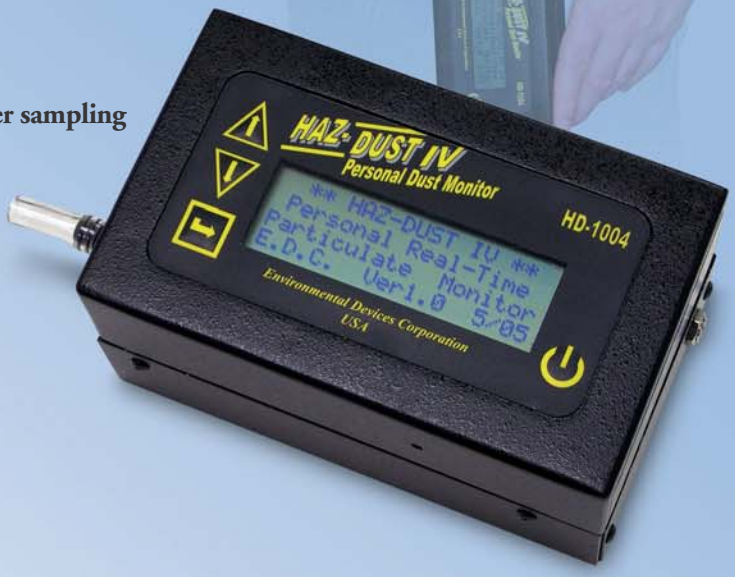
New!

HAZ-DUST IV

It's Small, It's Personal, It's Real Time

- **Immediate display of particle concentration in mg/m^3**
  - TWA, STEL, Max, and Min
- **Miniaturized sensor mounts directly in breathing zone**
- **Easily interchangeable sampling heads for true breathing zone measurements of specific fractions**
  - Inhalable adapts to IOM Sampler to meet the ACGIH/ISO/CEN inhalable curve
  - Thoracic sampling head meets the ACGIH/ISO/CEN thoracic curve
  - Respirable adapts to SKC GS-3 Cyclone to meet the ACGIH/ISO/CEN respirable curve
- **Internal adjustable sample pump — 1 to 3.3 L/min**
- **In-line cassette directly behind sensor for concurrent filter sampling**
  - Use sample to correct data for local dust
- **User-adjustable alarm**
- **User comfort**
  - Small, lightweight case easily attaches at the waist
  - Miniature sensor clips in the breathing zone
- **Easily download data to a PC**
- **DustComm Pro Software provides comprehensive graph reporting**
- **Easy operation**



The HAZ-DUST IV personal real-time aerosol monitor, with new infrared detector, provides you with immediate breathing zone measurements of aerosol and dust for industrial hygiene and environmental air investigations. The small, lightweight unit attaches onto a worker's belt while the miniature sensor easily clips to a worker's collar. Select from inhalable, thoracic, or respirable sampling heads to target a specific fraction. An in-line 37-mm cassette behind the sensor allows the user to collect a concurrent filter sample for gravimetric or chemical analysis. A user-adjustable alarm may be set to alert the user to approaching threshold limits. When monitoring is completed, use the included DustComm Pro Software on a PC to download data from the HAZ-DUST IV and produce management-ready graphs and reports.

Easy-to-use HAZ-DUST IV

Four simple keys and menu-driven instructions displayed on an easy-to-read LCD make HAZ-DUST IV operation easy. Simply select from the menus the desired particle type, connect the appropriate sampling head to the sensor, and place a filter in the filter cassette behind the sensor if collecting a concurrent filter sample. Zero the unit and then clip the sensor to a worker's collar. Attach the HAZ-DUST IV onto the worker's belt. Use the four-button keypad to begin monitoring.

SKC®

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HAZ-DUST IV Aerosol Monitor

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HAZ-DUST IV Sampling Heads

- **Inhalable —** SKC IOM Sampler (Cat. No. 225-70A) with adapter (Cat. No. 770-4204)

- **Thoracic —** sampling head included with the HAZ-DUST IV

- **Respirable —** SKC GS-3 Cyclone (Cat. No. 225-103) with adapter (Cat. No. 770-308)

Principle of Operation

HAZ-DUST IV operates on the principle of near-forward light scattering of infrared radiation. It immediately and continuously measures the concentration of airborne dust particles and displays the result in mg/m^3.

What is near-forward light scattering? *This measurement technique uses an infrared light source positioned at a 90-degree angle from a photodetector. As the airborne particles enter the infrared beam, they scatter the light. The amount of light received by the photodetector is directly proportional to the aerosol concentration. Unique signal processing internally compensates for noise and drift.*

Applications

- Determining levels of worker respirator protection for OSHA compliance
- Reviewing compliance programs
- Evaluating work practices and controls of any dust-generating practice
- Performing safety audits
- Combine with NIOSH video exposure monitor for real-time graphical overlays
- Monitoring welding fume exposures
- Performing air quality studies in occupational health and industrial hygiene
- Performing Haz-Mat air quality investigations and monitoring waste site remediation
- All air monitoring applications involving lung-damaging particulates

Performance Profile

Accuracy:	± 10% to filter gravimetric SAE fine test dust
Sensing Range:	.01-200 mg/m^3
Particulate Size Range:	0.1 to 100 µm
Precision:	± 0.02 mg/m^3
Calibration:	NIOSH Method 0600 gravimetric reference - NIST-traceable SAE fine test dust
Sample Flow Rate:	1.0-3.3 L/min
Power:	Rechargeable NiMH battery
Operating Time:	≥ 8 hours
Charging Time:	10-12 hours
Data Storage:	21,500 data points
Digital Output:	RS-232
Dimensions:	Case: 5.5 x 3.25 x 2.75 in (14 x 8.3 x 7 cm) Sensor: 1.75 x 1.5 in (4.4 x 3.8 cm)
Weight:	2 lbs (0.9 kg)

Ordering Information

Description		Cat. No.
HAZ-DUST IV Monitor includes monitor, thoracic head, in-line filter cassette, carry case, computer cable, battery charger, HAZ-DUST Media CD with instruction manual, and DustComm Pro Software C!	110 V	**770-4004**
	220 V	**770-4004B**
Sampling Heads		
Inhalable Sampling Head, IOM Sampler, mounts on HAZ-DUST IV sensor		**225-70A**
Adapter for IOM Inhalable Sampling Head, required when using IOM		**770-4204**
Thoracic Sampling Head, mounts on inlet or HAZ-DUST IV sensor		**770-4103**
Respirable Sampling Head, GS-3 Cyclone, mounts on HAZ-DUST IV sensor		**225-103**
Adapter for GS-3 Cyclone Respirable Sampling Head, required when using GS-3 Cyclone		**770-308**
Accessories		
Calibration Standard for Monitor for verifying span and optical sensor performance		**770-110**
Calibration Chamber for calibrating and setting pump airflow when using respirable sampling head		**225-112**
Zeroing Accessory, for clean-air zeroing of HAZ-DUST IV sensor when using inhalable sampling head		**770-4202A**
Zeroing Filter, for use with respirable and thoracic sampling heads		**770-4102**
Replacement Battery Pack, NiMH		**770-4105**
Chargers	110 V	**770-4104**
	220 V	**770-4104B**

C! *Requires calibration with equipment sold separately.*

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