

## LASAIR® II

### Models 310A, 510A

The LASAIR II from Particle Measuring Systems is the latest offering in our industry-leading aerosol line. It provides complete monitoring features in a compact, portable, convenient package.



### BENEFITS

#### Reduce Defects

- Real-time measurement of defect-causing particles
- Patented sample flow control gives more accurate measurements, eliminating errors associated with manifold sampling
- Use as a portable counter to localize source of particles

#### Increased Productivity

- Operates in cleanroom from office PC via web browser: set-up, sample, display, print, download data, update software
- Interfaces with Facility Net and Pharmaceutical Net software
- Uses either mains power or removable battery with external charger for continuous mobile use
- Quieter pump improves work environment
- Provides calculations and final reports for ISO 14644-1, FS-209E, and BS-5295
- Comprehensive validation manual makes it easier for pharmaceuticals to meet regulatory requirements
- Choice of 8 display languages

#### Cost Effective

- Easy to clean/wipe down; designed to minimize particle traps
- Rugged, chemical-resistant, ESD-compatible KYDEX® casing
- Longer life pump: eliminates annual vane replacement
- Diode laser for reduced maintenance

### FEATURES

- Compact, convenient, lightweight
- Only 15.5 lbs (7.0 kg) with battery
- Sizing sensitivities from 0.3 - 25.0  $\mu\text{m}$
- Meets JIS accuracy standards
- Stores 3,000 samples
- Integrates up to 6 external analog sensors
- Provides range of data communications options
- Controllable from PC web browser
- Built-in thermal printer
- Meets pharmaceutical validation requirements
- Large, color LCD for higher visibility, more data displayed
- NiMH battery affords 4 - 7 hours of use

### APPLICATIONS

- Cleanroom monitoring
- Facility certification
- Trend analysis
- Statistical process control
- Troubleshooting
- Manifold compatible
- Portable or dedicated use

Without measurement, there is no control.



**PARTICLE  
MEASURING  
SYSTEMS**  
[www.pmeasuring.com](http://www.pmeasuring.com)

# Specifications

## LASAIR II

## 310A

## 510A

<b>Size range:</b>	0.3 - 25.0 $\mu\text{m}$	0.5 - 25.0 $\mu\text{m}$
<b>Channel thresholds (<math>\mu\text{m}</math>):</b>	0.3, 0.5, 1.0, 5.0, 10.0, 25.0 Customization available	0.5, 1.0, 2.0, 5.0, 10.0, 25.0 Customization available
<b>Maximum concentration:</b>		
@ 10% coincidence loss	> 750,000/ft <sup>3</sup>	> 900,000/ft <sup>3</sup>
@ 5% coincidence loss	> 375,000/ft <sup>3</sup>	> 425,000/ft <sup>3</sup>
<b>Counting efficiency:</b>	50% +/- 10% (exceeds JIS standards)	
<b>Zero count level:</b>	Meets JIS and ISO 14644 Class 3 standards	
<b>Flow rate:</b>	1 CFM (28.3 LPM) with +/-5% accuracy	
<b>Laser source:</b>	Laser diode	
<b>Calibration:</b>	Materials traceable to US National Institute for Standards and Technology (NIST)	
<b>Data storage:</b>	3,000 data sets (includes particle and environmental data, plus location, time, etc.)	
<b>Location data storage:</b>	Via TouchRAM wand and memory buttons	
<b>Communication modes:</b>	Ethernet or RS-232; optional 4-20 mA output board	
<b>Supporting software:</b>	Facility Net, Pharmaceutical Net, Microsoft® Internet Explorer Rev. 5.0+	
<b>Environmental sensors:</b>	Temp/RH probe, plus interfaces with 4 external environmental sensors via 4-20 mA input	
<b>Display:</b>	1/4 VGA color LCD screen	
<b>Languages:</b>	English, French, German, Italian, Japanese (Kanji), Korean, Mandarin, Spanish	
<b>Printer:</b>	Built-in thermal printer	
<b>Reports:</b>	Sample printouts; final reports for ISO 14644-1, FS-209E, and BS-5295; averages	
<b>Key software features include:</b>	Pharm mode, scheduled sampling, historical data filtering and review, remote operation via web browser, password protection, recipes	
<b>External surface:</b>	ESD compatible KYDEX chassis, polyester display screen	
<b>Cleaning materials:</b>	Bleach, formaldehyde, ethyl/isopropyl alcohol, peroxide/quaternary ammonium solutions	
<b>Sample output filtering:</b>	Internally filtered to HEPA standards (>99.97% @ 0.3 $\mu\text{m}$ )	
<b>Power:</b>	85-264 V, 50-60 Hz	
<b>Battery:</b>	NiMH; expected operation 4-7 hrs. External recharge: 2-3 hrs. Internal recharge (@ 24° C): 80% by 4 hrs. 100% by 5-10 hrs.	
<b>Dimensions (h, w, d):</b>	11.5 x 10.7 x 9.0 in (29 x 27 x 23 cm)	
<b>Weight:</b>	12 lb (5.4 kg) without battery; 15.5 lb (7.0 kg) with optional battery	
<b>Operating environment::</b>	Temperature: 15 - 35° C Humidity: 10-85% non-condensing	

## Accessories

**Included:** Printer, printer paper, Operations Manual, sample probe, probe adapter, sample tubing, zero count filter, power cord, spare fuse.

**Optional:** Battery, external battery charger, external filter, HHIPA, hand-held/tripod/wall-mountable isokinetic sampling probe, tripod, temperature and relative humidity probe, air velocity probe, differential pressure probe, 4-20 mA data output board, TouchRAM wand and buttons.

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U. S. patents: 6, 167,107. Foreign patents pending.

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

## AUTHORIZED REPRESENTATIVE



Registration applies to the Boulder, Colorado facility



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