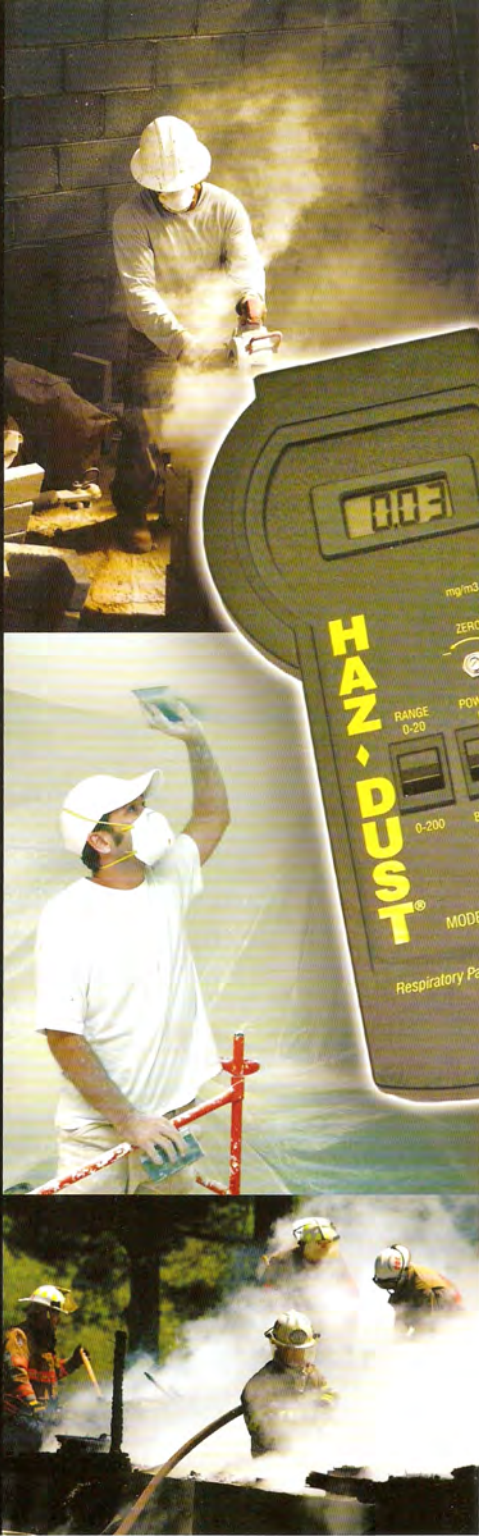


# HAZ-DUST®

Real-Time Particulate Air Monitors

[www.hazdust.com](http://www.hazdust.com)



# Model HD-1100

Respiratory Air Monitor

Calibrated for US OSHA Respirable Dust  
and Occupational Health Applications



## DL-103 Data Logger

For HD-1100 Monitor

For Data Collection and Statistical Analysis

# Model HD-1100 - Real Time Dust Monitor

## Setting new standards in respiratory monitoring

**HAZ-DUST** uses the latest in infrared technology which provides accurate and instantaneous data on airborne particle concentrations, in accordance with the regulatory NIOSH method 0600 for lung damaging Respirable particulates.

**HAZ-DUST** saves money by eliminating repetitious and costly gravimetric air sampling and the associated time delays involved with laboratory analysis.

With **HAZ-DUST** your results are determined easily and immediately displayed.

By continuously monitoring lung-damaging particles **HAZ-DUST** protects the respiratory health of industrial personnel and

reduces any potential liabilities, in addition to reducing the cost of your regulatory air monitoring program.

When coupled with the **DL-103 Data Logger**, maximum automation is achieved for

data collection, statistical analysis, graphs and detailed report generation. Software is completely Windows™ compatible and easy to use.

If your company is concerned with air quality and its effects on workers & the community, the **HAZ-DUST** will help you comply with federal regulations for respiratory safety.



## For All Types of Dust and Aerosols

- Lead
- Coal
- Chromate
- Dry Chemicals
- Grain
- Silica
- Wood
- Nuisance dust
- Heavy Metals/PCB's
- Construction dusts
- Welding fumes
- Concrete/Cement
- Pharmaceutical dust
- Paint Spray
- Toxic Soil Remediation

## Applications

- Determining level of respiratory protection
- Survey of workplace for OSHA/EPA compliance
- Qualifying off site particulate migration
- Surveying for PM-10 and TSP levels
- Monitoring dust generation during drilling/excavation operations
- Evaluating dust suppression and engineering controls
- Locating and identifying "Hot Spots"
- Emergency Response & fugitive emissions compliance
- Evaluating worker's exposure to airborne contaminants
- Dust collector/ventilation system checks
- Monitoring lung damaging particles in factories & buildings
- Can be used in all OSHA & EPA personal and ambient particulate air sampling applications

## Features

### Easy operation

Turn the instrument on and your results are immediately calculated.

### High Sensitivity

Sensitive enough to monitor all OSHA/NIOSH reference methods. Sensitivity down to 0.01mg/m<sup>3</sup>.

### Low Battery Indicator

Alerts the user when the battery needs recharging, so the unit is ready when you are.

### Data Logging

DL-103 Data Logger and software provides management ready statistical reports. Allows for a complete time vs. concentration profile, which is impossible to obtain with filter/gravimetric techniques.

### Rugged Construction

Lightweight case is able to withstand harsh environments and rough handling. A unique design provides protection against RFI/EMI waves (emitted from radios, transmitters, etc.), which affects the precision of many measuring devices.

# Model DL-103 - Data Logger



LCD display (liquid crystal display) that prompts the operator through all menus.

Data review and analysis is displayed directly on the LCD screen. Dustcomm Pro Software provides further analysis. Windows™ application software package designed to operate with IBM and compatible PC's. Data transmission from the data logger to computer is accomplished through an RS-232 communications port.

The DL-103 Data Logger is an advanced recording device specifically designed for storing aerosol data from the Haz-Dust line particulate monitor. The large memory allows storage of up to 21,500 data points and a sampling range from 1 second to 21 weeks. The DL-103 does not require specialized system set-up and calibration. The system-up configuration is stored in nonvolatile memory. A four key user-friendly switch pad is used in conjunction with a 4 line, 20-character alphanumeric



Measuring Oil Mist Particulate Concentration in machining application

Hand-held Haz-Dust Model HD-1100 Particulate Monitor connects to data logger DL-103 on user waist belt and provides computer graphs and OSHA ready reports.

## DustComm Pro Software

DustComm is a powerful and flexible Windows™ application software package designed for use with the Haz-Dust Particulate Monitoring Equipment.

DustComm is both communications software that enables stored project data to be downloaded to a PC, and a data manipulation tool, enabling detailed analysis and reporting of sampled data.

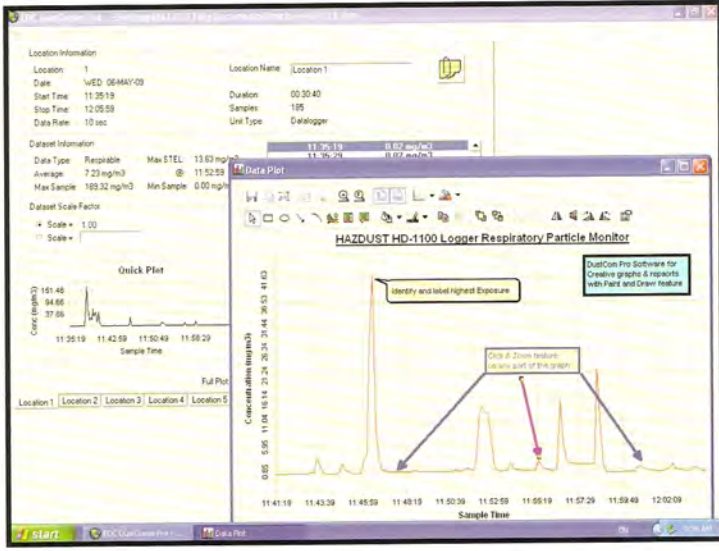
### Spreadsheet Applications

DustComm easily translates data into spreadsheet programs such as Microsoft Excel.

### Data Plots

The data plots provided with DustComm enable:

- Detailed statistical analysis
- The creation of graphics and charts
- The mathematical correction of particle characteristics when aerosol significantly differs from calibration dust.



**Environmental Devices Corporation** is a manufacturer of scientific instrumentation specializing in real-time monitoring of particulates, gases, and meteorological equipment. Since its incorporation in 1990, EDC has designed and commercialized several advanced product lines of air monitoring equipment. All Products are highly portable, light weight and compact. EDC has gained worldwide recognition and is committed to ISO-9001 quality standards in accordance with requirements and procedures of ANSI/ASQC.

**Particulate Monitors Also Available:**



*Breathing Zone Measurements*  
**Haz-Dust IV HD-1004 Personal Real-Time Dust Monitor**



*Direct Reading Ambient PM-10 and PM-2.5 Air Sampling*  
**EPAM-5000 Real-Time Environmental Particulate Air Monitor**



*Indoor Air Quality Monitor*  
**Air-Aide AA-3500 Airborne Particulate Monitor**



*Fix Point Continuous Aerosol Monitor*  
**AQ-10 Industrial Air Quality Monitor**



*Low cost Filter Based PM-2.5 and PM-10 Air Sampler*  
**Dust-Sol DS-2.5 Portable Particulate Ambient Air Sampler**



*Direct Reading Dust & Video Monitor to Record Visual Proof of Exposure*  
**VDM-7500 Wireless Video Dust Monitoring System**



*Personal Direct Reading Diesel Particulate Monitor*  
**Haz-Dust DPM-4000 Diesel Particulate Monitor**

See Our website for gas and meteorological product information

**[www.hazdust.com](http://www.hazdust.com)**

**Custom Manufacturing Design Services Available**



Manufactured by:  
**Environmental Devices Corporation**

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**HD-1100 HAZ-DUST Specifications**

10µm Particulate Monitor HAZ-DUST with concentration range 0.01-200mg/m<sup>3</sup>

**Display:** LCD 3.5 digits mg/m<sup>3</sup> concentration reading  
**Calibration:** Gravimetric reference NIST Traceable - SAE fine test dust-ISO12103-1  
**Sensing range:** 0.01-200mg/m<sup>3</sup>  
**Particle size range:** 0.1-50µm  
**Precision:** +/- 0.02mg/m<sup>3</sup>  
**Accuracy:** +/-10% to NIOSH #0600  
**Power:** 6VDC NiMH rechargeable battery  
**Operating time:** >8 hours  
**Charging time:** 10-12 hours  
**Signal output:** 0-2 volt  
**Humidity:** 95% non-condensing  
**Dimensions:** 9"x3"x1.5"  
**Weight:** 1.25lbs

**DL-103 Data Logger Specifications**

Single channel, 3 keys programmable operation. Real-time clock display with on screen calculation of statistics

**Number of Channels:** single channel  
**Input Voltage:** 0-2 voltage  
**Resolution:** 0.1mv  
**Real-Time Clock:** User-programmable display in days, hours, minutes & seconds  
**Recording Rime:** programmable from 1 minute to 12 hours  
**Sampling Rate:** 1 or 2 sec. per sample display: 4 line, 15 character alphanumeric LCD  
**DustComm Pro Software:** Window™ driven for graphical and data translation  
**Output:** RS-232C, programmable baud rate of 9600  
**Power:** 9.6V rechargeable Ni-cad batteries  
**Operating temperature:** -20°C to 60°C  
**Storage Temperature:** -20°C to 60°C  
**Humidity:** less then 95% or non-condensing  
**Dimensions:** 7 x 3.5 x 2.5 inches  
**Weight:** 1lbs.

**Accessories**

TP-111 Tripod Stand  
CS-111 Calibration Standard  
ZA-111 Zeroing Accessory  
KK-101 Cleaning Kit

**ISO-9001 Certified**

