

MODEL

HD-1620

Multi-parameter, hand-held, real-time respiratory air monitor for measuring all lung damaging particles and aerosols

Designed specifically for firefighters, first responders, and OSHA/EPA compliance

The Only Hand-Held Monitor To Offer:

- **Cal/OSHA AQI** displayed and recorded for PM-2.5
- **Single large button "Go/No Go"** for easy rapid deployment
- Gloved hand operation
- Measures and records temperature, humidity, barometric pressure, GPS, PM mass concentration and particle number count
- Infield calibration verification
- Optional Wi-Fi, Bluetooth, Cellular, and networking capabilities
- Designed for easy on-site user maintenance and service



ENVIRONMENTAL DEVICES CORPORATION
Easily Deployable. Flexible. Intuitive.
U.S.A.

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HD-1620 identifies potential respiratory problems **before they become health concerns**

For All Types of Dust and Aerosols

- Smoke and Fires
- Silica
- Lead
- Coal
- Pharmaceutical Dust
- Paint Spray
- Toxic Soil Remediation
- Chromate
- Grain
- Dry Chemicals
- Wood Dust
- Nuisance Dust
- Heavy Metals
- Construction Dusts
- Welding Fumes
- Concrete/Cement
- Urban AQI Monitoring
- Office IAQ
- Ventilation efficiency

Key Hand-held Features

- **Cal/OSHA AQI** displayed and recorded for PM-2.5
- **Single large button "Go/No Go"** for easy rapid deployment
- Gloved hand operation
- Light weight
- Measures temperature, humidity, barometric pressure, GPS, PM mass concentration and Particle Number Count
- Infield calibration verification
- Audible and Visual Alarms"
- PM-2.5 AQI
- Impactors for PM-10, PM- 5.0, PM-4.0, PM-2.5, PM-1.0
- Programable start/stop time
- Optional Wireless Remote Networking
- Real-Time Rolling Graphical Display
- Designed for easy on-site user maintenance and service
- Large color display with user adjustable backlight for easy viewing under any conditions
- Multiple language options
- OSHA TWA, min, max, cumulative average along with STEL and ceiling alarms





The HD-1620 is a multi-parameter, hand-held, real-time, respiratory air monitor, designed specifically for firefighters, first responder and industrial hygienists. The instrument can be held in the hand, strapped around the hand, worn on a belt clip, turnout gear, or mounted on a tripod. It offers a large one button "Go/ No Go" feature for quick, rapid, and easy deployment.

The large color display with user adjustable backlight provides easy viewing under any conditions for clear visualization of mass concentration or particle number count along with a color coded AQI delivered from the Cal-OSHA Air Quality Index.

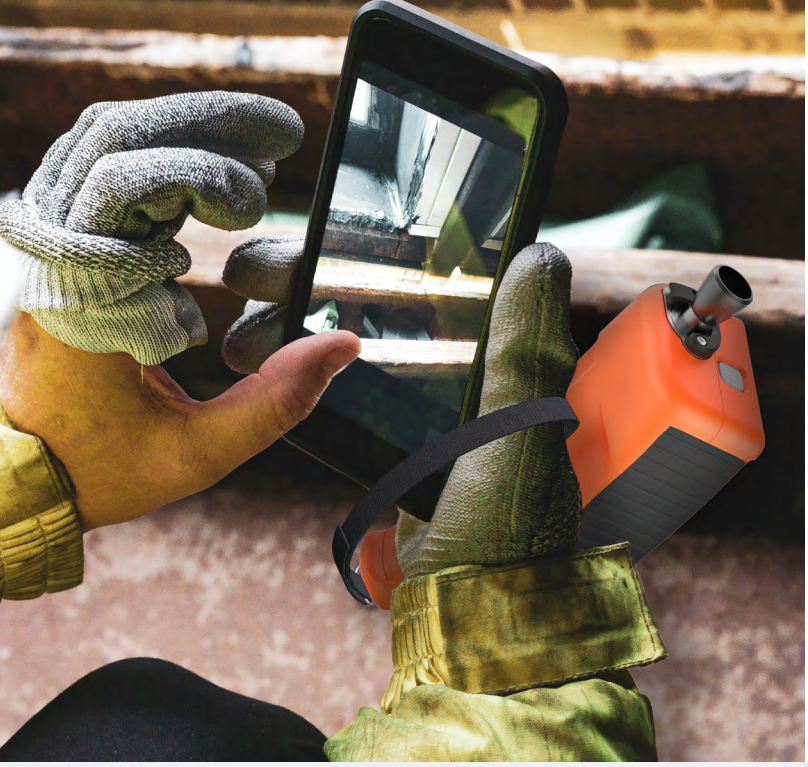
The HD-1620 also offers temperature, humidity, barometric pressure and GPS along with PM-TSP, PM-10, PM-5.0, PM-4.0, PM-2.5 and PM-1.0. The instrument also offers a number count within a selective size PM fraction.

The color display offers large font sizes and graphics with sufficient back light for quick glances at the instrument values. Users can also select to view a real-time rolling graph with user defined ceiling and S.T.E.L. alarms. Users have the ability to easily view real-time parameters from one screen for a quick assessment of current conditions.

The easy to use instrument will identify health concerns in real-time and allow employers to set up engineering controls for workers such as a N95 mask, SCBA respiratory protection ventilation controls, evacuation and/or reentry plans.

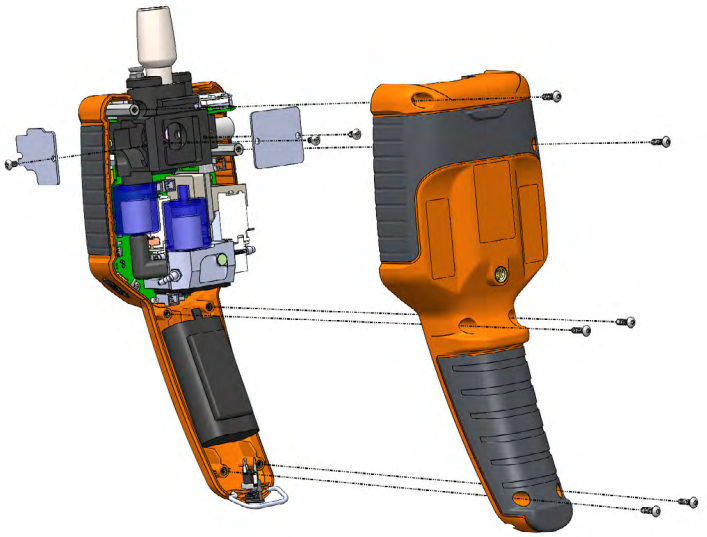
The HD-1620 offers GPS location and the ability to network multiple devices and have the data transmitted to a central command post, which can be a useful tool when multiple persons are deployed in the field.

The HD-1620 comes complete with comprehensive PC software allowing users to upload data parameters into the software or export to meet their needs. Data can also be viewed in real-time and viewed from a central command post when configured with wireless options.



Can be used with video exposure monitoring like NIOSH EVADE software

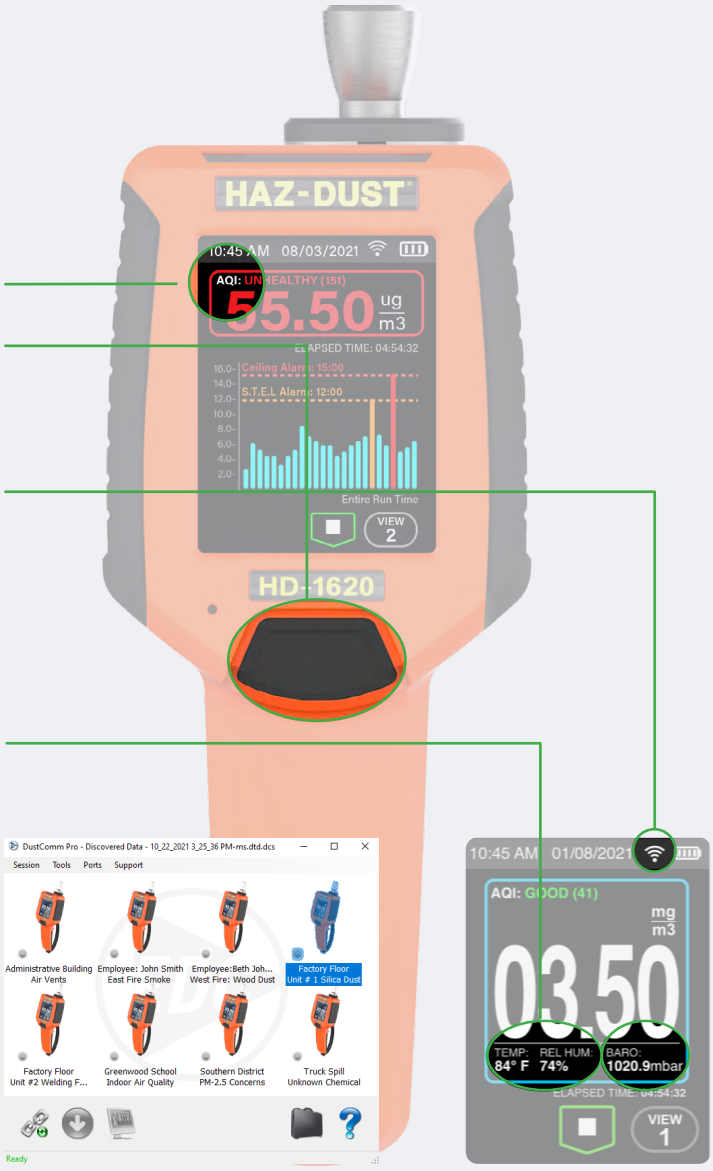
The HD-1620 allows users to easily service and clean the device, *reducing factory maintenance*



HAZ-DUST HD-1620

Features and Benefits

- **PM-2.5 AQI** derived from Cal OSHA enables users guidance in adhering to new rules and regulations
- **Single large button "Go/No Go"** for easy rapid deployment
- **Automatic calibration verification** gives users peace of mind and documentation for compliance
- **Wireless remote networking** for real-time remote data of up to 8 instruments to a central command post
- **Measures and records** PM, AQI, Temperature, Relative Humidity, and Barometric Pressure help to indicate heat stress and changing environmental conditions. Paired with GPS this can be a powerful tool when considering workers' health and safety
- **Particle Number Count,** within a size selective fraction, for enhanced characterization
- **The ability to name data sets** through the touch screen allowing for organized data reporting.
- **Users can enter calibration factors** through the touch screen. Building a library of aerosol profiles saves time and money on filter gravimetric.
- **Large color graphical display** with sufficient back-light helps quickly identify parameters in real-time.
- **Touch screen entry** allows users to make quick on the spot assessments and changes to all settings while preventing accidental touches and false entries.



HAZ-DUST HD-1620 ***is equipped with two viewing screens***

HD-1620 Specifications

Sensors	**Sensor Type:** 90° light scattering 880nm **Calibration:** Calibrated against Gravimetric reference NIST traceable- SAE fine test dust ISO12103-1 A2 Fine Test Dust. **Accuracy:** +/- 10% to filter gravimetric SAE fine test dust **Precision:** +/- 2 ug/m3 or 0.002 mg/m3 **Sensing Range:** 0.001-500 mg/m^3 or 1-500,000 ug/m^3 **PM Size Range:** 0.1 to 100µm **Minimum Resolution:** 1 $ug/m3$ or 0.001 mg/m^3 **Zero Stability:** +/- 1ug/m3 or 0.001 mg/m^3 over 24 hours using 10 second log rate. **Humidity:** 95% non-condensing **Temperature:** 0-50 C°/32-122 F° **Barometric Pressure:** 28-2.5-30.75 Hg 956.6-1041.3 mb
Display	3.5", 24-bit True color, Resistive Color Touch, with Auto Dimming
Real-Time Data Display	**Time:** Hours, min., sec., 12hour & 24 hour **Date:** MM/DD/YYYY, YY/MM/DD, DD/MM/YY **Data Display:** Concentrations (mg/m^3, ug/m^3), Sampling Size Fraction of PM (OSHA TWA, AVE., MAX., MIN.), Start time, stop time, elapsed run time, Log rate, Flow, Real-Time Rolling Graph, Personalized Named Data Sets, Unique Aerosol Profiles, Language Options, Battery Life Pump Faults, Flow Rate, In Field Calibration Test, History of Data Sets
Sampling Flow Rate	1.5 LPM user adjustable.
Impactors TSP and PM-1.0	PM10, PM5.0, PM4.0, PM2.5
Alarm Output	Audible & Visual **Audible:** 90db at 3ft Ceiling and S.T.E.L Alarms, Pump Fail, and Low Battery
Recording Time	1 second to 15 days Sampling Rate: 1 sec., 4 sec., 10 sec., and 60 sec
Data Storage	43,200 data points

Memory & Time Storage	>5 years
Digital Output	Micro USB 6.00' (1.83m), A Male to Micro B Male, 28SWG, Shielded
Power Supply	Wall Mount, Multi Bald Included, Voltage Input 100~240 VAC, Voltage Output 12V, Current Output 2A, CE, UL, CB, cUL, PSE, RCM
Battery	Lithium Ion pack, 7.4 Volt 3350 mAh, 24.79 watts
Operating Time	10 hours
Operating & Storing Conditions	**Operating Temperature:** 0 to 50°C **Storage Temperature:** -20 to 70°C **Operational Humidity:** 0-95% Non-Condensing
DUSTCOMM Pro Software	Windows™ driven Windows 10 or greater
Maintenance	**Zero Calibration:** Before each use **In Field Calibration Verification:** Before each use **Flow Calibration:** Before each use. Will automatically change when switching PM selective size. **Sensor Cleaning:** By user when needed/ or during annual calibration **Factory Calibration:** Annually or when instrument fails infield calibration verification.
Weight and Dimensions	**Dimensions:** 10"x 3.5" x 1.5" **Weight Instrument:** 1.4lbs **Display dimensions:** 3.5"
PM Sensor	**Sensor Type:** 90° light scattering 880 nm Calibrated against Gravimteric reference NIST traceable - SAE fine test dust ISO12103-1 A2 Fine Test Dust.
Optional Accessories	PM Impactors: TSP, PM-10, PM-5.0, PM-4.0, PM-2.5, PM-1.0

Optional Wireless Connectivity available. Contact EDC for specifications.

For more information on HD-1620, or to learn more about other particulate monitors available, contact us.

Specifications are subject to change without notice.
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ENVIRONMENTAL DEVICES CORPORATION U.S.A.
Our instruments detect what's in the air we breathe.

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Environmental Devices Corporation is a manufacturer of scientific instrumentation specializing in real-lime 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 quality standards in accordance with requirements and procedures of ANSI/ASQC.

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