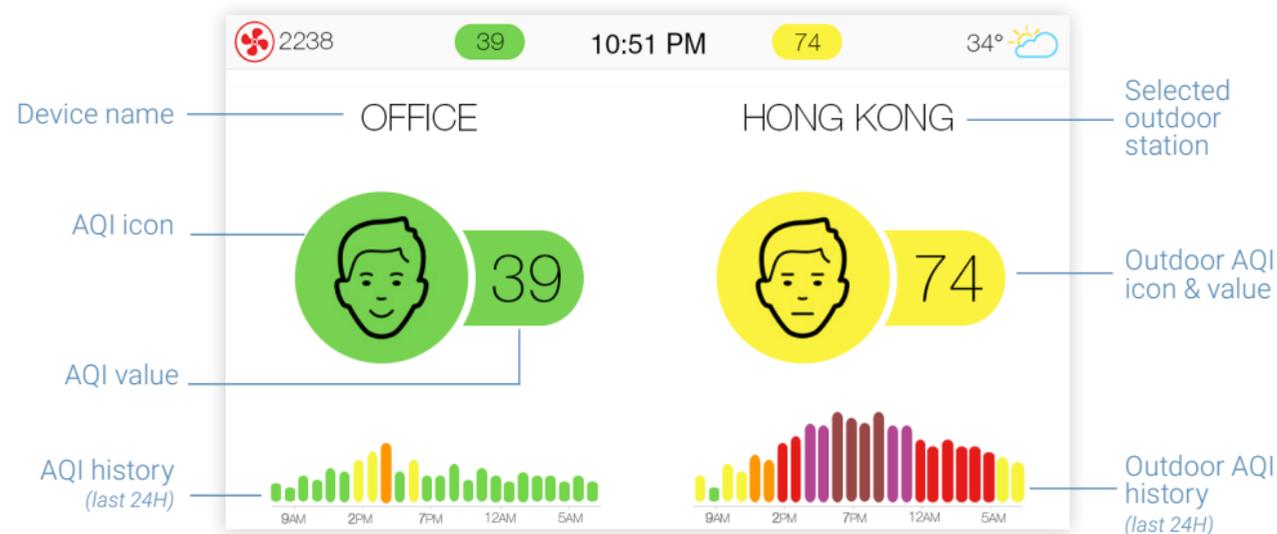
This screen provides indoor air quality data including $CO_2$ concentration, temperature and humidity.



- CO₂ gauge value *(ppm)* → CO$_2$ gauge value *(ppm)*
- Pro temperature *(°F/°C)*
- CO₂ history *(last 24H)* → CO$_2$ history *(last 24H)*
- Device name
- Relative humidity *(%)*

Screen display: 55% · 39 · 10:51 PM · 2238 · 24°C · OFFICE · 24°C · 2238 CO$_2$ · 55% · 9AM 2PM 7PM 12AM 5AM

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Know before you go! Use the air pollution and weather forecast to guide your schedule of outdoor activities so that you can maximize comfort and well-being.



- Timeline
- Outdoor AQI forecast
- Weather forecast
- Selected outdoor location

Screen display: 2238 · 39 · 10:51 PM · 74 · 34° · HONG KONG · Tomorrow morning · Tomorrow afternoon · Wednesday · 29° 25° · 34° 29° · 30° 28°

15
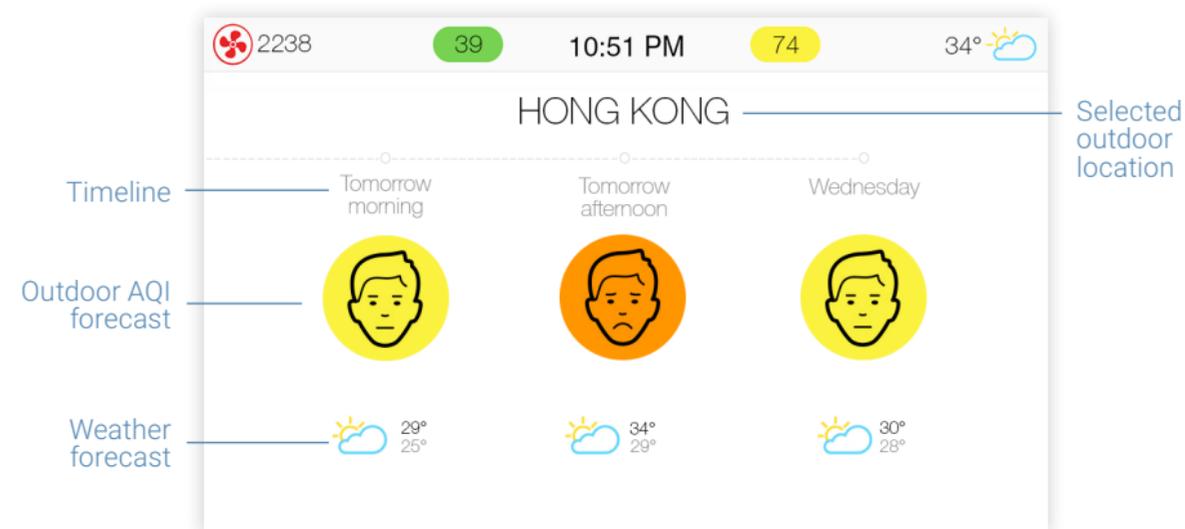
# Recommendations screen

The recommendations screen provides practical insights to help optimize your health and comfort.



- Advice icons
- Wi-Fi status
- Battery status
- Time & date
- Advice text

2238 | 39 | 10:51 PM | 74 | 34°

# 10:51
Wednesday, March 16, 2016

Your $CO_2$ levels are high.
Open your windows to get clean, fresh air.
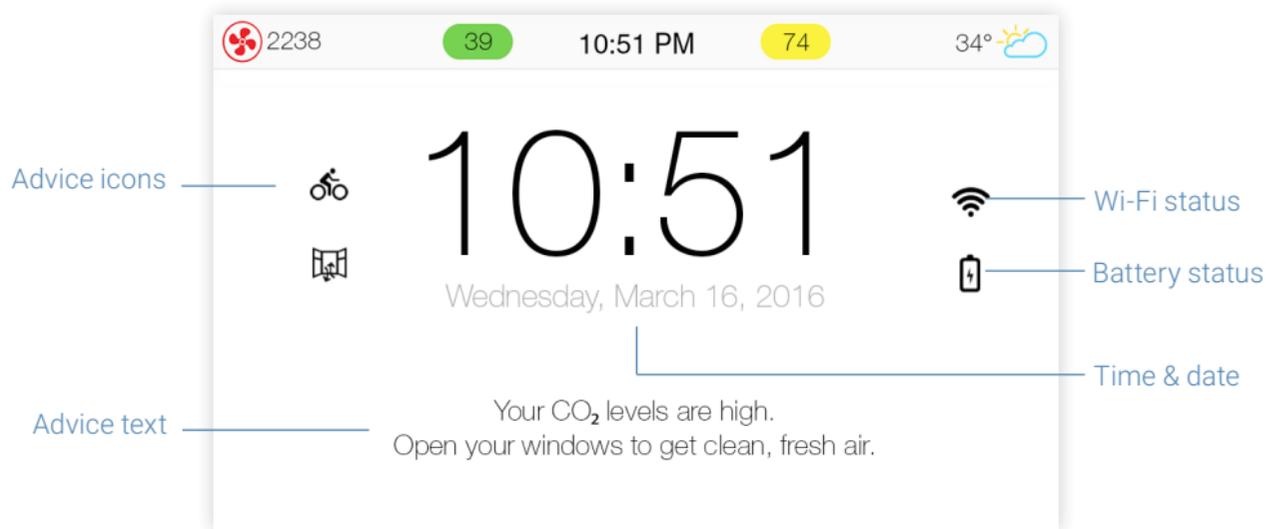
# Icon index

 Open your windows to bring in fresh, clean air

 Close your windows

 Enjoy your outdoor activities

 Avoid outdoor activities
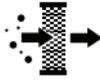
 Run an air purifier to lower indoor pollution

 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

 Battery charging

**How can I view my AirVisual Pro's data remotely?**

You can stay connected and view your AirVisual Pro's readings anywhere, anytime by registering your AirVisual Pro on our dedicated data platform, powered by AirVisual. Registering your AirVisual Pro allows you to:

- Access your data on the go
- Control settings remotely
- Share your data with others

There are two ways to connect your AirVisual Pro:

**AirVisual App:** Select the **+** button in the app > 'Add a Device' > Follow the instructions

**AirVisual.com:** Select 'Sign in' on the menu bar

> Login with your email address and password

> Click on your name and then "Add a Device"

> Follow the instructions

**How can I view PM2.5 concentrations?**

If you wish, it is possible to display PM2.5 concentration along with AQI readings.

To access this setting go to the main menu by pressing the 'OK' button, then navigate to  Display > Units > AQI > 'PM2.5 concentration', select 'Display' > 'Save and exit'.

PM2.5 concentration ◄ ( Display ) ►

You will now be able to view PM2.5 concentrations below the AQIs on your device's home screen.

**How can I connect my AirVisual Pro to Wi-Fi?**

The AirVisual Pro gives you the option to connect to Wi-Fi using either the device, or the mobile application (handy for users with private/hidden networks or long Wi-Fi passwords).

1) To setup Wi-Fi using the device click the 'OK' button and navigate to 🛜 Network > Wi-Fi, and then select your desired network. Click the center "OK" button to arrive at the password screen.

2) To setup Wi-Fi using the AirVisual app click on the **+** icon in the app. Select 'Configure my Device's Wi-Fi' and follow the instructions.

**How can I download my AirVisual Pro's historical data?**

Your AirVisual Pro's complete history of air quality data is available for download. This data can be used as you wish to gain further insight.

To access the data, first make sure your AirVisual Pro is connected to the local network (the same network as your computer), and then go to the settings menu by clicking the 'OK' button, and navigate to 🛜 Network > Access Pro data

| | |
|---:|:---|
| Device name: | AIRVISUAL-ABCDEFG |
| URL: | smb://200.200.200.207/airvisual |
| Username: | airvisual |
| Password: | 1234abcde |

For more information and support, visit support.airvisual.com and read the article "Download the AirVisual Pro's data using Samba."

**How can I reset or clear data stored on the AirVisual Pro?**

Air quality measurements are saved to your AirVisual Pro's memory. At any time you can reset your AirVisual Pro to its factory settings to wipe this data.

To do so, go to the settings menu by clicking the 'OK' button and then navigate to ⓘ About > Factory Reset

Reset to factory settings
(Historical data will be kept)

Reset settings & clear data
(Historical data will be erased)

Choose the option "Reset settings & clear data."

**Can I set the screen to switch on/off automatically?**

Save energy and extend your sensor's lifetime* by setting up the Auto power ON / OFF (sleep mode).

Go to the settings menu by clicking the 'OK' button, then navigate to Performance > Power saving

Adjust the times to when you want your AirVisual Pro to automatically power on and off. Click the "Save & exit" button when finished.

*Your AirVisual Pro will continue to take measurements in sleep mode.*

**Where can I find my AirVisual Pro's serial number?**

You may be asked for your AirVisual Pro's serial number either when activating your device or receiving help from AirVisual's customer service.

Your serial number can be found in two places:

1) On a sticker on the back of your AirVisual Pro.

2) In the About settings.  To find it, press the center menu button on your Pro,  then  go  to  ⓘ About > Device info.

| | |
|---|---|
| Device name: | AIRVISUAL-ABCDEFG |
| Version: | 1.1662-KBG50F6 |
| Serial Number: | ABCDEFG |
| Mac address: | A1:B2:C3:D4:E5:F6 |

**Tips for running an air quality experiment:**

The AirVisual Pro is a great tool for running experiments. Here are a few friendly tips for getting started:

1) Take measurements continuously so that the AirVisual Pro reacts to changes in air quality within seconds. Go to ▭ Performance > Sensor mode and select 'Continuous'.

2) Import your data to a spreadsheet to perform your analyses. For detailed instructions on this process visit  airvisual.com/contact and read the article "Download the AirVisual Pro's data using Samba".

## Care & maintenance

### DO

Put the AirVisual Pro on a flat, stable surface

Clean the AirVisual Pro using a slightly damp cloth

Connect the AirVisual Pro to an electrical outlet

Extend the sensor's lifetime by using power saving mode

### DON'T

Expose to direct sunlight (even indoors)

Expose to water (e.g. rain) The AirVisual Pro is not waterproof

Expose to strong wind

Expose to extreme heat (e.g. don't place on a heater)

## The Air Quality Community

AirVisual reports data for more than 10,000 locations worldwide. Yet, still many places lack local air quality monitoring stations.

By placing your AirVisual Pro outdoors you can become an air quality data source for your local community.



Together, we can raise air quality awareness and provide the global air quality data needed for people, businesses and governments to implement change. Visit us online for more information: **airvisual.com**

# IQAir

## AirVisual Pro

Have a question about your AirVisual Pro?
Contact us at airvisual.com/contact