



## The Macro to Micro Interface

### OMNI™ 3000 Portable Air Sampler

The **OMNI 3000** is the first rugged and highly portable high-volume, high performance aerosol sampler for indoor/outdoor applications. Providing the power and concentration rate of a large collector in a compact, lightweight, ergonomically designed form. The **OMNI** — which is simple to operate and easily decontaminated — offers breakthrough capabilities in sampling performance, reliability and flexibility.

InnovaPrep's **OMNI 3000** uses the proven SpinCon® aerosol collection technology that has been validated through its use in innumerable U.S. military and other governmental monitoring applications.



#### **A Breakthrough in Field Sampling Performance** *Compact package yields high concentration rate*

The **OMNI** is compact and designed for mobility, yet it collects sample at the high flow rate of 300 liters per minute. With excellent collection efficiency across the broadest range of particles, the **OMNI** provides superior sample concentration. Used indoors or outdoors, even in low-level detection application, this sampler provides highly concentrated samples that are compatible with most analytical formats.

#### **Technology You Can Count On** *OMNI 3000 uses SpinCon technology that is proven worldwide*

Inherent in the **OMNI** is proven SpinCon technology, already found in hundreds of sampling installations worldwide, including military force protection roles, the U.S. Postal Service, biological detection systems, government facilities monitoring, governmental and corporate mailrooms, urban biomonitoring, event monitoring and agricultural monitoring for crops and livestock. SpinCon has protected attendees at past Super Bowls, Olympic Games, World Series, Boston Marathons, Mardi Gras festivities and other high-profile events. The **OMNI** packages this proven technology in a convenient, industrial design that increases the scope of applications, making it an unprecedented value.

InnovaPrep technology is proven to collect the broadest range of particles, down to submicron sizes, enabling the collection of bioaerosols, low vapor pressure particulates, soluble vapors, and some semi-volatile chemical compounds.

Its high flow rate, excellent collection efficiency and ability to concentrate particles into a small sample size allows the **OMNI 3000** to provide particle concentrations in milliliters of liquid that are tens of thousands of times the concentrations in the surrounding air. The end result is that the **OMNI** dramatically increases the probability of capturing the number of particles required to accomplish a positive detection and avoid a false negative.

#### **Revolutionary Portability and Convenience** *Ergonomic design makes the OMNI the easiest-to-use sampler on the market*

The **OMNI** was designed with the assistance of end users and industrial designers to provide incredible portability, ease of use, low maintenance and user safety. Weighing less than 13 pounds (without batteries), the **OMNI**'s balanced, slim design is lightweight, yet is rugged enough to survive today's tough environments. With enlarged, sealed push buttons and an expansive display screen, the **OMNI** is easy to set up, use and decontaminate while wearing Personal Protective Equipment.

## Optimal Operator Safety

### *The Presumptive Positive Design Approach*

The **OMNI**'s closed fluidic system protects operators from direct exposure to the sample. Small cartridges containing sample fluid are easily loaded into the **OMNI**; these same cartridges conveniently serve as protective sample cases for sending samples to a laboratory for analysis. If a site sample is required, a pipette is available and can be inserted through the one way duckbill valves in the cartridge for safe access to the sample. Unlike many other air samplers, the **OMNI** provides the user complete protection from sample exposure.

## The OMNI 3000 Delivers

### *Efficiency, Value, Portability, Reliability, Convenience*

- A highly concentrated sample using proven SpinCon® technology
- The highest collection rate of any portable collector
- Broadest range of particles, down to submicron
- Low operational and maintenance costs
- Compact and lightweight design
- Easy to use and decontaminate
- Optional battery operation (battery charger included)
- User determined sampling times
- Concentrated sample compatible with most detection methodologies

**Note:** The **OMNI 3000** can be reconfigured for use in combination with collect/detect or trigger/collect/detect systems, or as an integrated component subsystem.



## OMNI 3000 Applications

### *Include, but are not limited to:*

- Stand-alone sampler for biological or low vapor pressure chemical agents (pictured above)
- Front-end sampler for integrated biological detection systems
- Integrated sampler for reconnaissance vehicles and unmanned ground vehicles

Power Requirements	Internal Battery or external 120VAC
Power Consumption	70W Max while sampling (< 2.5W Idle)
Optional Batteries	24VDC Hot Swappable Nickel Metal Hydride
Flow Rate	300 LPM w/ integral flow regulation
Size	7.5"x8.5"x16.5"
Weight	13 lbs (with optional battery < 21 lbs)
Operating Temperature Range	2° - 50° C (36° - 120° F)
Sampling Time	User selectable up to 6 hours
Sampling Size	< 9 mL
Sampling Extraction	Automatic into sealed disposable Sample cartridge
Sampling Solutions	Water, Phosphate Buffered Saline (PBS), PBS with Triton. Uses water for evaporative makeup. Consult InnovaPrep if your application requires a custom solution
User Interface	Sealed touch pad controls with LCD display easily usable and viewable in personal protective equipment
Decontamination	Alcohol or bleach. OMNI has smooth surfaces And minimal hard-to-clean areas. External surfaces can be sprayed or rinsed; fluid lines can be easily flushed. Contactor can be removed for submersion cleaning or replacement
Concentration Rate	At 1 µm 120,000; at 3 µm 150,000 (assuming an ambient concentration of 1000 particles per liter of air)

The **OMNI 3000**, featuring SpinCon® technology, is supported by:

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