

Particle counter for facilities monitoring

Model 237D Laser-based Airborne Particle Counters

FEATURES

- 0.5 micron minimum threshold setting at 1.0 cfm
- 0.3 micron minimum threshold setting 0.1 cfm
- 2 size channels
- RS232/RS485 communications
- Splash-tight enclosure

APPLICATIONS

- Filling Suites in Pharmaceuticals
- Sampling Sites Subjected to Splashing by Liquids



Today's cleanroom requires constant monitoring in order to ensure high quality standards are met. Using a particle counter with a data acquisition system provides up-to-the-minute information on particles in your cleanroom, as well as data for long-term studies and quality reports to customers or internal departments.

The Model 237D is built around our popular 237 series of portable counters based on reliable laser-diode technology. Ideal for fixed monitoring, the Model 237D offers splash-tight (NEMA 4X / IP66 type) enclosures (stainless steel) for the pharmaceutical and food industries.

The Model 237D incorporates a standard LED readout for operator feedback on current room counts. When used in a computer-controlled system, the front panel push buttons are locked out, preventing accidental resetting of sampling parameters while under automatic control.

Standard 237D's include flow loss detection to provide an alert for the loss of central vacuum, and vacuum flow control solenoids to permit computer-control of sample air flow. The counter has a 5 foot cable terminated with a 15 pin "D" connector and a vacuum connection. The flow is controlled with a critical orifice which requires 18 inches of Mercury (450 mbar) vacuum minimum to maintain constant flow. For consistent airborne monitoring in critical areas, the Model 237D offers a solid solution for a challenging environment.

Model 237D Laser-based Particle Counters

SPECIFICATIONS

Size Channels (μm)	0.5, 5.0 at 1.0 cfm 0.3, 5.0 at 0.1 cfm (consult factory for additional size channels)
Light Source	Laser diode (10-year MTTF)
Coincidence Loss	Less than 5% at 2,000,000 particles/ft ³
Factory Calibration	Mono-dispersed polystyrene latex spheres (NIST traceable)
Flow loss Detector	Cal fail (4-20mA output is zero on flow loss)
Zero Count	Less than one count in 5 minutes
Display	7-digit LED
Output	RS485 for computer, optional 4-20mA, two channels
Sample and Hold Time	1 second to 24 hours
Count Alarms	1 to 9,999,999 counts each channel
Power	9 VDC at 600mA
Enclosure	Stainless Steel, splash-tight (NEMA 4X / IP66 type)
Dimensions	12" w x 10" h x 4.7" d (30 x 25.4 x 11.94 cm)
Weight	15 lbs (5.8 kg)
Environment	Operating 55 to 105°F (12 to 41°C) 20 to 95% relative humidity, non-condensing Storage -40 to 160°F (-40 to 70°C) up to 98% relative humidity, non-condensing
Accessories Included	Operator's Manual

ORDERING GUIDE

When ordering, specify:	
Minimum Threshold Setting	0.3 μm at 0.1 cfm 0.5 μm at 1.0 cfm
Output	RS485 or 4-20 mA (consult factory)
Number of Channels	2, 3, 4, 5 or 6

OPTIONAL ACCESSORIES

Isokinetic Sampling Probes
Sample Tubing
Distributed Vacuum Systems
Distributed DC Power Systems
Particle Vision® Online Software