

The Aeroexplorer Sampling Station: Dual Inlet System

The Dual Inlet configuration of the sampling station allows for simultaneous collection of particles at two different sizes depending on the choice of inlet size. Shown at left is the instrument configured with two cyclone inlets. The system can also be configured to use mini-impactors for the collection of larger-sized particles. This adaptability ensures precise sampling tailored to diverse research requirements.



Image of the AeroExplorer dual inlet system with two cyclone inlets

Inlet-box specifications

- Box dimensions: 12.5" x 15" x 9"
- Weight: 6 kg
- Installed height: 40" but varies per configuration
- Control box option: SS5e, SS5e7-1
- Holds FC10, 8-slot filter cartridge
- Flow rate: 1.5-7 lpm, set to control particle size
- Inlet size cut-off options: PM10, PM4, P2.5, or PM1

Advantages

Autonomous particle sampling. Pump turns on/off and sampling advances to next filter slot, automatically, as function of minutes, hours or days. All directed by operator-initiated programs, input with intuitive button controls or script command uploads.

Control-box specifications

- Box dimensions: 12.5" x 18" x 9"
- Weight: 5.3 kg
- Compatible options: SS5i, SS5i-PMx
- Max flow rate: around 7 lpm standard
- Power inputs: 110/220 VAC 50/60Hz
- Auxiliary power input: nominal 12VDC.
- Solar power compatible.
- User sets sampling protocols with intuitive button commands.
- Controls on/off pump and advance to next filter slot as function of minutes, hours or days.
- Data stored on removable memory cards with automatic backups.