# uRADMonitor CITY - Quick User Guide

Congratulations on purchasing this device! Now you are part of an ambitious project, which started in Timisoara and has expanded on a global scale: URADMonitor is a network of interconnected monitoring stations for continuous environmental surveillance. The purpose of uRADMonitor is to generate completely transparent open data, to raise awareness of environmental issues among the population and to make us responsible in our relationship with the environment. The devices are designed and produced in Romania.



## uRADMonitor Model CITY

uRADMonitor CITY is an automatic monitoring station that tracks a total of 10 important air quality parameters. Each device measures temperature, pressure, humidity and concentrations of PM1, PM2.5, PM10 suspended dust, Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide gases. It is among the few devices on the market that have the ability to measure very low concentrations of the 4 gases, up to 1PPB. Comes in a sturdy, weatherproof Stevenson ASA platic case. The data is exported to the uRADMonitor network and can be accessed in real time using the cloud API or directly over the local network. Three variants are available with the same sensors but different connection options: Wifi, GSM / Cellular and LoRAWAN.

## Installing your unit

The devices can be installed outside, directly on the pole or on the facades. Use the base support  for fixing. Do not cover the vents. It is mounted with the cables down.

## Connecting and starting the device

Connect the antenna first. Next, connect uRADMonitor to the power source. Your devices can be powered through the microUSB plug at 5V, or through the screw (red) / DC Jack connectors with any voltage between 6V and 50V direct current.

- **Ethernet Variant**

Your device must be connected to a DHCP enabled network router. Static IP can also be set via USB. Check the USB command manual, available on the product page.

- **WIFI Variant**

Use a smartphone or computer with WLAN capabilities to connect to the local hotspot created by your unit. The SSID is uRADMonitor-XX, where XX is the last two digits of the ID. The key is the device ID, in uppercase, printed on the case. Open 192.168.4.1 in your browser and click the "CONFIG" link to configure the connection to the Wireless Internet Router. Enter the SSID and key of your Internet access network. If the connection fails, you will see the status message and three consecutive beeps will indicate the problem. Additionally, you can configure the device via USB. See the USB Manual.

- **LoRaWAN Variant**

Your device must be pre-configured with LoRaWAN connection details. These can also be set via USB. Check the USB command manual, available on the product page.

- **GSM Variant**

A data SIM card must be inserted into your unit before it can connect to the Internet. If this card was offered by us, your device will work automatically, as soon as it is powered, without any other settings.

Ethernet, LoRaWAN, Wifi and GSM settings can be customized via the USB connection. See the product manual for full details, available on our website: https://www.uradmonitor.com/products/

## Access to data

There are three simple ways to access the data generated by your uRADMonitor device:

1. On the uRADMonitor portal frontend, open http://www.uradmonitor.com/?open=ID, where ID is your device ID (1CXXXXXX), printed on the device case. This will open the global map at the location of your unit and you can see the data represented in graphs and colors.
2. Using the uRADMonitor cloud API, via REST API calls, see the details presented in the "Dashboard" section at http://www.uradmonitor.com/dashboard. The use of the API for non-commercial, academic or civic purposes is free.
3. Local access, available for Wifi variants, open your unit's LAN IP in your browser to access a built-in mini-webserver where you can view measurements or access data as a JSON-formatted file. See our blog for the "Direct Data Access" Article.

uRADMonitor is a global network of environmental monitoring stations. The bigger the network, the better it does its job. Your help to make our work known is very important. Please share pictures with your uRADMonitor unit on Facebook, Twitter or Instagram, using the hasgtag #uradmonitor .

**uRADMonitor CITY was tested in 2021  and in 2023 by AIRPARIF France with very good results in terms of measurement accuracy.**
**Warranty: Your uRADMonitor unit is covered by a 12-month warranty from the date of product purchase.**