aeroqual

OUTDOOR AIR QUALITY TEST KITS

Outdoor Starter Kit

Portable and accurate real-time air quality information, made affordable

Designed for those that require a handheld device capable of measuring the main air pollutants in urban environments.

Expand the kits at any time from our wide range of sensor heads for different gases, or customize a kit to suit your requirements.

Can also be used indoors.

Outdoor Pro Kit

Kits at a glance

KIT / CONTENTS	SERIES 500 MONITOR*	SENSORS						CARRY CASE
		PM	O_3	NO_2	CO	VOC	Temp / RH	
Starter Kit	✓	✓	✓	✓			✓	Small
Pro Kit	✓	✓	✓	✓	✓	✓	✓	Large

*Series 500 Monitor base including: LCD digital display, Lithium battery and charger, in-built datalogger, monitor to USB cable, PC software.

Who are they for?

- **Air quality professionals** who need real-time defensible measurements

- **Community groups** who need cost-effective scientifically credible air quality data

- **Educators** who want students to learn about air pollution in a way that supports STEM

- **Health and safety managers** who need to demonstrate safe environments

- **Researchers** who want to collect scientifically robust data on a limited budget

What are they for?

- Personal exposure monitoring

- Outdoor air quality assessments

- Educational learning tool

- Checking pollution "hotspots"

- Roadside air quality studies

- Short term monitoring

- Nuisance complaint monitoring

- Mobile air quality surveys

Specifications | Outdoor Air Quality Test Kits

Sensor specifications

GAS & PARTICULATE SENSORS	RANGE	SENSOR TYPE*	MINIMUM DETECTION LIMIT	ACCURACY OF FACTORY CALIBRATION	RESOLUTION	RESPONSE TIME	TEMPERATURE	RELATIVE HUMIDITY	KIT STR	KIT PRO
Particulate Matter (PM_{10} & $PM_{2.5}$)	0.000 to 1.000 mg/m^3	LPC	0.001 mg/m^3	± (0.002 mg/m^3 + 15 % of reading)	0.001 mg/m^3	5 Seconds	0 to 40 °C	0 to 90 %	✓	✓
Ozone (O_3)	0-0.15 ppm	GSS	0.001 ppm	<±0.005 ppm	0.001 ppm	60 Seconds	0 to 40 °C	10 to 90 %	✓	✓
Nitrogen Dioxide (NO_2)	0-1 ppm	GSE	0.005 ppm	<±0.02 ppm 0-0.2 ppm / <±10% 0.2-1 ppm	0.001 ppm	30 Seconds	0 to 40 °C	15 to 90 %	✓	✓
Carbon Monoxide (CO)	0-25 ppm	GSE	0.05 ppm	<±0.5 ppm 0-5 ppm / <±10% 5-25 ppm	0.01 ppm	60 Seconds	0 to 40 °C	15 to 90 %		✓
VOC	0-20 ppm	PID	0.01 ppm	<±0.2 ppm + 10%	0.01 ppm	30 Seconds	0 to 40 °C	0 to 95 %		✓

* Sensor Types: Gas Sensitive Semiconductor (GSS), Gas Sensitive Electrochemical (GSE), Laser Particle Counter (LPC), Photoionization Detector (PID).

For the full range of available sensors, visit our website; www.aeroqual.com or to download the list, click here.

Monitor specifications

SERIES 500 PORTABLE MONITOR SYSTEM SPECIFICATIONS (Included in Starter & Pro Air Testing Kits)	
Measurement units	Gas: ppm or mg/m^3	Relative Humidity: %	Temperature °C or °F
Reading functions	Instant, minimum, maximum, average
Sensor head	Active fan sampling to ensure high accuracy measurements, interchangeable, replaceable, zero and span calibrate sensor heads in the field
Display status indicators	Battery, sensor, standby
Sensor calibration	Zero and gain calibration
Analog output	0-5 V
Digital interface	RS-232 to USB
Data logging	Up to 8,188 records (2,706 incl. Temp/RH)
PC data logging	Software and data cable supplied. Link data to a specific location and monitor.
Clock function	Real time
Power supply	12V DC (power adaptor/charger supplied 100-250 V AC)
Rechargeable battery	Lithium polymer 12 V DC 2700 mA/h
Enclosure material and rating	PC and ABS; IP20 and NEMA 1 equivalent
Size	(L x W x D) 195 x 122 x 54 (mm); 7⅝ x 4¾ x 2⅛ (in) (with sensor head)
Weight	< 460 g; < 16 oz (with sensor head and battery)
Environmental operating conditions	Temperature: –5 °C to 45 °C	Relative Humidity: 0 to 95 % non-condensing
Temperature & Humidity sensor	Range – 40 °C to 124 °C (- 40 °F to 255 °F); Range 0 to 100 % RH
Approvals	Part 15 of FCC Rules; EN 50082-1: 1997; EN 50081-1: 1992