

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

**NEW!**

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  $\text{mg}/\text{m}^3$  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  $\mu\text{m}$

**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:**  $\geq 5$  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:**  $\geq 8$  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

**Environmental Devices Corporation**  
4 Wilder Drive, Bldg. 15 • Plaistow, NH 03865  
Phone: (603) 378-2112 • Fax: (603) 378-2113  
[www.hazdust.com](http://www.hazdust.com)