



HAZ-DUST Model DPM-4000 Personal Real-Time Diesel Particulate Monitor

The Haz-Dust Real-Time Diesel Particulate Monitor Model DPM-4000 is a complete and personal portable package that allows true breathing zone measurements and comprehensive graph reporting. The product is designed for measuring diesel particulate matter for Industrial Hygiene and Environmental air investigations. DPM-4000 is individually worn and offers immediate determination and data storage of airborne diesel particulate concentrations in micrograms per cubic meter. This is the only commercially available personal direct reading aerosol monitor specifically designed and calibrated for measuring occupational exposures of diesel particulate matter in the work place.

Diesel powered equipment usage is widespread and growing. Worldwide diesel exposures occur in transportation, mining, agriculture and other industries. Diesel particulate matter (DPM) studies have consistently found positive association as a human carcinogen. Diesel particulate exposures adversely affect human respiratory and cardiovascular health. The DPM-4000 Diesel Particulate Monitoring kit comes complete with GS-1 Respirable Cyclone and one 37mm sampling cassette preloaded with quartz filter. The inline 37mm filter cassette allow the user to concurrently collect filter samples for carbon analysis by NIOSH method 5040.

The signal processing electronics and microprocessor are enclosed in a compact case that attaches to the individual's waist. A real-time display reports concentrations in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Statistics such as: TWA, STEL, Max, and Minimum can instantly be viewed on the display. The internal user adjustable alarm can be preset to alert the user of approaching dangerous threshold limits.

Accompanying software provides management ready graphs and reports. DPM-4000 is an excellent survey compliance tool for determining worker exposure to diesel contaminants, diesel engine combustion efficiency, evaluating levels of respiratory protection, or any application that requires immediate and accurate air monitoring of lung damaging diesel particulates.

New Diesel Particulate Monitor Model DPM-4000



DPM-4000 Monitor Complete with SKC GS-1 Cyclone and Filter Cassette



True Breathing Zone Measurements with Optical Infrared Sensor

Applications

- Diesel Engine Surveys
- Combustion Efficiency
- Mining
- Transportation (i.e. Bus Depots, Trucking, & Freight)
- Valuable Survey Tool for MSHA & NIOSH Compliance Program – Reviews or any air monitoring applications involving lung damaging diesel particulate matter

Features

- Direct Read Out in $\mu\text{g}/\text{m}^3$
- Comfortable Light Weight
- Miniaturized Sensor Design
- Adjustable Alarm Signal
- Enhanced Accuracy
- Splash-Proof
- On Screen Display of Statistics
- Data Logging
- RFI/EMI Protection

DPM-4000 Specifications

Display: Alpha-numeric LCD-4line, 20 character mg/m^3 concentration reading

Operations: Four key splash proof membrane switch – menu driven

Calibration: NIOSH gravimetric reference NIST traceable – SAE fine test dust

Accuracy: +/- 10% to filter gravimetric SAE fine test dust

Particulate Size Range: <1 to 10 μm

Precision: +/- 2 $\mu\text{g}/\text{m}^3$

Sample Flow Rate: 1.0 – 3.3 liters/minute (recommend flow 1.7 LPM)

Filter Cassette: 37mm disposable

Analog Output: 0-2 vdc

Alarm Output: 90db at 3ft

Recording Time: 1 second to 21 weeks

Sampling Rate: 1 second, 1 minute, and 10 minute intervals

Concentration Range: 1-20,000 $\mu\text{g}/\text{m}^3$

Data Storage: 21,500 data points

Security Code: 4 digit combinations

Memory & Time Storage: ≥ 5 years

Real-time Clock and Data Display: Hours, minute, second, day, month, & year

Data Display: Concentration in $\mu\text{g}/\text{m}^3$ & TWA, MAX, MIN, STEL, date, & time

Digital Output: RS-232

Operating Temperature: 0 to 50° C

DustComm Pro Software:

Windows™ Driven

Power: NiMH Rechargeable Battery

Operating Time: ≥ 8 hours

Charging Time: 10-12 hours

Humidity: 95% non-condensing

Dimensions (case): 5.5" x 3.25" x 2.75"

Sensor Dimensions: 1.75" x 1.5"

Weight: 2 lbs

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