

Personal Samplers

RESPICON™ Particle Sampler

The RESPICON is a multi-stage virtual impactor that traps airborne dust onto three individual collection filters. You determine the mass of deposited dust by comparing before and after filter weights.

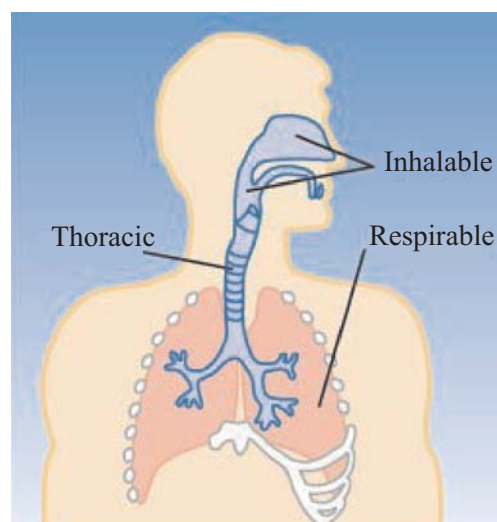
Personal Size-selective Sampling Made Easy

The effect of inhaled particles depends on where they deposit in the respiratory tract. Exposure sampling must reflect the physiology of the human body to be useful. This can only be accomplished through the use of a particle size selective sampling method that models the human respiratory tract.

The RESPICON Particle Sampler is a lightweight, compact device for measuring human exposure to airborne particle concentrations in the workplace. The RESPICON uses a single sampling head to model the human respiratory tract and simultaneously determine the three most critical particle fractions: inhalable, thoracic, and respirable. These three size fractions represent the size of particles that can penetrate progressively deeper into the respiratory system.

How the RESPICON Particle Sampler Works

The RESPICON is a multi-stage, virtual impactor that traps airborne particles onto three individual collection filters. The mass of deposited particles is determined by comparing the filter weights before and after sampling. Airborne particles corresponding to the inhalable fraction are drawn into the RESPICON through a ring-gap sampling inlet via a conventional personal sampling pump. Coarse particles pass straight through to the lower collector while other particles are aerodynamically separated onto the appropriate filter. The first virtual impactor stage separates out and collects the particles smaller than 4 microns. The second stage collects particles below 10 microns, while the third stage collects the remaining particles. The inherent design advantages of virtual impaction allow the RESPICON to avoid many of the sampling problems common to conventional impactors. You can normally sample for an extended period of time without the concern of overloading. Particle bounce losses are eliminated and there is no need for messy grease traps.



ECM ECO Monitoring

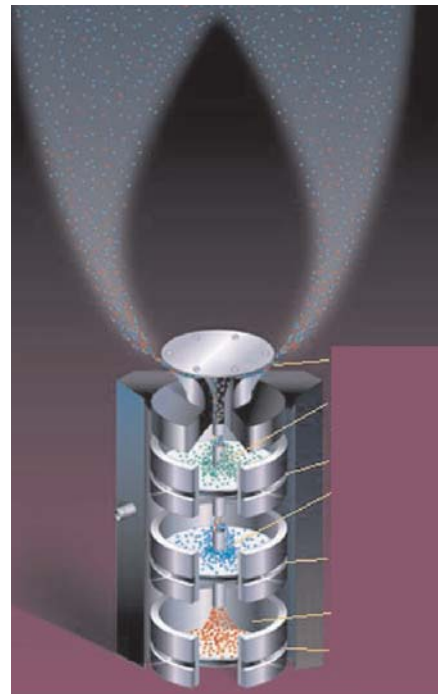
Environmental & Process Monitoring instrumentation & systems

Features

- Separates relevant dust fractions simultaneously
- Permits gravimetric, microscopic, and composition analysis of samples
- Includes integrated clip for personal harness mounting
Lightweight and compact
- Easy to use
- Threaded for tripod mounting

Applications

- Epidemiological studies
- Personal workplace sampling
- Area workplace sampling
- Process monitoring
- Particle size analysis



SIDEPAK™ AM510 Personal Monitor

The SIDEPAK™ AM510 Personal Monitor for industrial hygiene and safety professionals displays and data logs concentration in real time. The rugged, belt-mountable laser photometer is compact and quiet, minimizing interference and worker discomfort. The built-in sampling pump lets you attach a wide variety of size-selective aerosol inlet conditioners for breathing zone or area measurements with a respirable cyclone or one of the three integrated impactors. The SIDEPAK™ monitor incorporates the Smart Battery Management System. This system utilizes a built-in "gauge" in the battery packs to monitor battery condition and provide precise run time information. The SIDEPAK™ monitor's easy-to-read display shows your data as both real-time aerosol mass-concentration and 8-hour time-weighted average. The monitor's **intrinsic safety rating** makes it ideal for hazardous/explosive environments. With its convenient data logging and long battery life, the SIDEPAK™ is also ideal for extended sampling. The easy-to-use [TRAKPRO™ Data Analysis Software](#) lets you create effective graphs and reports.



User Friendly

- Small, lightweight and quiet to maximize worker acceptance
- Rugged design with secure belt clip
- Easy-to-understand user interface with only four keys
- Lockable keypad prevents tampering while sampling
- User-adjustable sample flow rate
- Define, label and store multiple calibration constants
- Easy-to-read LCD display
- Convenient, threaded tripod socket accommodates area sampling

Advanced Features

- Smart Battery Management System provides precise run time information, maximizes battery capacity and speeds charging
- Integrated pump allows use of size-selective aerosol inlet conditioners
- Built-in impactors let you choose “none,” 1.0, 2.5 or 10-micron cut off
- Display shows real-time concentrations (mg/m³) and “on-the-fly” TWA as you data log
- Display statistics: max, min and average readings, elapsed time and 8-hour TWA
- Smart battery system maximizes run time, speeds charging, and computes remaining capacity

Quick and Easy Reports

- Convenient preprogramming for occupational exposure sampling
- Data log for long periods and store multiple tests
- Analyze data, print graphs and create reports with TRAKPRO software
- USB port lets you conveniently connect to your computer

