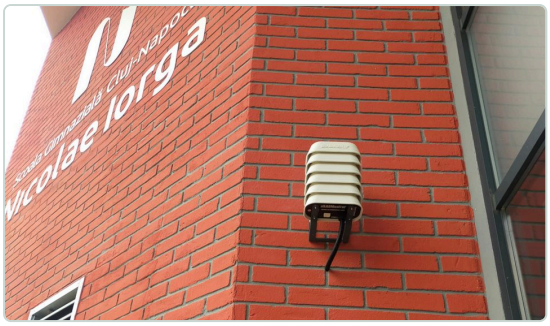
uRADMonitor MODEL CITY

Urban air quality monitoring station, 1 ppb gas resolution



Automated fixed outdoor station measuring PM1, PM2.5, PM10 and traffic and combustion gases: ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide, plus temperature, humidity and pressure. Used when the specification requires urban gases at building level.

Role in the school network: Outdoor, building level. Does not measure noise or CO2: pair it with a MODEL A3 Stevenson outdoors and A3 stations in the classrooms.

> Basis: Directive (EU) 2024/1275, Art. 13, indoor air quality monitoring devices in non-residential buildings; national green school schemes such as Romania's OME 4147/2022, art. 27(b): a sensor network in all occupied rooms and at building level.

Sensor specifications

Sensor	Parameter	Range	Resolution	Accuracy	Expected life
MEMS	Temperature	-40…+85 °C	0.5 °C	±1 °C	5 years
MEMS	Relative humidity	0…100 % RH	1 % RH	±2 %	5 years
MEMS	Barometric pressure	300…1100 hPa	1 Pa	±0.25 %	5 years
Optical, laser	PM1 · PM2.5 · PM10	0…1000 µg/m³	1 µg/m³	±1 %	5 years
Electrochemical	Ozone O3	0…1 ppm	1 ppb	±1.5 %	2 years
Electrochemical	Nitrogen dioxide NO2	0…1 ppm	1 ppb	±1.5 %	2 years
Electrochemical	Sulphur dioxide SO2	0…1 ppm	1 ppb	±1.5 %	2 years
Electrochemical	Carbon monoxide CO	0…10 ppm	1 ppb	±1.5 %	2 years

General characteristics

Housing	UV-resistant ASA Stevenson, rain and snow proof; 25 × 20 × 10 cm, 1.25 kg, without mount
Mounting	Stainless steel bracket for wall or pole
Airflow	Built-in fan, active flow
Connectivity	Choice of GSM, WiFi, LoRaWAN, NB-IoT, Ethernet; built-in GPS
Power	6–50 V DC or 5 V micro-USB; passive PoE; optional internal battery
Operating conditions	–20…+65 °C, 0–95 % RH
Data	Public school dashboard, cloud API and local access
Evaluations	AIRPARIF AIRLAB, France (2021, 2023)
Warranty	12 months

Compliance table for the tender specification

Requirement in the specification	Technical offer: uRADMonitor MODEL CITY	Complies
Particulate matter PM1, PM2.5, PM10	Optical laser sensor, 0–1000 µg/m³	YES
Carbon monoxide CO	Electrochemical, 0–10 ppm, 1 ppb	YES
Nitrogen dioxide NO2	Electrochemical, 0–1 ppm, 1 ppb	YES
Sulphur dioxide SO2	Electrochemical, 0–1 ppm, 1 ppb	YES
Ozone O3	Electrochemical, 0–1 ppm, 1 ppb	YES
Temperature, humidity	MEMS, −40…+85 °C, 0–100 % RH	YES
Outdoor, weatherproof installation	ASA Stevenson housing, stainless mount	YES
Operating temperature −20…+65 °C	−20…+65 °C	YES
Cellular or WiFi connectivity	GSM, WiFi, NB-IoT, LoRaWAN, Ethernet	YES
CE marking	EU declaration of conformity	YES
Nitric oxide NO (separate from NO2)	Not measured	NO
Noise level (dBA), CO2	Not measured; covered by MODEL A3 in the network	NO
Project-specific requirements (to be completed by the bidder):		

Documents supplied

- EU declaration of conformity (CE)
- Quality and warranty certificate with each station's serial number
- Installation and user instructions
- Commissioning record with every station live on the dashboard
- The evaluation reports listed, on request

Manufacturer: Magnasci SRL, Dumbrăvița 307160, Timiș, Romania · +40 770 420 664 · www.uradmonitor.com
Configurations and quotes: greenschools.uradmonitor.com

Informative document. Technical data may be updated; confirm the hardware version when bidding. uRADMonitor® is an EUIPO registered trademark of Magnasci SRL.