

OUTDOOR AIR QUALITY TEST KITS

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 Starter Kit



Outdoor Pro Kit

Kits at a glance

| KIT / CONTENTS | SERIES 500 MONITOR* | SENSORS | | | | | | | |
|----------------|------------------------|---------|----------------|-----------------|----|-----|-----------|------------|--|
| | | PM | O ₃ | NO ₂ | СО | VOC | Temp / RH | CARRY CASE | |
| 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

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Specifications I Outdoor Air Quality Test Kits

Sensor specifications

| GAS & PARTICULATE | RANGE | SENSOR | MINIMUM | ACCURACY OF FACTORY | RESOLUTION | RESPONSE TIME | TEMPERATURE | RELATIVE | KIT | |
|--|-------------------------------------|-----------|-------------------------|---|-------------------------|----------------|---------------|------------|----------|-----|
| SENSORS | | TYPE* | DETECTION LIMIT | CALIBRATION | RESOLUTION | RESPONSE HIVIE | TEIVIPERATURE | HUMIDITY | STR | PRO |
| Particulate Matter (PM ₁₀ & PM ₂₅) | 0.000 to 1.000 mg/m ³ | LPC | 0.001 mg/m ³ | \pm (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 | 0.001 ppm | 30 Seconds | 0 to 40 °C | 15 to 90 % | √ | √ | |
| | | | <±10% 0.2-1 ppm | | | | | | | |
| Carbon Monoxide (CO) 0-25 ppm | GSE | 0.05 nnm | <±0.5 ppm 0-5 ppm | 0.01 nnm | 60 Seconds | 0 to 40 °C | 15 to 90 % | | ✓ · | |
| | 0-23 μμπ | ррпі ч | 0.05 ppm | <±10% 5-25 ppm | 0.01 ppm | 00 Seconds | 01040 C | 15 10 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; $\underline{www.aeroqual.com} \text{ or to download the list, click } \underline{here}.$

Monitor specifications

| SERIES 500 PORTABLE MONITOR SYSTEM SPECIFICATIONS (Included in Starter & Pro Air Testing Kits) | | | | |
|--|---|--|--|--|
| Measurement units | Gas: ppm or mg/m³ 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); 7% x 4¾ x 2½ (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 | | | |



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