# ENTECH
## INSTRUMENTS
*See What's Really There™*



## 7200/7650-M
## AIR ANALYSIS
— System —

*The most advanced instrumentation ever developed for the analysis of volatile and light semi-volatile compounds in air and soil gas.*

## Million Air™
### Advanced Air Analysis
$10^6$ Concentration Range without Dilution

# 7200 | 7650-M – MillionAir™  System

**The 7200 Preconcentrator and 7650-M Inlet combine for state-of-the-art whole air analysis.**

Introducing the 7200 | 7650-M, MillionAir™ Analysis System. The most advanced instrumentation ever developed for analysis of volatile and light semi-volatile compounds in air and soil gas. Now, analyze any size canister in your inventory with the quality assurance of direct inlet robotics. The 7650-M features the new MillionAir™ option that includes the ability to perform rapid screening of samples without exposure to the 7200 Trapping system, thereby maintaining far superior system hygiene relative to other preconcentration systems.

The 7650-M 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™ completely isolates samples within specific, low-volume flow-path segments, and prevents trap exposure during important sample select and preflush operations. The dual 0.1cc loop in the 7650-M and 1cc loop in the 7200-01 allows a vastly extended range when combined with the accurate 10–1000cc preconcentration range of the 7200. The result is greater dynamic range and reduction in the number of sample dilutions required when analyzing soil gas and other high-concentration samples.

The combination of the 7200 Preconcentrator with a special version of Entech's robotic autosampler line, the 7650-M, creates the perfect solution for laboratories needing to maximize the dynamic range of their air analyzer. The MillionAir™ system gets its name by being able to handle samples with a million fold difference in concentration without pre-dilution. Air labs have always been faced with the dilemma of having to screen potentially high concentration air samples to determine if dilution will be needed, while at the same time preventing the contamination of their analyzer. Older rotary valve autosamplers used by all other manufacturers expose potentially high concentration samples to inlet lines for hours or even days, creating a background in the system that may take days or even weeks of flushing to eliminate. With the MillionAir™ system, contact with the sample is only seconds long.  Better yet, the 7650-M contains its own loop valve that can bypass the 7200 primary traps altogether, injecting the sample directly to the GCMS either for screening purposes or for quantitative analysis. Samples can be screened in as little as 6 minutes using an isothermal analysis to determine levels of TCE, PCE, and BTEX, which are the major contaminants in soil gas that can raise havoc in other systems when hot samples are processed without dilution. With the Entech MillionAir™ system, both screening and analysis using sample volumes as low as 0.1cc can extend the calibration curve well into the PPM range, drastically reducing the number of samples that have to be diluted before analysis. The MillionAir™ system is the ideal solution for today's competitive TO-15 laboratory.

| Description | Unit | Part # |
|---|---|---|
| **7200 | 7650-M, MillionAir™ Analysis System** | | |
| **System Includes:** | | |
| 7200 Preconcentrator (with 1cc Loop) | EA | 7200-01* |
| 7650 w/ Loop Injection | EA | 7650-M* |

**\* High Voltage Operation - Add "-HV" to the end of the part number for the 220V+ versions.**
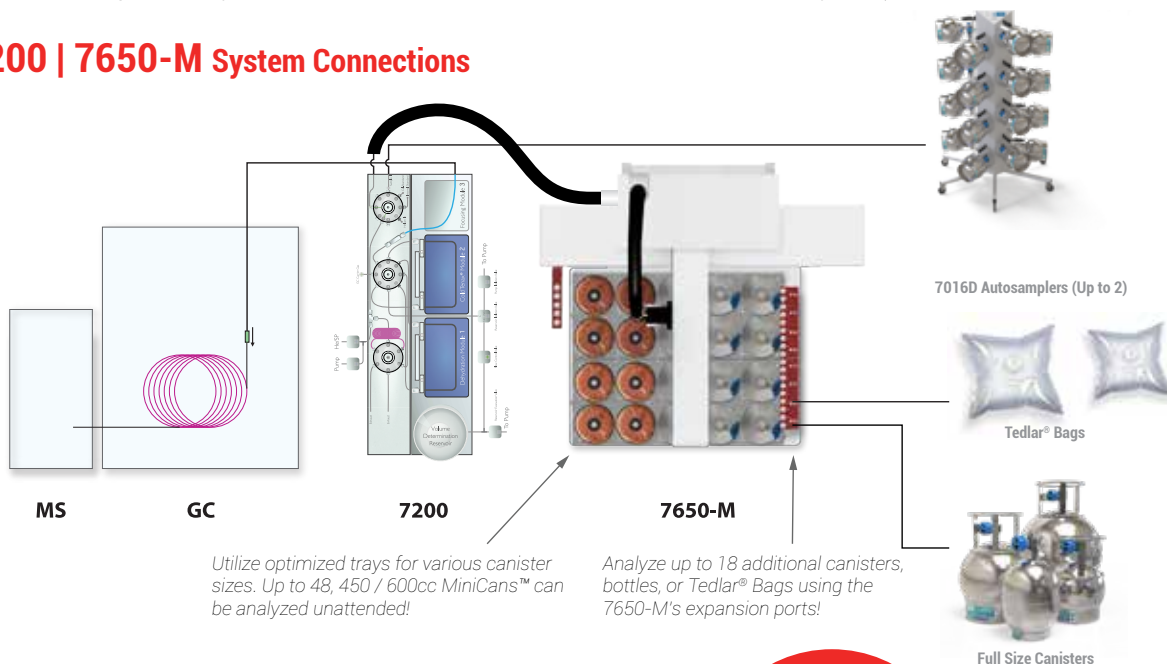
# 7200 | 7650-M Air Analysis System

## Features

- **Direct Inlet Robotics**
  *The 7650-M features a single inlet with a Silonite-D™ coated transfer line to eliminate rotary valves and multiple inlet lines from the inlet flow path for the best possible sample isolation and analytical accuracy.*

- **Automated Analysis**
  *Accu-Sample™ technology provides superior water management to quantitatively analyze 10 – 1000cc of sample volume. Choose the 7200 Loop option to achieve accurate sample volumes from 0.1cc to 1cc.*

- **New! MillionAir™ System**
  *New, very low volume injection mode that allows analysis of a concentration range of up to one million fold.*

- **Extended Range Air Analysis**
  *Wide volume range (0.25–1000cc) for increased dynamic range without dilution. Directly handle PPM level samples without carryover. Supports single canister calibrations.*

- **Quantitative Accuracy**
  *Sampling and analytical precision is not affected by changing matrices (air, humid air, nitrogen, helium, $CO_2$, 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.*

- **Screen High Concentration Samples**
  *Prevents trap exposure to high concentration samples.*

**Now, analyze all sample types, including Tedlar® bags, canisters, and thermal desorption tubes!**
*(Tube screening and analysis requires the addition of the 5400B Thermal Transfer System)*

## 7200 | 7650-M System Connections



MS     GC     7200     7650-M

7016D Autosamplers (Up to 2)

Tedlar® Bags

Full Size Canisters

*Utilize optimized trays for various canister sizes. Up to 48, 450 / 600cc MiniCans™ can be analyzed unattended!*

*Analyze up to 18 additional canisters, bottles, or Tedlar® Bags using the 7650-M's expansion ports!*

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

**Expand your Lab's Analysis Capabilities!**

**Call Us Today to** Learn More!

**7200**
Preconcentrator

**4700**
Precision Diluter

**7016D**
Canister Autosampler

**5400B**
Thermal Transfer System

**3108D**
Canister Cleaning System

# The Recognized Global Leaders in Environmental Air Analysis.

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7650-M Air Analysis System – 190305- 5.4