

EPAM-5000

Electronic Monitor for Measuring EPA PM Criteria

- **Fast and easy setup**
- **Highly sensitive from 0.001 to 20.0 mg/m³ for particles 0.1 to 100 µm**
 - Optional 0.01 to 200 mg/m³ range available
- **Accuracy ± 10% to NIOSH Method 0500 using SAE fine test dust**
- **High correlation to EPA PM10 methods and TEOM®**
- **Internal air sample pump for 4.0 L/min flows***
- **Unique aerodynamic particle-sizing real-time sensor**
 - Use optional EPA FRM-style cassette holder for gravimetric reference
- **Immediate display and data storage**
- **Internal temperature compensation for ambient use**
- **Interchangeable size-selective sampling heads for EPA parameters**
 - PM10, PM2.5, PM1.0, and TSP
- **Rugged, waterproof carry case**
- **Rechargeable lead-acid battery for up to 24-hour operation**
 - Continuous monitoring with AC adapter
- **Easy four-key menu-driven operation**
- **Audible alarm**
- **Stores up to 15 months of data**
 - RS232 digital output
- **Easy-to-use data analysis software included**
- **Large, easy-to-read display**
- **Portable and compact**
 - 6 x 14 x 10 inches (15.2 x 35.6 x 25.4 cm)
 - 12 pounds (5.4 kg)
- **RFI/EMI shielded; CE marked**
- **Real-time clock and data display**



Description

The HAZ-DUST EPAM-5000 is a portable microprocessor-based particulate monitor suitable for ambient, environmental, and indoor air quality investigations. Highly sensitive, this monitor uses light scattering to measure particle concentration and provide immediate real-time determinations and data recordings of airborne particle concentration in mg/m³. Interchangeable size-selective sampling heads allow PM10, PM2.5, PM1.0, or TSP monitoring. The EPAM-5000's unique aerodynamic particle sizing and 47-mm in-line filter holder loaded with the appropriate filter provide concurrent gravimetric sampling. Sample for up to 24 hours on one battery and store up to 15 months of monitoring data. Data can be downloaded to and stored on a PC for further analysis using included DustComm Professional Software. Trend analysis and management-ready reports can also be generated. The EPAM-5000 can interface with the VDM-7500 wireless video dust exposure monitoring system.

* Internal pump has variable flow rate designed for use at 4.0 L/min to achieve proper size-selection with EPAM impactors.



New EPAM-5000 Features

- User-programmable start and stop time for unattended data collection
- On-screen user-selectable sampling parameters retained in memory for quick, easy deployment when sampling parameters remain unchanged
- Wireless data transmission option transmits data up to 10 miles
- Improved DustComm Pro PC Software provides:
 - Greater flexibility in graphical reports — create and label in new “draw and paint” program
 - Trend analysis
 - Live data feed and logging from wireless data transmission
- Interfaces with the VDM-7500 wireless video exposure dust monitoring system

EPAM-5000 Applications

- Quantifying off-site particulate migration
- Surveying for PM2.5 and PM10
- Monitoring dust generation during drilling and excavation
- Evaluating dust suppression and engineering controls
- Locating and identifying “hot spots”
- Emergency response and fugitive emissions compliance
- Determining level of respiratory protection
- Survey of workplace for OSHA/EPA compliance
- Evaluating worker exposure to airborne contaminants
- Dust collector/ventilation system checks
- Monitoring lung-damaging particles in factories and buildings
- Complementary instrument for all EPA and OSHA personal and ambient particulate air sampling procedures




Notice: This publication is intended for general information only and should not be used as a substitute for reviewing applicable government regulations, equipment operating instructions, or legal standards. The information contained in this document should not be construed as legal advice or opinion nor as a final authority on legal or regulatory procedures.


Performance Profile

Sensing range:	0.001 to 20 mg/m ³ 0.01 to 200 mg/m ³ (optional)
Particle size range:	0.1 to 100 µm
Precision:	± 0.003 mg/m ³ (3 µg/m ³)
Accuracy:	± 10% to NIOSH Method 0500 using SAE fine test dust
Sampling flow rate:	4.0 L/min with variable adjustment
Filter cassette holder:	47 mm
Alarm output:	90 db at 3 ft
Analog output:	0 to 4 vdc
Recording time:	1 sec to 15 mos
Sampling rate:	1 sec, 10 sec, 1 min, and 30 min
Data storage:	21,600 data points
Security code:	4-digit combinations
Memory and time storage:	> 10 yr
Data display:	Concentration in mg/m ³ and TWA, MAX, MIN, STEL, DATE, and Time
Digital output:	RS232
Operating temperature:	-10 to 50 C
Storage temperature:	-20 to 60 C
Power:	Rechargeable lead-acid battery
Operating time:	≥ 24 hrs
Charging time:	10 to 12 hrs
Dimensions (case):	6 x 14 x 10 in (15.2 x 35.6 x 25.4 cm)
Weight:	12 lbs (5.4 kg)

Ordering Information

Each kit contains the EPAM-5000 monitor with a specific cut-point sampling head, battery and charger (110-240 V), filter cassette holder, DustComm Professional Software (Windows 2000, NT, ME, and XP compatible), computer cable, manual, and carry case.

Description	Cat. No.
EPAM-5000 Monitor Kit with 10-µm sampling head 	770-203
EPAM-5000 Monitor Kit with 2.5-µm sampling head 	770-202
EPAM-5000 Monitor Kit with 1.0-µm sampling head 	770-201
Calibration Standard	770-207
Filter Holder, 47 mm, for gravimetric sampling, requires filter sold separately	770-215

 Requires calibration with equipment sold separately.

Optional accessories and interchangeable sampling heads available.
Call SKC for more information.

