

Investigator Multi Sampler™

The *Investigator Multi Sampler™* Ionic Spore Trap is a rugged device that utilizes electrostatic capture and impaction to sample particulates from the air. This unique capture mode allows this device to monitor nanometer sized bacterial aerosols in addition to larger particulates including spores, pollen and abiotic materials. The housing is constructed of stainless steel, and its components are designed for outdoor use. It is designed to be mounted on a tripod (pictured at right), which is readily adjustable with regard to height and level. It too may be suspended with its built-in ring.

The *Investigator Multi Sampler™* accepts 12.5 mm (0.5 inch) sample stubs, which can then be topped with any of the capture media. The following analytical procedures can be employed with these capture media: light and fluorescence microscopy, scanning electron microscopy (SEM), and qPCR. In addition, particulates can be analyzed for elemental composition with Energy Dispersive Spectroscopy (EDS) within a SEM. This latter analytical procedure is useful if one is interested in airborne pollution such as heavy metal nanoparticles, smokestack emissions, an other airborne particulates.

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The *Investigator Multi Sampler™* has two unique and valuable features:

1. A **Programmable Carousel** holds *Seven* 12.5 mm sampling stubs. Each stub is completely independent of the others. This permits the device to run unattended during which time it will rotate new stubs into position on an hourly or daily schedule.
2. A Windows-based program allows the user to specify hour of the day and days of the week when it will operate. In addition, fan speed (throughput) for each hourly increment can be set. It also records temperature, relative humidity and line voltage, and these values can downloaded as an Excel® file to a computer.

Applications:

The *Investigator Multi Sampler™* is designed as a research instrument in that its functions are programmable. The Carousel feature allows it to be **autonomously** deployed in remote areas for extended sampling periods, or it can be used to sample on an hourly basis for establishing diurnal spore release characteristics and many other applications.

Weight:	7.2 kg +/- 30g
Voltage:	12 volts DC or 120 volt mains
Current:	0.66 Amps at 100% fan power
Housing:	304 Stainless steel
Specimen Mount:	Holds seven 12.5 mm sample stubs
Air flow:	Programmable with a maximum of 440 L/min
Advanced Features:	Programmable automatic specimen carousel, integral logging capability for temperature and humidity

Specimen Carousel

