

Lasair® II Particle Counter

Models 310A, 310B, 510A, 350L, and 550L



The Lasair II particle counter provides complete features in a compact, convenient particle counter. Its great portability, ease of use, and chemically-resistant easy-to-clean cover have made it the particle monitoring standard for pharmaceutical and high tech industries.

The Lasair II 350L and 550L models features a 50 liter/minute sampling rate to help meet the requirements of GMP Annex 1. The instrument samples one cubic meter in only 20 minutes and save 15 minutes per zone over 1.0 CFM instruments. The software guides the user through the certification process, verifies adequate sample numbers and volumes, collects the data, and then prints a full final report.



BENEFITS

Reduce Defects

- Real time measurement of defect causing particles
- More accurate measurements with patented sample flow, eliminating errors from manifold sampling
- Portable counter for localizing particle sources

Increase Productivity

- Choose from nine languages for display and print out
- Software guided EC GMP and ISO sampling
- Generates ISO and EC GMP validated reports
- Comprehensive validation manual available
- Operates in cleanroom from office computer via web browser: Setup, sample, display, print, etc.
- Continuous mobile use with instrument's removable battery, available with optional external charger
- Quick, CSV data (21 CFR 11-compliant) download via USB port for periodic or real-time review
- 50 LPM unit saves 15 min. sampling time/clean zone

Cost Effective

- Diode laser for reduced maintenance
- Best laser lifetime in the industry
- Use in up to ISO Class 8 rooms (FS209 Class 1-100,000) or in Class 9 with diluter
- Rugged, chemical-resistant, KYDEX® casing for easy wipe-down sanitation
- Comprehensive validation manual simplifies meeting FDA and EC GMP requirements

APPLICATIONS

- Cleanroom monitoring
- Trend analysis
- Manifold compatible
- Portable or dedicated use

Without measurement, there is no control.

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specifications

	310A	310B	510A	350L	550L
Channels	0.3, 0.5, 1.0, 5.0, 10.0, 25.0 µm	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 µm	0.5, 1.0, 2.0, 5.0, 10.0, 25.0 µm	0.3, 0.5, 1.0, 5.0, 10.0, 25.0 µm	0.5, 1.0, 2.0, 5.0, 10.0, 25.0 µm
Flow rate (± 5% accuracy)	1.0 CFM (28.3 LPM)	1.0 CFM (28.3 LPM)	1.0 CFM (28.3 LPM)	50 LPM (1.77 ft. ³ /min.)	50 LPM (1.77 ft. ³ /min.)
Maximum concentration	> 375,000/ft. ³	> 425,000/ft. ³	> 425,000/ft. ³	> 350,000/ft. ³	> 250,000/ft. ³
Sample tubing	3/8", 10 ft. (3m) maximum length	3/8", 10 ft. (3m) maximum length	3/8", 10 ft. (3m) maximum length	1/2", 10 ft. (3m) maximum length	1/2", 10 ft. (3m) maximum length
Calibration	Particles are traceable to U.S. National Institute for Standards and Technology (NIST) and Japanese Industrial Standards (JIS)				
Counting efficiency	50% ± 10% for most sensitive threshold (Exceeds JIS standards)				
Zero count	Meets JIS standards				
Data storage	3000 complete data sets. Data cannot be edited or altered meeting 21 CFR 11 compliance.				
Communication modes	Ethernet or RS-232; USB data downloading; Optional 4-20 mA output board and optional wireless Ethernet				
Controlling software	Facility Net, Pharmaceutical Net, Microsoft® Internet Explorer 5.0+				
Remote operation	Remote web browser operation; real-time download to Facility or Pharmaceutical Net				
Reports	USB reports; sample printouts; cleanroom certification reports for ISO and EC GMP; averaging				
Environmental sensors	Temperature/RH probe, plus interfaces with four external environmental sensors via 4-20 mA inputs				
Languages	English, French, German, Italian, Japanese (Kanji), Korean, Mandarin Chinese (Traditional or Simplified), Spanish				
Display and Printer	1/4 VGA color LCD screen; built-in thermal printer				
External surface	KYDEX chassis and polyester display screen				
Enclosure cleaning materials	Bleach, formaldehyde, ethyl/isopropyl alcohol, peroxide/quaternary ammonium solutions				
Sample output filtering	Internally filtered to HEPA standards (> 99.97% at 0.3 µm)				
Power	85-264 V, 50-60 Hz				
Battery (310A, 310B, and 510A) (350L & 550L)	NiMH: operation 4-7 hrs. External recharge: 2-3 hrs. Internal (at 24°C): 80% by 4hrs., 100% by 5-10 hrs. NiMH: operation 3-4 hrs. External recharge: 2-3 hrs. Internal (at 24°C): 80% by 4hrs., 100% by 5-10 hrs.				
Dimensions (h, w, d) and Weight	11.5 x 10.7 x 9 inch (29x 27 x 23 cm), 12 lbs. (5.4 kg) without battery, 15.5 lbs. (7.0 kg) with optional batteries				
Operating environment	Temperature: 15-35°C; Humidity: 10-85% non-condensing				
	KYDEX® is a registered trademark of Kleerdex company. Lasair® is a registered trademark of Particle Measuring Systems, Inc. Microsoft® is a registered trademark of Microsoft Corporation. U.S. patents 6,167,107. Foreign patents pending. Particle Measuring Systems, Inc. reserves the right to change specifications without notice.				



Registration applies to the Boulder, Colorado facility.

AUTHORIZED REPRESENTATIVE



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