

Micro LPC-101 HP

Micro High Pressure Laser Particle Counter

The Particle Measuring Systems Micro LPC- 101 HP samples inert pressurized gases at their line pressures. This system outputs data to an external printer or computer.



BENEFITS

Reduced Costs

- Speed qualification of process gas distribution systems
- Detect particles in gases before they impact yield
- System incorporates two devices: a sampling sensor and a data system

Improved Process Control

- Verify specifications
- Detect process upsets
- Quantify impact of system changes
- Accurate particle sizing
- Facility Net data management system option for comprehensive data storage, management, reports, and alarms

Reliable

- Passive cavity design requires infrequent maintenance
- Unlike other systems, the Micro LPC-101 HP requires no fluids for monitoring
- Samples inert pressurized gases at their line pressure

FEATURES

- 0.1 micron sensitivity at 0.1 SCFM
- Eight particle size thresholds
- Line pressures from 40 to 150 psig
- Passive cavity optical design
- Side-stream monitoring of process gases
- Computer interface
- Optional external printer

APPLICATIONS

- Qualification of gas distribution systems
- Process gas monitoring

Without measurement, there is no control.

Specifications

Micro LPC-101-HP

Size range:	0.1 - 5.0 microns
Flow rate:	0.1 SCFM (2.8 LPM)
Sample volume:	0.1 SCFM (2.8 LPM)
Counting efficiency*:	>50% at 0.14 microns
Zero count level:	<2/ft ³ or <0.2/min
Maximum concentration**:	3,000/ft ³
Optical design:	Passive cavity with parallel processing array detector
Optical system:	Wide angle 90° scattering collecting optics with greater than 2π steradians solid angle
Laser type:	HeNe
Number of sensors:	1
Sizing thresholds:	8 channels with thresholds at: 0.1, 0.2, 0.3, 0.5, 1.0, 2.0, 3.0, 5.0 microns
Sampling interval:	1 second to 99:59:59 (hh:mm:ss); programmable or manual
Sampling mode:	Single, continuous, or manual
Delay time:	5 seconds to 99:59:59 (hh:mm:ss); programmable
Data reporting:	Option of external printer or special version of Facility Net
Data management and analysis:	Facility Net option
Computer interface:	RS-232C, bi-directional
Calibration:	Calibration materials used are traceable to the USA National Institute for Standards and Technology (NIST)
Power:	100, 115, 220 or 240 V; 50 - 60 Hz, 4 amps maximum
Dimensions (l, w, h):	22 x 16 x 7 in. (56 x 41 x 18 cm)
Weight:	42 lb. (19 kg)
Environment:	Temperature: 0 - 40° C, Humidity: noncondensing, Altitude: 0 to 20,000 ft. (6,098 m)

*Allow ±5% for variations in sample flow.

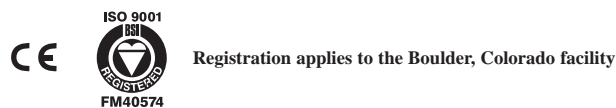
** Greater than 90% accuracy (less than 10% coincidence loss) at maximum recommendation ambient concentration.

Patents apply: U. S. - 4,798,465, 4,893,928, and 4,594,715. Foreign patents: Japan- 2,786,187, and 2,554,614.

Germany- 3,712,665C2, 3,930,642, and 3,485,749.4. Canada- 1,228,148. UK- EP142815.

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

AUTHORIZED REPRESENTATIVE



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