

Indoor Air Monitoring Aerocet 831 Handheld Particle Counter

The Aerocet 831 is a full-featured, battery operated, handheld mass monitor or particle counter and completely portable unit. A mass monitor that simultaneously provides five important mass ranges (PM1, PM2.5, PM4, PM10) in one minute. Survey the environment with this extremely portable, size selective mass monitor. This small lightweight instrument is only 28 ounces and is the perfect survey tool for a wide range of applications.



Operation

The Aerocet 831 is simple to operate with two front-panel buttons that accompany the multifunction rotary scroll wheel to provide simple and efficient operation. Just press and rotate to scroll thru the menu driven platform. With the Aerocet 831 you can view sample history easily on the display or export data via the USB port using the included software. Unit stores up to 2500 sample events. USB interface provides quick data download and field firmware upgrades. The Aerocet 831 has 24 hours of typical intermittent operation and up to 8 hours of continuous use. Recharge time is only 2.5 hours. The included AC charger / adapter operates the counter even when the batter pack is discharged.

Features

- Four Mass Ranges (PM1, PM2.5, PM4, PM10)
- Handheld Operation
- Sample History
- Low Cost w/ Data Logging
- Battery Powered

Applications

- Industrial/occupational hygiene
- Point source location monitoring
- Indoor/Outdoor Air Quality
- Process Control
- HVAC Applications
- Filter Testing
- Mining & Ore Processing
- Remote Sampling

Operating Principle

Particle count to mass conversion.

Specifications

Performance

PM Range:	PM1, PM2.5, PM4 and PM10
Concentration Range:	0 – 1,000 µg/m ³
Resolution:	0.1µg/m ³ (display / serial output)
Sensitivity:	High = 0.3 µm, Low = 0.5 µm
Accuracy:	± 10% to calibration aerosol
Flow Rate:	0.1 cfm (2.83 lpm)
Sample Duration:	1 minute
Data storage:	2,500 records

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 24 hour intermittent operation
Battery Recharge Time:	2.5 hours typical
Communications:	USB Mini B Type
Certifications:	Meets or exceeds CE, ISO, ASTM, and JIS international certification

Interface

Display:	2-line by 16-character LCD
Controls:	2 button keypad with rotary dial
Data Memory:	2,500 records
Power Supply / Charger:	Yes
Software:	Yes

Physical

Size:	Height: 6.25" (15.9 cm) Width: 3.63" (9.22 cm) Thickness: 2.0" (5.08 cm)
Weight:	1.74 lb (28 oz) (0.79 kg)

Environmental

Operating Temperature:	0° C to +50° C
Storage Temperature:	-20° C to +60° C

Accessories

Supplied:	Operation Manual Battery Charger / Adapter USB Cable Comet Software
Optional:	Carrying Case (PN 8517) Protective Boot (PN 80450) Zero Filter Kit (PN 80846) Flow Meter Kit (PN 80530)

Specifications are subject to change at any time