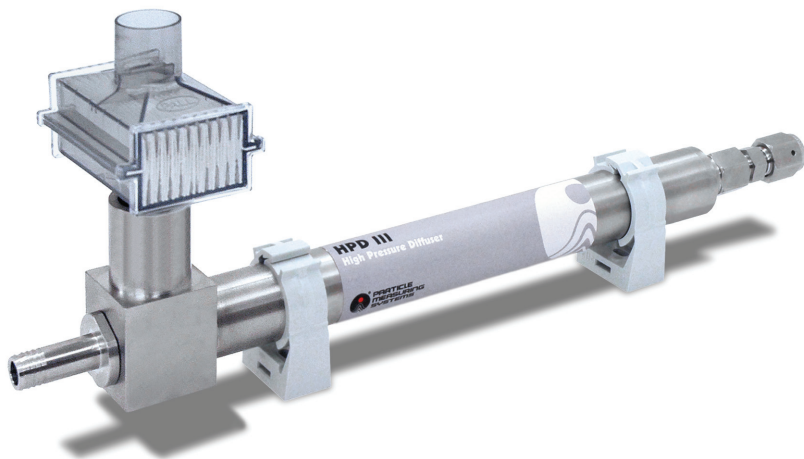


# HPD III High Pressure Diffuser

## Aerosol Monitoring Accessory



Sampling gases at pressures greater than sea level, such as 40 – 100 psi, is challenging for some particle counters. Connecting pressurized air or gas to a particle counter can defeat its flow-metering system. High Pressure Diffusers (HPDs) have been developed to correct this problem. HPDs reduce the pressure of the gas to about that of sea level by allowing some of the air/gas to diffuse and allow the particle counter's flow-metering system to function as designed.

The HPD III is compatible with non-toxic, non-flammable gases such as Clean Dry Air (CDA), Argon, and Nitrogen to a level acceptable to particle counters designed to operate at atmospheric pressure.

### BENEFITS

- Measures gases from 25 to 100 psi (60 to 100 psi for 100 LPM)
- No external flow meters needed
- Measures particles as small as 0.3  $\mu\text{m}$
- Low contamination, < 5% of ISO Class 5 cleanliness

### Cost-Effective

- Economical monitoring of pressurized gases with atmospheric pressure particle counters

### Flexible

- Can be used with Clean Dry Air, Argon, Nitrogen, or other non-toxic inert gases.
- Four different versions for 0.1 CFM, 1.0 CFM, 50 LPM, and 100 LPM flow rates

### FEATURES

- No moving parts to wear
- Connects via male 4-VCR fitting
- Exhaust filter included reduces contamination when no flow is present
- Mounting clamps supplied
- Stainless steel construction

### COMPATIBILITY

- Models are available for use with:
  - Airnet® particle sensor model 310
  - Lasair® III particle counter models 310C, 350C, and 5100
  - Airnet II particle sensor models 510, 510 OPC, 510XR, and 510XR OPC
  - Airnet II particle sensor models 301, 301 OPC, 501, and 501 OPC



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## Aerosol Monitoring Accessory

### specifications

Pressure	25 – 100 psi or 60 – 100 psi for 100 LPM flow rate
Flow rate	Options for 0.1 CFM, 1.0 CFM, 50 LPM, or 100 LPM
Temperature range	Typical: 4 – 35 °C; 0 – 85% RH non-condensing
Material	Stainless Steel body with Ruby orifice, Buna-N O-rings, exhaust filter
Sample gas	Dry, inert, non-toxic, non-flammable gases (CDA, Nitrogen, Argon)
Inlet fitting	Male 4-VCR fitting
Exhaust fitting	Barb fitting 0.75" ID, 0.5" ID, 0.375" ID, or 0.125" ID dependent upon configuration
ISO class	Less than 5% of ISO Class 5
Tubing length	1 m (39.4 in)
Dimensions (h, w, d)	15 x 2.75 x 5.5 in (38 x 7 x 14 cm)
Weight	2.7 lb (1.25 kg)
Compatible instruments	Lasair III particle counters: 310C, 350C, and 5100 Airnet II particle sensors: 510, 510 OPC, 510XR, and 510XR OPC Airnet II particle sensors: 301, 301 OPC, 501, and 501 OPC Airnet particle sensor: 310

**System components included:** mounting brackets and exhaust tubing to particle counter  
**Not included:** particle counter, ISPs sample tubing, communications cables (manifold to monitor), PC, Facility Net or Pharmaceutical Net software

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Particle Measuring Systems, Inc. reserves the right to change specifications without notice.

### AUTHORIZED REPRESENTATIVE



Particle Measuring Systems Headquarters  
 5475 Airport Blvd., Boulder, CO 80301, USA  
 (303) 443-7100 1-800-238-1801 FAX: (303) 449-6870  
 Instrument Service & Support: 1-800-557-6363  
 Customer Response Center: 1-877-475-3317

Particle Measuring Systems China  
 Tel: (86) 21-6113-3688  
 Email: PMSChina@pmeasuring.com

Particle Measuring Systems Europe  
 Tel: 44-1684-581000  
 Email: PMSEurope@pmeasuring.com

Particle Measuring Systems Italia  
 Tel: 39 06 90530130  
 Email: PMSSRL@pmeasuring.com

Particle Measuring Systems Japan  
 Tel: 813-5298-8175  
 Email: PMSJapan@pmeasuring.com

Particle Measuring Systems Mexico  
 Tel: 52-55-2271-5106  
 Email: PMSMexico@pmeasuring.com

Particle Measuring Systems Nordic  
 Tel: +45 70702855  
 Email: PMSNordic@pmeasuring.com

Particle Measuring Systems Puerto Rico  
 Tel: 972-306-1040  
 Email: PMSPuertoRico@pmeasuring.com

Particle Measuring Systems Singapore  
 Tel: 65-6496-0330  
 Email: PMSSingapore@pmeasuring.com