

Aerocet 831

Handheld Particulate Mass Monitor

The Aerocet 831 is a completely portable, fully featured, battery operated, handheld mass monitor for indoor air quality monitoring. This device simultaneously provides five critical air particulate mass ranges (PM₁, PM_{2.5}, PM₄, PM₁₀, & TSP), displaying results within one minute from start up.

Survey the indoor air quality of your environment with the easy to use, extremely portable, size selective Aerocet 831.

Weighing only 28 ounces, this compact handheld air quality monitoring instrument is the perfect tool for a wide range of indoor air quality assessment applications.



Features

The Aerocet 831 is simple to operate with two front-panel buttons used with the multifunction rotary scroll wheel to provide user-friendly and efficient operation. Just press and rotate to scroll through the menudriven platform. With the Aerocet 831 one can view particulate count sample history easily on the display, or export data via the USB port using the included COMET software.

The Aerocet 831 stores up to 2,500 sample events internally. The USB interface provides quick data downloads and field firmware upgrades. The Aerocet 831 provides up to 24 hours of typical intermittent operation or 8 hours of continuous use on a full battery charge. Battery recharge time is only 2.5 hours.

- Fast sampling.
- · Simple operation.
- · Selectable particulate sizes.
- · Low cost.
- · Includes data logging.
- · Self contained and portable.
- Produced by industry-leading ISO Certified facility.
- Time-tested reliability backed up by a 1-year Warranty.

Applications

- · Controlled Environments.
- Public Space Monitoring.
- Workplace Monitoring.
- · Indoor Air Quality Monitoring.
- · Process Control.
- · HVAC Applications.
- Trace Contamination Sourcing.
- · Quality Assurance (QA) Programs.
- · School Air Quality Monitoring.
- Environmental Health and Safety Management.





Specifications

FEATURES

Sample Duration: 1 Minute

Sample Modes: Manual and Continuous

Data Storage: 2,500 Records

Display: 2-line by 16 character LCD

Controls: 2 button keypad with rotary dial

PERFORMANCE

PM Ranges: PM₁, PM₂₅, PM₄, PM₁₀, & TSP

Concentration Range: 0 - 1,000 µg/m³

Resolution: $0.1 \,\mu\text{g/m}^3$ (display / serial output)Sensitivity:High = $0.3 \,\mu\text{m}$, Low = $0.5 \,\mu\text{m}$ Accuracy: $\pm 10\%$ to calibration aerosol

Flow Rate: 0.1 CFM (2.83 lpm)

ELECTRICAL

Light Source: Laser Diode, 780 nm, 40 mW typical

AC Adapter/Charger: AC to DC module, 100 - 240 VAC to 8.4 VDC

Battery Type: Li-ion rechargeable Battery

Battery Operating Time: 8 hours continuous operation. Up to 24 hours intermittent operation.

Battery Recharge Time: 2.5 hours typical **Communication:** USB Mini B Type

PHYSICAL

Weight: 1.74 lbs - 28 ounces - (0.79 kg)

Size: Height: 6.25" (15.9 cm), Width: 3.63" (9.22 cm), Thickness: 2.00" (5.08 cm)

ENVIRONMENTAL

Operating Temperature: 0° to +50°C

Storage Temperature: -20° to +60°C

Supplied Accessories

- · Battery Charger/Adapter.
- · USB Cable.
- · Operation Manual.
- · Calibration Certificate.
- · Comet Software.



optional Accessor

- $\cdot \text{ Carrying Case.} \\$
- · Protective Boot.
- · Zero Filter Kit.
- · Flow Meter Kit.

