



DDS™

A Porous Metal Diffusion Denuder Sampler for Partitioning Aerosol-Bound and Gas Phase Chemical Species



Model 450 DDS™

The Model 450 DDS™ uses a single stage impactor at the inlet to remove particles larger than 2.5 or 1.0 μm from the air stream. A diffusion denuder is then used to collect the gas phase species, and a final filter stack is used to collect the fine particles for analysis. The porous metal denuder collects gas phase species such as SO_2 , NO_2 , NH_3 , etc. by diffusion. Up to four porous metal plates can be installed to collect different species. The plates are prepared by soaking them in a solution containing an absorbent specific for the species of interest. To minimize gas phase sample loss all parts in contact with the porous metal plates are made of Teflon®

**SEPARATE PARTICLES FROM
GAS PHASE SPECIES**

Features

- A compact sampling system
- Single stage impactor inlet with choice of 2.5 or 1.0 μm cut-points
- Porous metal diffusion denuder for collecting gas phase species and final filter for particle collection
- Ultra-quiet sampling pump
- Multi-day timer permitting up to 14 programmable starts and stops

Applications

- Separate gas phase species from aerosol-bound species for gas sampling in cleanrooms
- Acid and pollutant aerosol measurement in air pollution and air quality studies
- Micro-environmental sampling for industrial hygiene applications

Specifications

- Cut-point diameter: 2.5 or 1.0 μm
- Sampling flow rate: 10L/min
- Filter diameter: 37 mm
- Dimensions: 240 x 230 x 300 mm
- Weight: 3.9 kg
- Power: 115 VAC, 2A

**DESIGNED FOR THE MICRO
ENVIRONMENT**