

The *Investigator Solo™ 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 also may be suspended with its built-in ring.

The *Investigator Solo™* accepts 12.5 mm (0.5 inch) and 25 mm (1 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 particulate pollution such as heavy metal nanoparticles, asbestos, smokestack emissions, etc.

The most important advantage of the *Investigator Solo™* is its **programmability**. 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 be downloaded as an Excel® file to a computer.

### Applications:

The *Investigator Solo™* is designed as a research instrument in that its functions are completely programmable. It has also proved useful in commercial application such as food production facilities, electronics manufacturing, and in health and hospitals. Please note it also accepts our *Subsampler™*, which allows the user to perform three independent analytical procedures on a single sampling event. This is the only model that accepts this accessory, the *Subsampler™*.

### Investigator Solo™



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| <b>Weight:</b>            | <b>7.2 kg +/- 30g</b>  |
| <b>Voltage:</b>           | <b>12 volts DC or 120 volt mains</b>                                   |
| <b>Amperage:</b>          | <b>1.4 Amps at 100% fan power</b>                                      |
| <b>Housing:</b>           | <b>304 Stainless steel</b>   |
| <b>Specimen mount:</b>    | <b>12.5 mm or 25 mm stub</b>   |
| <b>Air flow:</b>          | <b>Variable 0 to 660 L/min</b>   |
| <b>Advanced features:</b> | <b>Programmable, Integral data logger for temperature and humidity</b> |

### Subsampler™

