

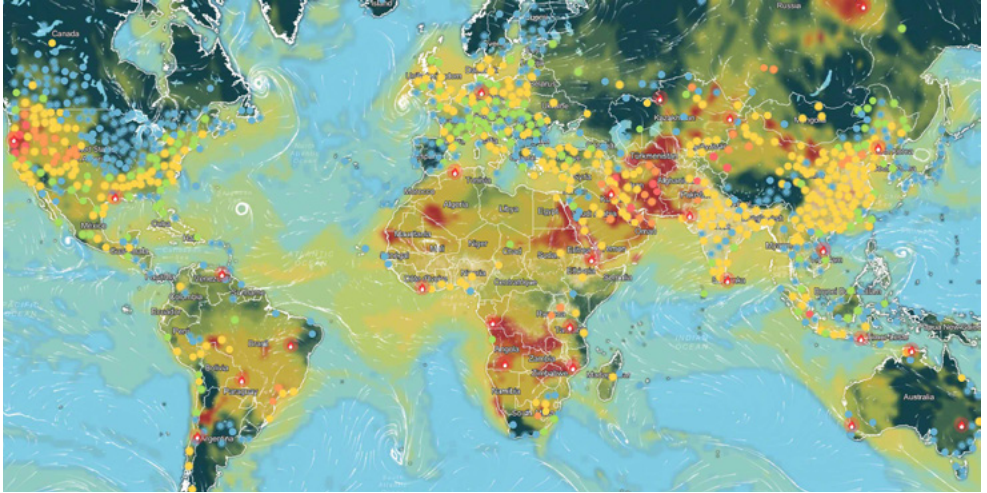
IQAir® AirVisual® Outdoor

Community Air Quality Monitor



User Manual

Join the air quality community



EN Join the air quality community

IQAir reports data from thousands of ground level monitoring stations around the world. Yet, many places still lack local air quality information.

With the purchase of an AirVisual Outdoor monitor, you are only a few simple clicks away from becoming an official air quality monitoring station and contribute your data to global air pollution knowledge. Your station, after a short validation process, will become visible to the global air quality community on the IQAir AirVisual app and IQAir website. By making your AirVisual Outdoor public, you become part of a global community of air quality data contributors who help to increase knowledge about hyper-local air quality.

Together, we can raise air quality awareness and provide the global air quality data needed for people, businesses, NGOs, and governments to help improve air quality everywhere.

Visit us on-line for more information: iqair.com

ES Únase a la comunidad de calidad del aire

IQAir informa los datos de miles de estaciones de control a nivel del suelo en todo el mundo. Aun así, muchos lugares todavía no cuentan con información local sobre la calidad del aire.

Con la compra de un monitor AirVisual Outdoor, usted está a tan solo unos pocos clics de convertirse en una estación oficial de control de la calidad del aire y contribuir con sus datos al conocimiento de la contaminación atmosférica mundial. Tras un breve proceso de validación, su estación se volverá visible para la comunidad de calidad del aire mundial en la aplicación IQAir AirVisual y en el sitio web de IQAir. Al hacer que su AirVisual Outdoor sea público, usted pasa a formar parte de una comunidad global de personas que aportan datos sobre la calidad del aire para ayudar a ampliar el conocimiento sobre la calidad del aire hiperlocal.

Juntos, podemos generar una mayor conciencia sobre la calidad del aire y proporcionar los datos globales sobre la calidad del aire que necesitan las personas, las empresas, las ONG y los gobiernos para ayudar a mejorar la calidad del aire en todas partes.

Visítenos en línea para obtener más información: iqair.com

FR Rejoignez la communauté de la qualité de l'air

IQAir rapporte les données de milliers de stations de surveillance au sol à travers le monde. Pourtant, de nombreux endroits manquent encore d'informations sur la qualité de l'air local.

Avec l'achat d'un moniteur AirVisual Outdoor, vous n'êtes qu'à quelques clics de devenir une station officielle de surveillance de la qualité de l'air et de contribuer par vos données à la connaissance mondiale de la pollution de l'air. Après un court processus de validation, votre station deviendra visible pour la communauté mondiale de la

qualité de l'air sur l'application IQAir AirVisual et le site Web d'IQAir. En rendant votre AirVisual Outdoor public, vous faites partie d'une communauté mondiale de contributeurs de données sur la qualité de l'air qui contribuent à accroître les connaissances sur la qualité hyper-locale de l'air.

Ensemble, nous pouvons sensibiliser à la qualité de l'air et fournir les données mondiales sur la qualité de l'air nécessaires aux particuliers, aux entreprises, aux ONG et aux gouvernements afin d'aider à améliorer partout la qualité de l'air. Visitez-nous en ligne pour plus d'informations: iqair.com

DE Treten Sie der Air Quality Community bei

IQAir meldet Daten von Tausenden von Messstationen auf der ganzen Welt. Dennoch fehlen vielerorts noch immer Informationen über die lokale Luftqualität.

Mit dem Kauf des Messgeräts AirVisual Outdoor sind Sie nur ein paar Klicks davon entfernt, eine offizielle Luftqualitätsüberwachungsstation zu werden und mit Ihren Daten zum globalen Wissen über Luftverschmutzung beizutragen. Nach einem kurzen Validierungsprozess wird Ihre Station in App und auf der IQAir-Website für die weltweite Luftqualitätsgemeinschaft sichtbar. Indem Sie Ihren AirVisual Outdoor veröffentlichen, werden Sie Teil

einer globalen Gemeinschaft von Lieferanten von Luftqualitätsdaten, die dazu beitragen, das Wissen über die hyperlokale Luftqualität zu erweitern.

Gemeinsam können wir das Bewusstsein für die Luftqualität schärfen und die globalen Luftqualitätsdaten bereitstellen, die Menschen, Unternehmen, Nichtregierungsorganisationen und Regierungen benötigen, um die Luftqualität überall zu verbessern.

Besuchen Sie uns online für weitere Informationen: iqair.com



Download the IQAir AirVisual app



EN Scan this QR to get to the appropriate app store. Download the IQAir AirVisual app & create an account

ES Escanee este código QR para ir a la tienda de aplicaciones correspondiente. Descargue la aplicación IQAir AirVisual y cree una cuenta.

FR Scannez ce QR pour accéder au magasin d'applications approprié. Téléchargez l'application IQAir AirVisual et créez un compte.

DE Scannen Sie diesen QR-Code, um zum entsprechenden App Store zu gelangen. Laden Sie die IQAir AirVisual App herunter und erstellen Sie ein Konto.

Important safety instructions

Packaging contents

In the box you will find:

- 1x Air quality monitor with pre-installed sensor modules
- 1x Mounting plate
- 2x Screws & wall anchors
- 2x UV resistant cable ties
- 1x Allen key
- 1x Short power cable
- 1x Long power cable
- 1x Power adapter
- 1x User Manual

Safety information

Read this user manual before you use the device, and save it for future reference.

WARNINGS

- Use of equipment, components, and accessories other than those specified by IQAir may impair the safe operation of the equipment. The safe operation of the equipment as part of a larger system is the responsibility of the installer of the system.
 - If the AirVisual Outdoor is out of reach, the power adapter should be positioned to allow it to be easily unplugged.
 - When using in covered outdoor areas, the power adapter is to be installed in a weatherproof enclosure or indoors with the cable routed through a wall or window feed-through.
 - If the AirVisual Outdoor is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- to be water resistant to rain or spray. It is not designed to be waterproof when immersed. Setting it in a pool of water will result in flooding the inner compartment with water. This will severely damage your AirVisual Outdoor.
- DO NOT install the AirVisual Outdoor less than 1 meter (3 feet) from the ground to prevent splash back.
 - DO NOT mount the AirVisual Outdoor upside down. To prevent the entry of insects and large particles, the PM sensor is covered by a porous screen that is not splash resistant. The AirVisual Outdoor is splash resistant from top, front, and back. Direct injection of water into the device is likely to damage it.
 - The supplied power adapter is not intended for outdoor use.
 - Before plugging the power adapter into a socket, check if power source, voltage and frequency corresponds to 100 to 240V and to 50 to 60Hz. Current rating of power adapter is 0.5A.

CAUTION

- The AirVisual Outdoor enclosure is designed

- Do not use the equipment at altitudes exceeding 2,000 meters (6,560 feet).

Important safety instructions

- The maximum power consumption of the AirVisual Outdoor is 12W (48.0VDC and 0.25A from PoE). It is recommended to power the AirVisual Outdoor through the RJ45 Ethernet connector with the supplied power adapter and cables. There are no outputs available from the AirVisual Outdoor.

- The supplied power adapter is rated to operate between 0 °C and +40 °C (32 °F to 104 °F), with humidity ranging from 0% to 95% non-condensing. The AirVisual Outdoor is rated to operate between -20 °C to 50 °C (-4 °F to 122 °F), with humidity ranging from 0% to 100% non-condensing. IQAir recommends running the AirVisual Outdoor within these temperature limits.



- WEEE directive requires that old or defective electrical and electronic products must be disposed of in an environmentally sound way. The symbol means that your product should be collected separately from household waste. Please contact a retailer or your community for the nearest collection center.

LASER SAFETY

- AirVisual Outdoor sensor modules are Class 1 laser-based instruments.
- During normal operation, you will not be exposed to laser radiation.
- DO NOT open the AirVisual Outdoor when it is powered ON.
- You will not be exposed to the laser radiation when the AirVisual Outdoor is disassembled.
- The PM sensor inside the PM sensor module contains a laser diode. DO NOT open the PM sensor module when it is powered ON.

Precautions

DO NOT remove any parts from the AirVisual Outdoor.

WARNING

The use of controls, adjustments, or procedures other than those specified in this manual may result in exposure to hazardous optical radiation.

When operated according to the manufacturer's instruction, this device is a Class 1 laser product as defined by U.S. Department of Health and Human Services standards under the Radiation

Control for Health and Safety Act of 1968.

This equipment is to be operated with provided accessories only. Equipment and accessories are to be supplied by IQAir or its agent only. This equipment is to be cleaned with a damp cleaning cloth with warm water containing some drops of dishwashing detergent. After cleaning, dry it with a cloth.

The power adapter is intended for use at supply voltages with fluctuations not exceeding +/-10% and classified as over-voltage category II. The IQAir AirVisual Outdoor is intended for use in environments classified as pollution degree 3, the power adapter is intended for use in environments classified as pollution degree 2.

Important safety instructions

FCC Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



The compliance statements on the AirVisual Outdoor can be found under the mounting plate.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna by reorienting the equipment.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the seller or an experienced radio/TV technician for help.

ISED RSS Warning

This device complies with ISED license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ISED Radiation Exposure Statement:

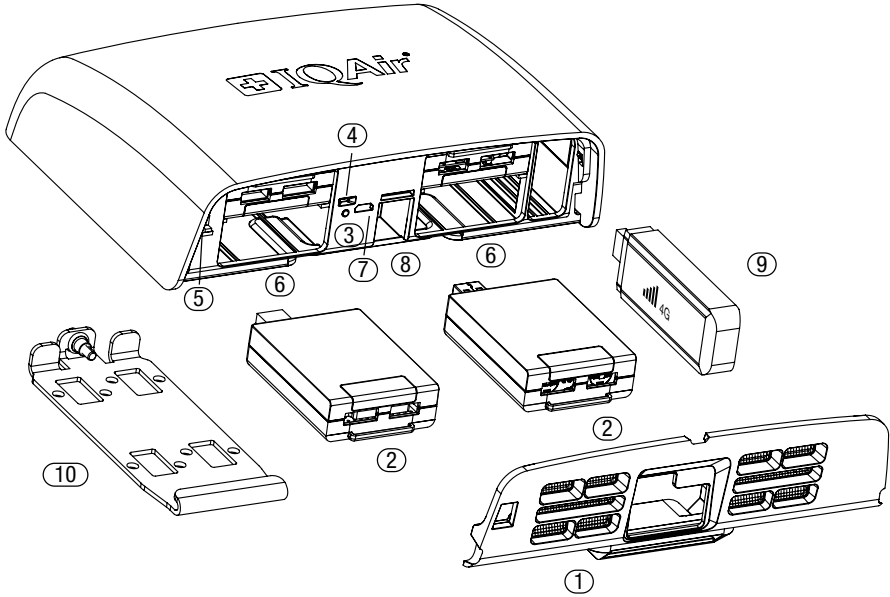
This equipment complies with ISED RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Cet appareil est conforme aux limites d'exposition de rayonnement RF ISED établies pour un environnement non contrôlé. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur. L'installation de l'appareil doit être installée et utilisée avec une distance minimale de 20 cm entre le radiateur et votre corps.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

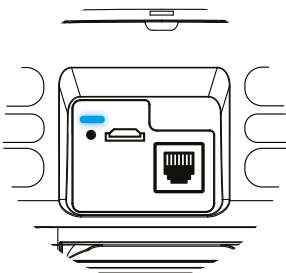
Tout changement ou modification non expressément approuvé par la partie responsable de la conformité pourrait annuler l'autorisation de l'utilisateur à faire fonctionner l'équipement.

Component overview



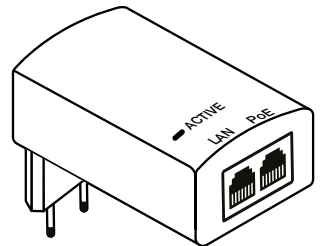
- 1. Air inlet cover with insect mesh
- 2. Sensor modules (up to 4)
- 3. Control button
- 4. Status LED
- 5. Temperature & humidity sensor
- 6. Slots for sensor modules
- 7. Micro-USB socket (not supported)
- 8. PoE Ethernet port (power and optional data)
- 9. Optional 4G USB modem stick
- 10. Mounting plate with mounting hook

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*

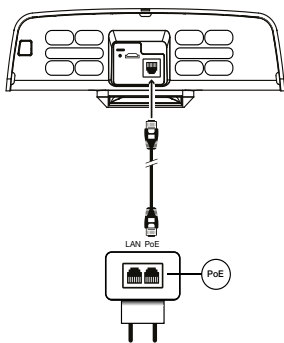
*In case of error, please check the Ethernet cables and connectors. If status remains, contact IQAir support.

Setup and configuration

Power the device

The AirVisual Outdoor uses Power over Ethernet (PoE) to power the monitor. Power is supplied with the provided 48V PoE power adapter and either of the two included Ethernet power cables.

When used in outdoor areas, the supplied PoE power adapter is to be installed in a dry spot where no water can reach the power adapter or use a power outlet with a weatherproof enclosure. When the PoE power adapter is connected indoors, the Ethernet cable should be routed through a wall or window feed-through.



Plug the power adapter into a power outlet and the status LED will turn red ■. Connect the Ethernet cable to the AirVisual Outdoor Ethernet port and to the PoE marked port of the power adapter. The status LED of the PoE power adapter will turn green ■.

The LAN marked port will not power the monitor. The LAN port on the power adapter can be used to connect the device to the Internet. Refer to *“Connecting to the IQAir cloud platform.”*

Instead of the supplied PoE power adapter you can use a PoE Ethernet switch (IEEE-802.3af capable). If you need a longer cable, PoE can power the AirVisual Outdoor up to a distance up of 80m / 262ft. Use a shielded CAT7 UV resistant Ethernet cable.

When initially connected to power, the AirVisual Outdoor will turn on and display a red status LED ■ indicating the device is not connected to a network.

Data connectivity options

The AirVisual Outdoor can be networked to the IQAir data cloud where current and historic air quality data may be viewed on the IQAir AirVisual mobile app or on the IQAir web dashboard. Three network connectivity options are available. The device features Wi-Fi and Ethernet connectivity. A 4G cellular connection is possible with an optional 4G USB modem stick and SIM card with an active data plan.

The most suitable choice of cloud connection will depend on the following:

- Do you have a reliable Wi-Fi signal at the installation location? This would make a Wi-Fi connection suitable.
- Do you have access to an Ethernet outlet? This would make an Ethernet connection suitable.
- If neither Ethernet nor Wi-Fi connection is available, then a mobile 4G cellular network connection may be the best way to connect your AirVisual Outdoor to the IQAir cloud. Please note that the AirVisual Outdoor generates about 35 MB in monthly data.

Connection with Ethernet or cellular 4G USB modem establishes the connection automatically. Wi-Fi setup requires a few steps. **Simply follow the instructions from the IQAir AirVisual app.**

Setup and configuration

Connect your AirVisual Outdoor to the app

Download the IQAir AirVisual app & create an account.

Add a device

In the app, select **'Scan QR Code'** and scan the device QR code on the back side of the device or in the user manual.

Alternatively, in the app, select **'Add device'** and follow the instructions to enter the serial number manually.

Follow the prompts for the network setup.

Connecting to the IQAir cloud platform

Ethernet connection

Connect the Ethernet cable from an Internet router to the port labeled LAN of the PoE power adapter. Connect the second Ethernet cable from the PoE labeled port of the PoE power adapter to the Ethernet port of the AirVisual Outdoor.

Wi-Fi connection

Use the AirVisual app to configure the AirVisual Outdoor to connect to your Wi-Fi network. Open the device settings and select Wi-Fi as connection type. To set the AirVisual Outdoor into pairing mode, press and hold the control button for 3 seconds. The status LED will start to blink green. Next, pair your phone with the device. The AirVisual app shows the Wi-Fi network of your device with the serial number for identification. After successful connection, the status LED will change to solid green. Select your local Wi-Fi network that you would

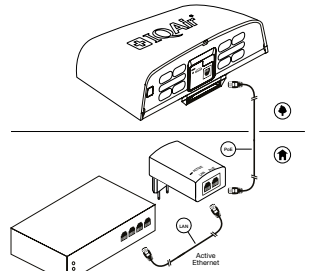
like the AirVisual Outdoor to connect to. Enter the password if required or enter an SSID manually. The AirVisual app will ask you to verify the successful connection by observing the blue status LED.

4G cellular connection

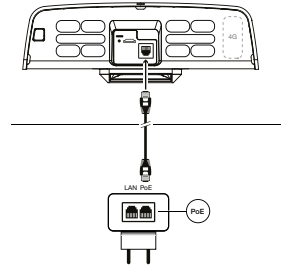
Plug the 4G USB modem stick into the USB socket on the side of the AirVisual Outdoor. The *"Component overview"* on page 6 shows where the 4G USB modem stick must be inserted after removing the air inlet cover.

A successful connection to the IQAir cloud data platform is indicated by a status LED on the AirVisual Outdoor that turns blue.

The device will now upload its data to the cloud and within a few minutes delay you can view your air quality data online from the AirVisual app or IQAir web dashboard (may require subscription).



Ethernet connection



Wi-Fi & 4G connection

Installation

Select a suitable air quality monitoring location

After successful network configuration, the device is now ready to be mounted in a suitable location.



Configure your AirVisual Outdoor and confirm that it is connected to the Internet and IQAir cloud platform (blue LED) before starting the installation.

Always mount the AirVisual Outdoor in an outdoor location with good air circulation. Avoid locations near direct local pollution sources, such as vents, exhausts, open windows, smoking areas or any other combustion sources.

Installation orientation

Install the AirVisual Outdoor vertically, e.g. onto a wall or pole, with the air inlet openings facing downwards.

Do not mount the AirVisual Outdoor horizontally on a surface as this may reduce sensor lifetime and allow moisture to enter the device.

Installation height

Install the device with a minimum clearance of 1 m / 3ft above any horizontal surface to avoid splash back.

Rain and snow

The AirVisual Outdoor power adapter must be placed so that it will not get in contact with water or snow.

Always use a “drip loop” for the power cable to prevent



water entering the device or the power adapter.

Prepare for installation

Remove the mounting plate and set aside. You do not need to fully remove the hex screw. Prepare the location and install the mounting plate.

Pole mount

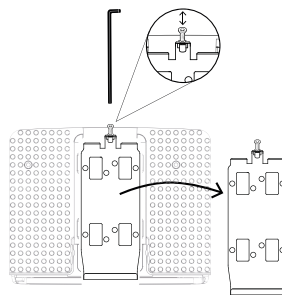
Install the mounting bracket with cable ties onto a pole or pillar. There are two UV resistant cable ties supplied. Insert the cable ties into the mounting plate. Install the mounting plate with zip-ties onto a pole or pillar.

Wall mount

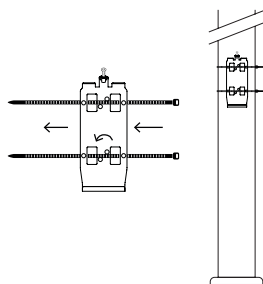
To mount the device onto a wall, you may need a power tool to drill a hole for the wall plugs. Wall plugs and screws are supplied.

Attach the AirVisual Outdoor on the mounting plate

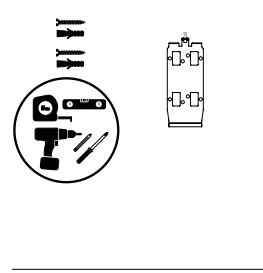
Once the mounting plate is installed, attach the AirVisual Outdoor by aligning the lower bracket on the mounting plate with the bottom slot on the back of the device. Tighten the hex screw.



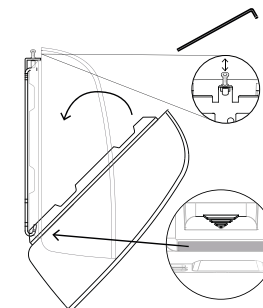
Remove the mounting plate



Pole mount with cable ties



Wall mount with hardware provided



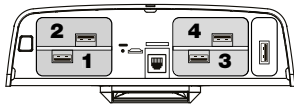
Attach the AirVisual Outdoor onto the mounting plate

Sensor modules

The AirVisual Outdoor has sensor slots (1-4) that allow for up to four removable sensor modules. The sensor slots can be filled with multiple identical or different sensor modules.

PM sensor module

The PM sensor module includes a laser-based nephelometer for simultaneous measurement of PM1, PM2.5 and PM10. The lifetime of the PM sensor is up to 5 years in average PM2.5 concentrations below 25 µg/m³.



Sensor slots

Calibration

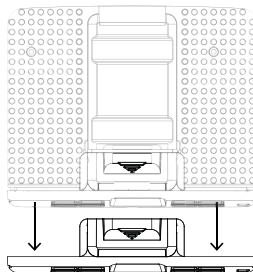
The AirVisual Outdoor sensor modules are supplied pre-calibrated. Due to the sensitivity of the sensors, they will react to environmental changes. All sensors except the PM,

temperature, humidity, or pressure sensors may take up to 5 days to show correct values after the first start or when they are restarted after they have been switched off for more than a few days.

Replacing a sensor module

You will be notified by the AirVisual app or web dashboard if a sensor module requires replacement. To replace a defective sensor module, please follow the steps below:

1. Unplug the power cable so the device is powered off.



Remove the air inlet cover

2. Remove the AirVisual Outdoor from its mounting plate, by loosening the hex socket screw on top.

3. Remove the air inlet cover by sliding down the cover at the back as shown.

4. Pull out the defective sensor, which can be identified by the sensor module serial number and/or the sensor slot number shown in the replacement notification.

5. Insert the new sensor module.

6. Slide the air inlet cover back on.

7. Plug back in the power cables.

8. Place the monitor into its mounting plate and tighten the hex socket screw.

9. Dispose of the old sensor according to your local disposal rules.

Technical specification

Model:	AirVisual Outdoor
Type:	09
Power Input:	PoE 48 VDC, 12W, 250 mA PoE Standard: IEEE802.3af USB 5.2VDC, 12W, 2.3 A
Operating temperature:	-4 to 104 °F / -20 to 50 °C
Operating humidity:	0 - 100% RH, non-condensing

Warranty information

For warranty information, visit the support section on the IQAir website.

Support & FAQ's

For help with any questions and warranty information, visit the support section on the IQAir website at:

<https://www.iqair.com/support>

