



Met One Instruments

# 831 Aerosol Mass Monitor

Small - Reliable - Affordable

## Four Mass Ranges (PM1, PM2.5, PM4, PM10)

A mass monitor that simultaneously provides data of four important mass ranges in one minute.

## Handheld Operation

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.

## Simple Operation

Only two front-panel buttons accompany the multifunction rotary scroll wheel to provide simple and efficient operation. Just press and rotate to scroll thru the menu driven platform.

## Sample History

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.

## Battery Powered

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.



Figure 1 – Model 831 pictured with optional protective boot

## Applications

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

**Whatever your particular needs,  
The right choice is only natural.**

## Operating Principle

Particle count to mass conversion

## Features

Sample Duration	1 minute
Data storage	2,500 records
Display	2-line by 16-character LCD
Controls	2 button keypad with rotary dial

## Performance

PM Ranges	PM1, PM2.5, PM4 and PM10
Concentration Range	0 – 1,000 µg/m <sup>3</sup>
Resolution	0.1µg/m <sup>3</sup> (display / serial output)
Sensitivity	0.5µm
Accuracy	± 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 24 hour intermittent operation
Battery Recharge Time	2.5 hours typical
Communication	USB Mini B Type

## Physical

Size	Height: 6.25" (15.9 cm) Width: 3.63" (9.22 cm) Thickness: 2.00" (5.08 cm)
Weight	1.74 lbs – 28 ounces – (0.79 kg)

## Environmental

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

## Accessories

Supplied	Battery charger / adapter USB Cable Operation manual Comet software
Optional	Carrying Case (P/N 8517) Protective Boot (P/N 80450) Zero Filter Kit (P/N 80846) Flow Meter Kit (P/N 80530)



## Contact :

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