

Portable Ozone Monitor

nanO₃™

The nanO₃ Portable UV Ozone Monitor has the reliability and accuracy of larger models with the added benefits of small size and versatility. An intuitive and simple interface allows for out-of-the-box operation with no training or special expertise.

The nanO₃ displays real-time ozone concentration and has a built-in data logger that allows for 16 GB storage and easy transfer to an external device via USB port.

Method of Measurement

Using Ultraviolet Atomic Absorption at 254 nm allows for high accuracy measurements with low ppb detection limits. The state-of-the-art UV LED light source allows for superior performance, long life, and minimal interferences compared to other technologies.

Key Features

- ▶ Compact, portable design built for extended field use
- ▶ 4.25" color touchscreen display with a modern, user-friendly interface for simple operation and data readings
- ▶ Sample conditioning to eliminate moisture interferences
- ▶ Optional GPS for data logging specific measurement locations
- ▶ Internal rechargeable battery with up to 8 hours of operation
- ▶ Long Lasting UV LED Light Source
- ▶ Fast Response Time

Applications

- ▶ Air Quality Monitoring
- ▶ Industrial Hygiene
- ▶ Research Monitoring and Measurements
- ▶ Individual Exposure Monitoring
- ▶ Health and Safety Monitoring
- ▶ Motor Vehicle Emissions and Roadside Monitoring
- ▶ Medical/Pharmaceutical
- ▶ Ozone Disinfection
- ▶ Semiconductors
- ▶ Food and Beverage
- ▶ Water Treatment





Accessories

- ▶ Data Retrieval/Charging Cable
- ▶ Power Supply/Charger
- ▶ Data Retrieval Software
- ▶ Particulate Filter (2)
- ▶ Zero Filter
- ▶ Product Manual
- ▶ Hard Enclosure Case
- ▶ External GPS Antenna for Signal Enhancement (Optional)
- ▶ Soft Carrying Case (Optional)
- ▶ External Backup Battery (Optional)

Other Available Models

- ▶ 19" Rack-Mount Enclosure
- ▶ Tabletop Enclosure
- ▶ Wall-Mount Enclosure



Technical Specifications

Measurement Principle	UV Absorption at 254 nm
Linear Dynamic Range	0 ppb to 10 ppm
Resolution	0.1 ppb
Precision (1 σ ; rms noise)	Greater of 2 ppb or 2% of reading
Limit of Detection (2 σ)	3.0 ppb
Accuracy	Greater of 2 ppb or 2% of reading
NIST-Traceable Calibration	Yes
Measurement Intervals	10 Seconds
Flow Rate (nominal)	~0.5 liter/min
Baseline Drift	<2 ppb/day / <5 ppb/year
Sensitivity Drift	<1%/day / <3%/year
Measurement Time/Frequency	10 Seconds
Response Time, T90	<30 Seconds
Data Storage	16 GB
Ozone Units	ppb
Pressure Units	atm
Temperature Units	C
T and P Corrected	Yes
Sample Temperature	0 to 60°C (non-condensing)
Operating Altitude/Pressure	~0-13.5 km (150-1,013 mbar)
Battery	Up to 8 hours of operation (varies depending on settings)
Size (without external accessories)	8 in. x 4.5 in. x 1.5 in (203 mm x 114 mm x 38 mm)
Weight	1.5 lb. (0.68 kg)
Data Transfer Baud Rate	115200
GPS	Yes

Please Note: Specifications are subject to change and may differ based on instrument settings, operating conditions, and sample matrix.