KEY FEATURES:

- Accurate, Real-Time Dust Concentration Monitoring
- Simple Operation
- Built-In DataLogger
- Purge Air System/ Automatic Zero
- WiFi, RS-485 & USB Communication

The Met One Instruments, Inc Aerocet 380 is a nephelometer that offers real-time airborne TSP (total suspended particulate) concentration levels using the principle of forward laser light scatter. This instrument is ideal for sampling in any indoor workplace or public place environment with optional separators to monitor PM$_1$, PM$_{2.5}$, or PM$_{10}$.

Optical Sensor

Met One's forward laser light scatter technology offers uniquely broad particle size detection. The all-new Aerocet 380 has an ultra low detection limit, down to 0.1-micron particle size and 1.0 µg/m^3 particle sensitivity, with a unit detection range of 0 to 100,000 µg/m^3. The continuous flow optical sensor is coupled with purge air to ensure accurate measurements in a wide range of environments without performance degradation.

Highly Portable

This sleek, aluminum, all-in-one desktop instrument provides continuous sampling with an AC adaptor or 8 hours with batteries that fully charge in less than 3 hours. The Aerocet 380's user-friendly interface comes complete with download utility software easily accessed via Wifi.

User-adjustable sample times include 1-, 5-, 10-, 15-, 30-minute, and 1-hour intervals which facilitates environmental profiling in various applications. Ideal for both long-term or remote sampling, a large display offers ease in viewing from across the room.

User-Friendly

Two buttons and a rotary dial enable easy access to menu-driven setup and sampling. The Aerocet 380 offers selectable sample modes of $\mu g/m^3$ or mg/m^3 and alphanumeric location IDs, giving the user the ability to identify a unique name to a location or sampling area. This dust monitor can store up to 15,000 sample records which are easily accessed on-screen or downloaded to a computer with the included utility software.

APPLICATIONS:

- Indoor Air Quality Investigation
- Industrial Hygiene Quality Control
- Occupational Health Control
- Particulate Matter Studies
- Workplace & Plant Monitoring
- Dust Generation/ Suppression Evaluation
- Industrial Process Monitoring
- Testing Air Filtration Efficiency
- Aerosol Research Studies
- Baseline Trending & Screening

Measurement Principles:	Particulate concentration by forward light scatter laser Nephelometer.
Measurement Range:	0 to 100 mg/m³ (0 to 100,000 µg/m³)
Measurement Sensitivity:	0.001 mg/m³
Nephelometer Accuracy:	± 5% traceable standard with 0.6 µm PSL
Particle Size Sensitivity:	0.1 to 100 µm. Optimal sensitivity 0.5 to 10 µm particles
Long-term Stability:	5% with clean optics
Laser Type:	Diode Laser, 5 mW, 670 nm; Visible red
Display:	3.5" color LCD
Flow Rate:	2.0 liters/ minute ± 0.1 LPM. Actual volumetric flow
Pump Type:	Brushless Diaphragm (20,000 hour)
Power:	Input: 14.8 V Li Battery, Output: 16.8 VDC @ 1.8 A
Power Consumption:	5.25 W
Digital I/O:	RS-485, USB-C, WiFi
Purge Filter:	0.01 µm (99.99% in air)
Pump Filter:	5.0 micron
Serial Communication:	ASCII, MODBUS
Internal Data Storage:	>15,000 records
Operating Temperature:	0° C to +40° C
Ambient Humidity Range:	0 to 90% RH, non-condensing
Factory Service Interval:	24 Months typical, under continuous use in normal ambient air
Unit Weight:	2.3 kg (5.1 lbs)
Unit Dimensions:	21.6 cm height, 15.2 cm width, 21.0 cm depth (8.5" x 6.0" x 8.25")
Available Cut Points:	PM_1, $PM_{2.5}$, or PM_{10} separators optional

SUPPLIED ACCESSORIES

- Li-Ion Smart Charge w/ Power Cord
- TSP Sampling Cap
- Sample Tube
- USB-C Comm Cable
- RS-485 Comm Cable
- Operation Manual
- NIST Certificate of Calibration

OPTIONAL ACCESSORIES

- PM_1 Sharp Cut Cyclone (SCC 111)
- $PM_{2.5}$ Sharp Cut Cyclone (SCC 112)
- PM_{10} Sharp Cut Cyclone (SCC 110)

Specifications are subject to change at any time.

Met One Instruments