P-TRAK[™] Ultrafine Particle Counter



Providing a comfortable, safe and healthy indoor environment is a growing concern today and indoor air quality can be one of the toughest challenges. TSI's P-TRAK Ultrafine Particle Counter can help solve some of the most elusive air quality problems faced today.

The Problem

The most persistent air quality complaints are sometimes linked to ultrafine particles. At less than one-tenth of a micron in diameter, these particles are products of combustion or other chemical reactions. They can originate outside or inside building environments, and their sources include vehicle exhaust, stack emissions, industrial processes, battery charging, filter and gasket leaks, smoking, cooking, laundry, cleaning agents and office equipment. Individual sensitivities and reactions to ultrafine particles vary greatly but can be extreme.

The Solution

The P-TRAK Ultrafine Particle Counter utilizes TSI's proven condensation particle counting technology. With this real-time, portable instrument, just follow a pollutant "pathway" to pinpoint its source for repair or other action. These elusive sources are often missed completely when using conventional testing methods. The very smallest particles are often the ones of greatest concern. With its range of 1 micron down to 0.02 microns, the P-TRAK is designed to detect these small particles. This advanced technology makes the P-TRAK very effective for checking filters, finding gasket leaks and identifying other pollutant pathways. Once found, the sources can be isolated from occupied space.

The Method

The easy-to-use P-TRAK gives fast and reliable realtime results. By taking outside particle counts as reference measurements and setting indoor expectations, the P-TRAK can then be used to quickly locate and zero-in on unexpected levels that may be the origin of complaints. Once a problem is located, take appropriate action and then move on to the next source until the complaints end.



Specifications P-Trak Model 8525 Ultrafine Particle Counter

Concentration Range Particle Size Range Temperature Range Operation Storage Flow Rate Sample Total **Power Requirement** Battery type Battery life Alcohol Requirement Type Hours per charge RS232 Output Memory Single points Data logging

Size

Weight Instrument with batteries Factory Recalibration Interval Warranty Computer Requirements 0 to 5×10^5 particles/cm³ 0.02 to greater than 1 micrometer

32 to 100°F (0 to 38°C) -40 to 160°F (-40 to 70°C)

100 cm³/min 700 cm³/min (nominal)

6 AA alkaline 6 hrs at 70°F (21°C)

100% reagent grade isopropyl 8 hours at 70°F (21°C) Baud rate 9600

470 1,000 hours at one-minute intervals. A maximum of 141 separate tests.¹ 10.75 in. \times 5.5 in. \times 5.5 in. (27 cm \times 14 cm \times 14 cm)

3.8 lbs (1.7 kg) One year Two years on parts and labor ² PC with Microsoft Windows[®] 95, 98, or NT, Me, 2000 or XP; Windows-compatible printer; 5 MB hard disk space; and available RS232 serial port (for downloading)

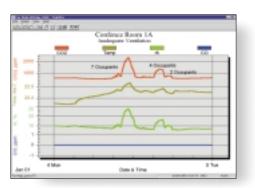
¹ The P-TRAK will operate with an AC adapter for long periods but the alcohol wick must be resaturated every 8 hours when operating over an extended time.
² Warranty repairs returned via overnight carrier at TSI expense.

Specifications are subject to change without notice. Windows is a registered trademark of the Microsoft Corporation.



Description

P-TRAK Ultrafine Particle Counter and accessories includes: Telescoping Sample Probe, Shoulder Strap, Inlet Screen, Spare Wicks (2), Alkaline Batteries, Alcohol Fill Capsule with Storage Cap, Reagent Grade Isopropyl Alcohol, Zero Filters (2), Carrying Case, TRAKPRO™ Software, Computer Cable, Operation and Service Manual, Calibration Certificate, and Two-year Warranty



Easy-to-use TRAKPRO[™] Data Analysis Software stores, organizes and reports test results.

TSI

TSI Incorporated

500 Cardigan Road, Shoreview, MN 55126 USA Tel: 651 490 2811 Toll Free: 1 800 874 2811 Fax: 651 490 3824 E-mail: answers@tsi.com TSI Germany—Tel: +49-241-523030 Fax: +49-241-5230349 E-mail: tsigmbh@tsi.com TSI Sweden—Tel: +46-18-52-70-00 Fax: +46-18-52-70-70 E-mail: tsi@tsi.se



