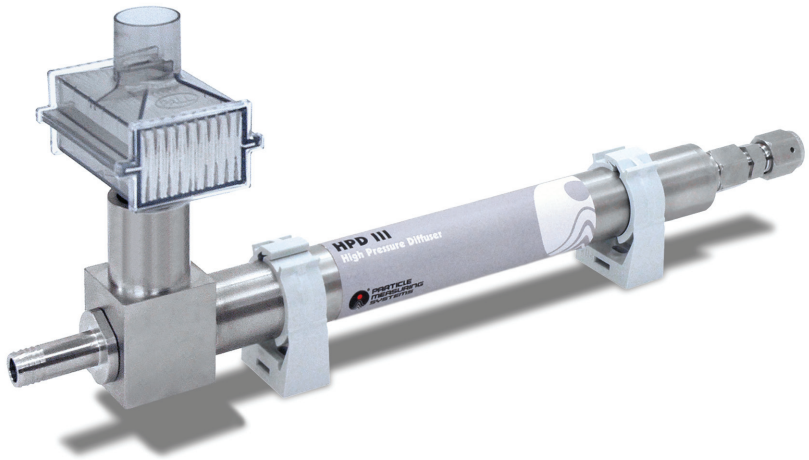
HPD III High Pressure Diffuser

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 µm
- 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

PARTICLE MEASURING SYSTEMS®

HPD III High Pressure Diffuser

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 ºC; 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

AUTHORIZED REPRESENTATIVE

PARTICLE MEASURING SYSTEMS
www.pmeasuring.com
info@pmeasuring.com

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