

## NANOSCAN SMPS NANOPARTICLE SIZER 3910

SKU: 3910

The TSI NanoScan SMPS spectrometer opens the door to routine nanoparticle size measurements. This revolutionary sizer fits a TSI SMPS Spectrometer into a portable package that is about the size of a basketball. Easy to use, lightweight and battery-powered, the NanoScan SMPS spectrometer enables investigators to collect valuable nanoparticle size data. The NanoScan SMPS spectrometer is suitable for a variety of applications, such as a multitude of mobile studies, workplace exposure monitoring, point source identification, and student lab education. Derived from TSI core technologies, the NanoScan SMPS spectrometer is an innovative, cost effective solution for real-time nanoparticle size measurements.



## PRODUCT DETAILS

Weighing less than 20 pounds (including two hot-swappable batteries), the NanoScan SMPS Model 3910 measures nanoparticle size distributions from 10 to 420 nm in one minute. Its internal CPC uses isopropyl alcohol as a working fluid, so the NanoScan is suitable for use in a variety of sensitive environments. Single particle mode allows the user to monitor particle concentrations of a single, user-set particle size. Data logging is built in to the instrument, so measurements may be made without the use of a laptop.

As a package, i.e. the Model 3910 combined with the Optical Particle Sizer Model 3330 enables users to measure three orders of size magnitude from 10 nm to 10 µm. These instruments are affordable, portable, and provide real-time data that can be merged with the multi-instrument manager (MIM) software. Used already for cabin measurements in cars and airplanes, the sky is literally the limit when it comes to new applications.

## BENEFITS

- Real-time nanoparticle size measurements
- Ideal for applications that demand portability
  - On-road
  - Work place surveys
  - Field studies
  - Point source identification
- Enables users to collect more data from more sites
- Opens up the possibility of simultaneous temporal and spatial measurements
- Provides new investigators opportunities to move into nanoparticle emission/exposure measurements and nanotechnology
- Easy for students and industrial workers to operate
- Streamline data analysis and data reporting with NanoScan Manager software

## APPLICATIONS

- General applied research
- Indoor/outdoor air quality investigations
- Nanotechnology/nanoparticle applications
- Combustion/emission research
- Mobile studies
- Health effects/inhalation toxicology
- Occupational hygiene/workplace exposure monitoring
- Point source identification

## INCLUDED ITEMS

- NanoScan SMPS Nanoparticle Sizer
- NanoScan Manager software CD
- NanoScan Accessory Kit

## FEATURES & BENEFITS

- Size distributions down to 10 nanometers

- Two measurement modes:
- SCAN - real-time size distributions
- SINGLE - single size concentration monitoring
- 1 minute size distributions; 1 second single size data
- Simple, stand-alone operation
- Built-in data logging
- Small and portable
- ~6hour battery life, with hot swappable, rechargeable batteries
- Concentrations up to 1,000,000 particle/cm<sup>3</sup>
- NanoScan Manager software package
- No radioactive materials
- Multi-Instrument Manager Software for use with the Optical Particle Sizer Model 3910