

## Particle / Dust Monitor

# Digital Aerosol Monitor Model 3431

## Compact Dust/Aerosol Monitor



**Indoor Air Quality Investigation**  
**Industrial Hygiene**  
**Health & Safety Applications**  
**Exposure Monitoring**  
**Manufacturing Process Control**

### Features:

- State-of-the-art components based on advanced light-scattering technology
- Compact and Light Weight
- Easy operation

### Benefits:

Accuracy is ensured to meet the latest needs of dust measuring in extremely clean indoor environments  
 All measurements can be made with a touch of a button on the front panel.

Allows the user to pre-enter the known concentration conversion value and let the unit automatically convert the dust count into mass concentration

### Specifications

Measuring Method	Light Scattering Method
Measuring Object	Aerosol particles, $\phi$ 10 $\mu$ m or smaller
Measuring Range	0.001 – 3.999mg/m <sup>3</sup> (1 – 9999cpm, 1cpm=0.001mg/m <sup>3</sup> for $\phi$ 0.3 $\mu$ m stearic acid particles)
Accuracy	+/-10% of reading +/-1cpm (or 0.001mg/m <sup>3</sup> )
Linear Characteristics	+/- 5% of reading
Measuring Time	1 minute / 3 minutes / 10 minutes with built-in timer, and continuous mode
Light Source	Laser diode
Detector Ph	oto diode
Operating Environment	35 – 104 F (5 – 40 C) under 85%RH
Display	4-digit LCD, dust count value (cpm), relative mass concentration value
Indicators	Cleaning, measuring mode, battery status, concentration conversion operation, zero point confirmation
Output	Analog output, 0 – 10,000cpm = 0 – 4V
Power Supply	AC 100V adapter and dry cell batteries (6 x AA batteries)
Dimensions	6.4" x 2.4" x 3.9" (162 x 62 x 100mm) not including the nozzles
Weight	2.2 Lbs. (1kg) not including batteries
Accessories AC	adapter, micro-screwdriver, alkaline dry cell batteries (6 x AA) shoulder strap
Options	Carrying case, Soft case, Analog output cable