



Efficiency Meets
Intelligence
with TSI OmniTrak™
Solution





TSI OmniTrak™ Solution - Where **Efficiency** Meets **Intelligence**

The TSI OmniTrak™ Solution is a cutting-edge ecosystem designed to simplify data monitoring and reporting for industrial and environmental applications. It offers modularity, scalability, and efficiency. With a few simple clicks, generate automated, customizable reports and data visualization in Microsoft Excel®, making analyses quick and easy. Simplify your instrument portfolio and access your data all in one, convenient location with TSI OmniTrak™ Solution.



How is TSI OmniTrak™ Solution **Different**?

▪ Modular, Scalable Platform

Connect up to 10 modules with wireless setup and firmware upgrades. Start small and expand as your needs grow, for a future-proof solution.

▪ Multi-Parameter Sensing

OmniTrak Solution simultaneously measures multiple environmental parameters, including PM, VOCs, CO₂, noise, temperature, and humidity, with synchronized, time-stamped data. Gain instant insights into correlations and variations, enabling better decision-making and deeper analysis through comprehensive data collection.

▪ Multi-Location, Time-Synced Monitoring

Wireless sensors can be distributed across multiple locations, with all data synchronized to a common time frame. Build a complete picture of spatial and temporal trends, quickly identifying sources and tracking changes across rooms, areas, or processes.

▪ Ease of Deployment with Intuitive Interface

Portable modules require no complex setup. Connect and deploy quickly and move easily between locations or projects with minimal effort.

▪ Smart Data Management and Reporting

Real-time visualization on the Smart Station and automated reporting save time and money. Share clear, actionable data to help drive actions.

▪ Speed to Insight and Operational Efficiency

Automated data capture and digital reporting reduce errors and post-processing time. Real-time study visibility and immediate access to results allow users to validate data, make on-site adjustments, and share findings with confidence.

The TSI OmniTrak™ Solution delivers reliable performance at a lower cost. Empower teams, reduce consultant expenses, and save on baseline studies.





Where is OmniTrak™ Solution Used?

From **factory floors to university labs**, this solution is trusted by professionals across industries to answer one of the toughest questions: what's really in the air we breathe and the environments we work in?

In **industrial and occupational health**, safety teams rely on TSI OmniTrak™ Solution to assess exposures, support compliance checks, and monitor workplace conditions that affect both people and processes. In **indoor environments**, consultants and facility managers use it for quick IAQ spot checks, remediation validation, and troubleshooting occupant comfort concerns. For **environmental monitoring and research**, TSI OmniTrak™ Solution makes it possible to map air quality or sound across spatial grids, validate building performance, and provide independent data for consulting studies. And in **facility management**, the system is helping leaders link environmental conditions to comfort, productivity, and ventilation performance – while integrating seamlessly into smart building systems.

TSI OmniTrak Solution also supports **sound and noise monitoring**, from workplace sound surveys to community noise assessments, helping organizations design effective hearing conservation programs and track environmental sound trends.

And for applications requiring **ultrafine particle detection**, TSI OmniTrak Solution pairs seamlessly with the **TSI OmniCount™** portable water-based condensation particle counter – giving **aerosol researchers, environmental scientists, and health professionals** the ability to accurately measure and count ultrafine particles and concentration levels.

Together, these diverse applications show why TSI OmniTrak Solution is gaining traction across industries: it's flexible enough to adapt to your environment, powerful enough to deliver reliable data, and simple enough to make that data clear and actionable.

How does the TSI OmniTrak™ Solution Work?

1

Choose Your Modules

Select the sensors you need to monitor parameters like PM, VOCs, CO₂, sound, and more.



2

Connect Wirelessly

Pair your modules with the Smart Station – no cables or complex setup required.



3

Start Collecting Data

Launch a study with just a few taps.



4

View Results in Real-Time

Monitor live data directly on the Smart Station's intuitive touchscreen.



5

Manage, Analyze and Report

Centralize all your study data for easier decision-making, and generate clear, customized reports using TSI Link™ Report Creator.



TSI Link™ Report Creator

Turning complex environmental data into meaningful insights shouldn't require specialized software or hours of manual work. That's why **TSI Link™ Report Creator**, included with **TSI OmniTrak™ Solution**, is designed to streamline your reporting process from start to finish – no downloads, no advanced training, no hassle.

Built as a powerful Excel® Add-In, Report Creator transforms exported CSV files – whether transferred via USB from the Smart Station or accessed through the cloud-based **TSI Link™** platform – into professional, easy-to-understand reports. Whether you need to identify exposure risks, validate engineering controls, or communicate findings to non-technical stakeholders, Report Creator makes the process faster, clearer, and more impactful.

With purpose-built workbooks, automated statistics, and powerful visualization tools, Report Creator helps you spend less time formatting and more time solving problems. Reports can be co-edited in Microsoft 365, annotated for clarity, and stored securely to meet compliance standards—all ensuring your results help drive real action.



The Workbooks

Basic Analytics Workbook

This workbook provides a straightforward data table with stats, sparklines, and metadata for quick study review or export to other tools. The **multi-parameter chart** lets you compare measurements from multiple instruments, while the **control and trend reports** make it easy to spot spikes, patterns, or early signs of control failures over time. The **correlation report** links your data to other variables – such as air exchange rate, occupancy, or product yield – using regression and R2 values to reveal relationships and guide process improvements.

A-B Comparison Workbook

Compare two datasets—such as **"before vs. after"** or **"fan on vs fan off."** Worksheets automatically calculate improvements or declines across key parameters, helping you show the impact of controls, equipment, or environmental changes.

Inhalation Exposure Workbook

Supports **regulatory-driven reports** by calculating ceiling, STEL, and TWA exposure values for gases, particulates, and VOCs. Includes tools for baseline subtraction, correction factors, and VOC constituent analysis—critical for accurate exposure assessment and recommendations.

Noise Exposure Workbook

Quantifies workplace noise hazards and evaluates **hearing protection devices** (HPDs) using OSHA, ISO, or EU standards. Provides clear visuals and statistics for compliance and training.

Spatial Analysis Workbook

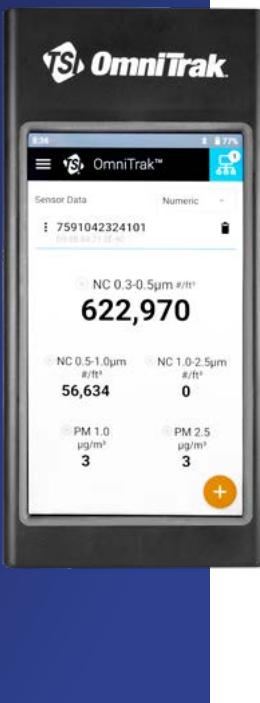
Overlay measurement data onto floorplans or photos for maximum impact. Highlight **hazard hotspots**, PPE zones, or ventilation issues in a way everyone can understand. This workbook is especially effective for communicating risks and recommendations to managers and workers.

With **TSI OmniTrak™** Solution, you don't just collect measurements—you capture the full story of your environment. From smart deployment to clear, actionable reports, **TSI OmniTrak™** Solution gives you the confidence to make decisions that help protect people, improve processes, and deliver results.

The TSI OmniTrak™ Smart Station

The TSI OmniTrak™ Smart Station is a handheld device with an intuitive touchscreen that wirelessly connects to any TSI OmniTrak™ module – multiple at a time.

Measurements appear instantly on the screen, both numerically and graphically, for a complete real-time view. With Bluetooth and Wi-Fi connectivity, setup is quick and seamless, while automatic time-sync ensures data across multiple modules and locations aligns effortlessly. Battery operation gives you flexibility in the field and every Smart Station stays current through over-the-air updates.



Sound Level Meter Module – Class 2

The Class 2 Sound Level Meter (SLM) module measures environmental noise levels making it ideal for occupational health, facility monitoring, and indoor environmental quality assessments. It captures key acoustic parameters such as Leq, peak, and frequency weightings (A/C/Z), enabling users to evaluate exposure risks, compare spaces, and validate noise control efforts.



Ammonia (NH₃) Module

Ammonia is used in cleaning products, refrigeration systems, agriculture, and industrial manufacturing. While it occurs naturally in the environment, high concentrations can irritate the eyes, nose, throat, and lungs – and prolonged exposure can lead to respiratory distress or chemical burns. The NH₃ module helps detect harmful ammonia levels in workplaces and enclosed areas, supporting worker safety, compliance, and ventilation strategies in facilities like food processing plants, laboratories, and chemical storage areas.

Carbon Monoxide (CO) Module

Carbon Monoxide is a colorless, odorless, and potentially deadly gas. Without proper ventilation or maintenance, CO can accumulate to dangerous levels. Monitoring helps ensure occupant safety, identify malfunctioning equipment, and supports compliance with indoor air quality standards.

Chlorine (Cl) Module

Chlorine is a highly reactive and toxic gas that can cause severe respiratory irritation, eye damage, and, at high concentrations, life-threatening health effects. Commonly used in water treatment, cleaning, and industrial processes, accidental leaks or improper handling can pose serious risks to workers and occupants.



Formaldehyde (HCHO) Module

Commonly found in manufacturing, construction, and consumer products, the HCHO module helps detect and monitor formaldehyde levels in workplaces and indoor environments where materials like resins, insulation, adhesives, and disinfectants are used. This module is ideal for identifying potential health risks in laboratories, manufacturing plants, schools, and healthcare facilities.

Ozone (O₃) Module

Ozone is a reactive gas that can cause respiratory irritation, aggravate asthma, and reduce lung function, even at low levels. It can be generated by office equipment, UV devices, and some air purifiers, making it a hidden indoor pollutant. Regular monitoring helps identify sources and protect occupant health.





The OmniTrak™ Modules

Select the modules that match your monitoring needs. For centralized data collection, deploy them throughout your environment, or attach one directly to the Smart Station.



Core Module

The Core module delivers 6 essential indoor air quality measurements in one compact solution. Monitor particulate matter (PM), volatile organic compounds (VOC-electro-chemical ppb), carbon dioxide (CO₂), temperature, humidity, and pressure – all from a single module. Use the data to pinpoint issues, confirm improvements, and compare air quality across spaces.

PM + VOC (ppm) Module

This dual-function module combines particle and gas monitoring in one device – measuring PM1, PM2.5, PM4, PM10 and VOCs up to ppm levels. Powered by a 10.6 eV PID, it delivers efficient, broad-spectrum monitoring for environments with mixed pollutant sources. Ideal for facility managers and consultants who need streamlined tools for fast, comprehensive air quality assessments.



VOC (ppm) Module

The VOC-ppm module measures higher concentrations of volatile organic compounds using a robust 10.6 eV PID sensor. It's suited for industrial, manufacturing, and remediation environments where elevated VOC levels are expected. Monitor emissions, track workplace exposures, and support compliance with safety standards.

VOC (ppb) Module

Designed for high-sensitivity applications, the VOC-ppb module detects trace levels of VOCs using a 10.6 eV photoionization detector (PID). Ideal for indoor air quality assessments, it identifies off-gassing from common products like paints, cleaning agents, and furnishings. Use it to detect early-stage air quality issues and support wellness initiatives in schools, offices, and healthcare settings.



Particulate Matter (PM) Module

Particulate matter, especially fine particles like PM_{2.5}, can pose serious health risks when inhaled. Monitor sources such as smoke, dust, cooking, and cleaning activities to identify pollution hotspots and support healthier environments. Using unique laser-based light scattering particle sensors, the PM module outputs mass concentration data (PM1, PM2.5, PM4, PM10) and particle number concentration data separated into 5 distinct bins.

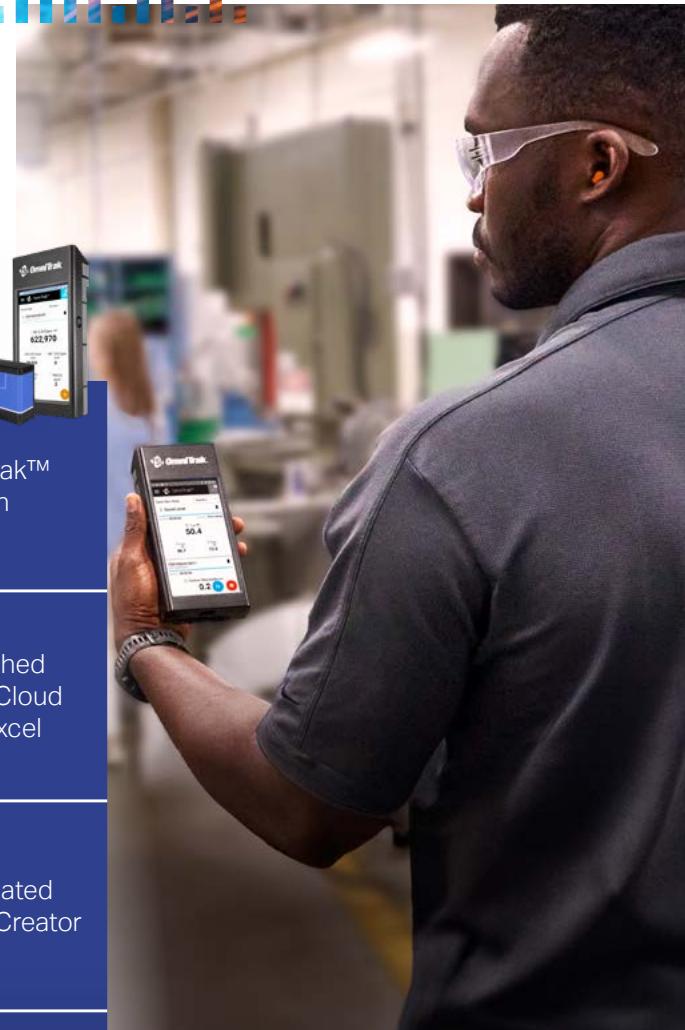
OmniCount™ – Portable Water-Based Condensation Particle Counter

For accurate ultrafine particle (UFP) counts and concentration measurements, the OmniCount Portable Water-based Condensation Particle Counter (PWCPC) provides a versatile, portable, and cost-effective solution.

PRODUCTS

Simplify, Save Time and Take Action

Equipment and Setup	Multiple Instruments	TSI OmniTrak™ Solution
Data Collection and Transfer	Manual Transfer From 3 Softwares Stitched Together	Time Synced Data to the Cloud and into Excel
Data Analysis and Reporting	Manual Analysis and Reporting	Auto-populated Excel Report Creator
Time	🕒🕒🕒	🕒
Cost	\$\$\$\$	\$



Learn more or request a demo at:
tsi.com/OmniTrak



Knowledge Beyond Measure.

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