

Sensor Performance

Parameter	Sensor Type	Accuracy	Range
PM2.5	Laser scattering	$r^2 > 0.9^*$	0-1000 $\mu\text{g}/\text{m}^3$ (1 $\mu\text{g}/\text{m}^3$ resolution)
PM10	Laser scattering	$r^2 > 0.9^*$	0-1000 $\mu\text{g}/\text{m}^3$ (1 $\mu\text{g}/\text{m}^3$ resolution)
NO2	Electrochemical	$r^2 > 0.82^*$, LOD: 2 ppb	0-5000 ppb (1 ppb resolution)
O3	Electrochemical	$r^2 > 0.82^*$, LOD: 5 ppb	0-5000 ppb (1 ppb resolution)
SO2	Electrochemical	$r^2 > 0.7^*$, LOD: 5 ppb	0-5000 ppb (1 ppb resolution)
CO	Electrochemical	$r^2 > 0.8^*$, LOD: 10 ppb	0-10 ppm (1 ppb resolution)

* r^2 -scores calculated during co-location trials with FEM reference instruments



Why Airqoon?

Our smart calibration process and cloud-based data management system transform raw measurements into actionable environmental intelligence, with proven field performance alongside reference-grade instruments.

Key Applications

- Municipal Air Quality Networks** Identify pollution hotspots and verify mitigation efforts
- Industrial Compliance Monitoring** Ensure regulatory compliance with accurate, continuous data
- Environmental Impact Assessment** Measure and validate improvements from green technology investments

Technical Specifications

Feature	Details
Sampling Period	1, 5, 10, 15, 30, 60 minutes
Unit Life	+10 years
Connectivity	Cellular 4G/NB-IoT w/ 2G compatibility
Operating Conditions	-10°C to +65°C, 10% to 99% RH
Dimensions	35cm x 25cm x 18cm
Weight	3.5kg with solar panel
Enclosure	IP34 rated
Powering Options	Solar panel or 5V DC power source
Battery	3.7V 15.2Ah
Compliance	CE

Packaging Options

Package	Included Components
Lite	PM1, PM2.5, PM10, Ambient Temperature, Relative Humidity and Pressure
Gas-1	Lite + 1 regular Gas
Gas-2	Lite + 2 regular Gas
Gas-3	Lite + 3 regular Gas
Gas-4	Lite + 4 regular Gas
Gas-Special	Contact us for custom configurations

Customization Options

- Regular Gas Sensors:** CO, NO, NO2, O3, SO2, CO
- Special Gas Sensors:** CO2, H2S, VOC, CH4, N2O
- External Add-ons:** Wind speed/direction, noise monitoring (Class-1 or Class-2), extended solar power package