Indoor Air Quality Test Kits

Specification Sheet

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

Easy-to-use air quality monitoring kits with everything required to start measuring common indoor pollutants, or for checking compliance to the WELL Building Standard™ (WELL).

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 outdoors.

Kits at a glance

Kit / Contents	Aeroqual Ranger Monitor	Sensors				
		PMX	CO_2	VOC	CO	O_3
IAQ Starter	✓	✓	✓	GSS		
IAQ Pro	✓	✓	✓	PID	✓	
WELL	✓	✓			✓	✓

Who are they for?

- **Health and safety managers** who need to demonstrate safe environments
- **Researchers** who want to collect scientifically robust data on a limited budget
- **Air quality professionals** who need real-time measurements
- **Educators** who want students to learn about air pollution in a way that supports STEM

What are they for?

- Indoor air quality assessments
- Personal exposure checks
- Health and safety compliance
- Health and comfort assessment
- Checking indoor air pollution "hotspots"
- HVAC system performance monitoring
- Indoor air quality studies
- WELL Compliance assessments

Specifications | Indoor 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	PRO	WELL
PMX Particulate Matter (PM$_1$, PM$_{2.5}$ PM$_{resp}$, PM$_{10}$, TSP)	0-30.0 mg/m³	LPC	Zero stability ± 0.1 µg/m³	<±8% of reading	0.1 µg/m³	1 Second	0 to 40°C	0 to 95%	✓	✓	✓
Ozone (O$_3$)	0-0.5 ppm	GSS	0.001 ppm	<±0.008 ppm 0-0.1 ppm <±10% 0.1-0.5 ppm	0.001 ppm	60 Seconds	0 to 40°C	10 to 90%		✓	✓
Carbon Dioxide (CO$_2$)	0-5000 ppm	NDIR	20 ppm	<±20 ppm + 5%	1 ppm	120 Seconds	0 to 40°C	0 to 95%	✓	✓	
Carbon Monoxide (CO)	0-100 ppm	GSE	0.2 ppm	<±1 ppm 0-10 ppm <±10% ppm 10-100 ppm	0.1 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	0-25 ppm	GSS	0.1 ppm	<±0.1ppm + 10%	0.1 ppm	60 Seconds	0 to 40°C	10 to 90%	✓		
VOC	0-30 ppm	PID	0.01 ppm	<±0.02ppm + 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), Non-dispersive Infra-red (NDIR). For the full range of available sensors, visit our website; www.aeroqual.com or download the list.

Monitor specifications

Aeroqual Ranger portable monitor system specifications (Included in Starter & Pro Air Testing Kits)	
Measurement units	PM: mg/m³, µg/m³ | Gas: ppm, ppb, mg/m³, µg/m³
Displayed measurements	Instantaneous, 1-minute and 5-minute averaged concentration AQI for PM$_{2.5}$ (Cal/OSHA)
Field calibration	Gas sensors: Zero and Span PM sensor: Zero, Span and Flow
Factory calibration	Traceable certified calibration certificate valid for 1 year Hot-swap sensor option available. Hot swap is a factory calibration program that delivers a factory-calibrated sensor head to you without the hassle of sending your old one back (see Aeroqual distributor)
Environmental operating conditions and Ingress Protection	Temperature: -10ºC to 40ºC (14ºF to 104ºF) Humidity: 0 to 95% RH non-condensing IP Rating: IP20
Power	Battery type: Lithium Ion Battery life: >20 hours Charger connector: USB-C Recharge time: approximately 4.5 hours
Data logging	Storage: 5 years on-board Logging interval: 60 seconds
Software	Aeroqual Cloud for Ranger
Data connectivity	Wi-Fi, USB-C cable file download, Analogue 0-5V output
Physical characteristics	Size: 170 x 83 x 37 mm (6¾" x 3¼" x 1½") Weight: 430g (15 oz)
Compliance	IEC/EN 61326-1 EN 55011:2010 AS/NZS CISPR 11:2011 IEC/CISPR 11:Ed.5.1 FCC Part 15 IEC 61010-1:2010+A1:2016AU/NZ: AS 61010.1; Europe: EN 61010-1:2010 + A1:2019; Canada: CAN/CSA-C22.2 No. 61010-1-12 3rd Edition; USA: UL 61010-1 3rd Edition RoHS 3 (EU 2015/863), REACH

Specifications are subject to change without notice.

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