

# 7650 Autosampler

*Amazing Air Analysis.  
Fully Automated.*





The 7650 Canister Autosampler

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The state-of-the-art in automated whole air analysis.

The 7650 brings the automated analysis of MiniCans™, Bottle-Vacs™, and even large volume sampling canisters to a whole new level. Drawing upon the benefits of its predecessors, the 7650 is the first canister autosampler to facilitate the analysis of up to twenty, 1–1.4L canisters while maintaining samples in a completely closed and isolated state until required for analysis. This level of isolation greatly reduces the potential for carryover, making the 7650 an ideal choice for today's soil gas laboratories. All samples, standards, and blanks, flow through the same direct, inert flow path, eliminating any problematic background level variations – a well-known challenge with rotary valve based autosamplers.

The 7650 features a reliable and precise pneumatic z-axis control along with minimal transfer line sample contact. The brief exposure during sample analysis is immediately followed with a nitrogen flush to greatly reduce any contamination risk due to high sample concentrations. Since the heated transfer line directly inserts into a MiniCan™ or Bottle-Vac™ canister via an ultra-compact MicroValve™ fitting, there is absolutely zero unswept dead-volume.

## Features

- **High or Low Level Analysis**  
*The 7650 Autosampler features stand-alone loop analysis, or pair with the 7200 Preconcentrator for trace analysis.*
- **Analyze up to 20, 1L MiniCans/Bottle-Vacs**  
*The 7650 holds 1 – 1.4L canisters in two, 10-position trays with intersample isolation far beyond that of rotary valve autosamplers.*
- **Toxic Organics Valve™ Compatibility**  
*Now, add MiniCan™ autosampling for your canisters that use the popular TOV™ and Nupro® valves by simply attaching a MicroValve™ to the top of the canister prior to analysis.*
- **Silonite–D® Coated Inlet Lines**  
*The 7650 1/16" heated Inlet line inserts directly into a canister's MicroValve™ for a zero dead volume, secure sample connection. After minimal sample contact during transfer to a Preconcentrator or GCMS, the inlet line is immediately flushed with UHP helium or nitrogen. Carryover is often less than one millionth the concentration of the previous sample!*
- **Extended Autosampling Capacity**  
*Analyze up to 18 additional 6L canisters or Tedlar® bags using expansion ports on the side of the 7650 Autosampler. Now, you can analyze any canister in your inventory using proven "direct inlet" reliability.*



16 Position Tedlar® Bag Tray

## A Canister Autosampler with the amazing Precision you need for today's demanding air analysis challenges.

When paired with a 7200 Preconcentrator, the 7650 becomes an ideal autosampler solution for today's laboratories that must routinely analyze both high and low concentration samples. The 7650 also includes an easily accessible, generous array of inlet expansion ports in banks of 9, for the analysis of up to 18 large canisters or Tedlar® bags.

## Applications

- Volatiles in Ambient Air
- Soil Gas / Vapor Intrusion
- Indoor Air Quality / Mold Microbial VOC Detection
- Landfill Gas
- Remote Headspace Analysis (Vacuum Samplers)
- HDS™ MiniCan™ and Bottle-Vac™ Analysis
- HDS™ Personal Monitor Analysis

Five fixed ports are available to facilitate the introduction of UHP Nitrogen, Internal Standard, Calibration Standard, and two additional fixed ports without using up sample tray positions.



The 7650's amazing single inlet system is designed to easily handle 1 - 1.4L MiniCans™ and 1L Bottle-Vacs™. Smaller canisters / vials can be analyzed using optimized trays. Add up to 18 additional canisters or Tedlar® bags with the 7650's expansion ports, or analyze / screen 6L canisters directly using the new 6L canister tray.

New Option!

**MillionAir™**  
Advanced injection control  
10<sup>6</sup> Concentration Range without Dilution



#### The 7200 Preconcentrator and 7650 Canister Autosampler

Introducing the all-new 7200 | 7650-M, MillionAir™ Analysis System. The most advanced instrumentation ever developed for the analysis of volatile and light semi-volatile compounds in air and soil gas. Now, you can choose to analyze any size canister in your inventory with the quality assurance of direct inlet robotics. The 7650-M features the new MillionAir™ option and the ability to rapidly screen samples up to 100 PPM via direct 0.1cc loop injection into a GCMS without any trap exposure.

The 7200 and 7650-M canister autosampler minimizes carryover when exposed to high concentration samples by combining brief sample contact time, zero dead-volume canister connections, and Accu-Sample™ technology found in the 7200. Accu-Sample™ control completely isolates samples within specific, low-volume flow-path segments, and prevents trap exposure during important sample select and preflush operations. The 7200's built-in loop option allows as little as 0.1cc to be precisely controlled and injected. The result is greater dynamic range and a reduction in the number of sample dilutions required when analyzing Soil Gas and other high-concentration samples.

## Direct Inlet Robotics

The 7650 features a single inlet with a Silonite-D® coated and heated transfer line for the best possible sample isolation and analytical accuracy.

## Extended Range Air Analysis

The 7200 | 7560-M System features a wide volume range (0.1 to 1000cc) for increased dynamic range without dilution. Directly handle PPM level samples without carryover. Supports single canister calibrations.

## Two Modes of Operation

Connect directly to a GCMS for loop injection analysis of 0.05–1000 PPM level samples, or use with a 7200 Preconcentrator to extend sensitivity down to the sub-PPB range.

## Quantitative Accuracy

Sampling and analytical precision is not affected by changing matrices (air, humid air, nitrogen, helium, CO<sub>2</sub>, methane, argon, hydrogen).

## Large Silonite® Canister and Tedlar® Bag Analysis

Add two, 9 port expansion ports to easily connect 18 large canisters and Tedlar bags. The 7200 also features a built-in 4 sample inlet that can accommodate up to two 7016 or 7016D autosamplers in addition to the 7650-M for unsurpassed flexibility and sample throughput.



The Recognized Global Leaders in Environmental Air Analysis.



**7200**  
Preconcentrator



**4700**  
Precision Diluter



**7016D**  
Canister Autosampler



**5400B**  
Thermal Transfer System



**3108D**  
Canister Cleaning System



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