uRADMonitor SMOGGIE-CO2

Classroom CO2 monitor

Compact monitor measuring carbon dioxide with an NDIR infrared sensor, plus temperature and humidity. Shows when the room needs fresh air and publishes the data in real time on the school dashboard. Wall mounted, with an explanatory panel for pupils.

Role in the school network: Indoor, one per classroom. Uses the school WiFi: needs reconfiguring when the password changes. For the full parameter set (PM, ozone, VOC, noise) combine it with MODEL A3 stations.

> 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
NDIR	Carbon dioxide CO2	400…5000 ppm	1 ppm	±5 %	5 years
MEMS	Temperature	-40…+85 °C	0.5 °C	±1 °C	5 years
MEMS	Relative humidity	0…100 % RH	1 % RH	±2 %	5 years

General characteristics

Housing	Plastic, 42 × 43 × 27 mm, two wall-mounting holes
Connectivity	WiFi 802.11 b/g/n 2.4 GHz (ESP8266); REST API and local JSON
Power	5 V micro-USB, adapter and 1 m cable included; 80 mA, up to 170 mA during CO2 measurement
Indicator	RGB LED showing air status
Operating conditions	–20…+65 °C, 0–95 % RH; indoor installation
Data	Public school dashboard and API
Certifications	CE, FCC
Warranty	12 months

Compliance table for the tender specification

Requirement in the specification	Technical offer: uRADMonitor SMOGGIE-CO2	Complies
Classroom carbon dioxide CO2	NDIR, 400–5000 ppm	**YES**
Temperature, humidity	MEMS, −40…+85 °C, 0–100 % RH	**YES**
Air status shown in the room	RGB LED and explanatory panel	**YES**
Data transmission and online platform	WiFi, public dashboard, API	**YES**
CE marking	CE, FCC	**YES**
Cellular connectivity	No; WiFi only	**NO**
PM, ozone, VOC, noise, metal housing	No; 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.