

### 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