

LASAIR® II-110

Aerosol Particle Counter

Particle Measuring Systems presents the LASAIR® II-110, a full-featured monitor setting a whole new standard for aerosol particle counting.

As the first monitor to use a thermally-chilled, solid state diode laser to count 0.1 micron particles, it offers unequalled accuracy, reduced operating costs, and the reliability and longevity to support its three year laser warranty.



BENEFITS

- Real-time measurement of defect-causing particles
- Use as mobile counter to localize source of particles
- Full range of accessories for monitoring in different applications
- Eliminates traditional undercounting errors in manifold sampling
- Saving/Reloading recipes saves time during cleanroom certification
- Control cleanroom monitoring from your office PC via web browser: Set-up, sample, display, print, update firmware, download data, upload sample recipes, etc.
- Interfaces with Facility Net®* and Pharmaceutical Net®* software
- Use either mains power, or optional external battery/charger for 8 hrs. of continuous mobile use
- Quiet reciprocal blower/pump improves work environment
- Comprehensive validation program makes it easier to meet regulatory requirements
- Choice of 8 display languages
- Provides calculations and final reports for ISO 14644-1, FS-209E, and BS-5295
- Diode eliminates need for frequent, costly cleanings of laser optics
- Longer-life pump eliminates annual vane replacement
- Easy to clean/wipe down; designed to minimize particle traps
- Rugged, chemical-resistant, ESA/ESD-compliant, easy to clean display screen and KYDEX® casing
- Cooled diode laser lasts longer (NOTE: three year laser warranty)

FEATURES

- FIRST: 110 particle counter that can be used for rooms from Class 1 to Class 100,000
- FIRST: Solid-state, cavity-less laser diode design for measuring 0.1 μm @ 1.0 CFM
- FIRST: Counts true 0.1 μm particles at 1.0 CFM flow
- FIRST: Up to 500,000 particles/cu. ft. before 5% coincidence error
- FIRST: Accurate manifold sampling; eliminates under-counting
- NEW: Thermoelectric chiller extends diode laser's life, enabling 3 year laser warranty
- NEW: Diode eliminates need for frequent, costly laser cleanings
- NEW: Enhanced user interface (adds alphanumeric keypad to soft key system)
- NEW: Recipes software saves time for cleanroom certification

APPLICATIONS

- High sensitivity applications
- Facility certification
- Cleanroom monitoring from Class 1 to Class 100,000
- Remote monitoring
- Minienvironment qualification
- Trend analysis
- Statistical process control
- Process gas monitoring (with L2 High Pressure Diffuser)
- Mobile or dedicated use
- Manifold sampling
- Troubleshooting



PARTICLE MEASURING SYSTEMS
www.pmeasuring.com

Without measurement, there is no control.

LASAIR II-110

Channel thresholds:	0.1, 0.2, 0.3, 0.5, 1.0, and 5.0 μm (customization available)
Maximum concentration*:	@ 5% coincidence loss: > 500,000/ft ³ , automatic over-coincidence alarm
Counting efficiency:	meets JIS standard
Zero count level:	meets JIS standard (less than 1 particle in 5 min.)
Flow rate:	1 CFM (28.3 LPM); monitored and adjusted electronically
Laser source:	laser diode, 3W (de-rated to 2W), 810 nm, infrared
Calibration:	Materials traceable to US National Institute for Standards and Technology (NIST)
Data storage:	3,000 data sets (includes particle and environmental data, plus location, time, etc.)
Communication modes:	Ethernet or RS-232; optional 4-20 mA output board
Environmental sensors	Temp/RH probe, integrates up to 4 external sensors via 4-20 mA input
Display:	1/4 VGA color LCD screen
Display languages:	English, French, German, Italian, Japanese (Kanji), Korean, Spanish, Mandarin (classical + simplified)
Printer:	built-in thermal printer
Reports:	sample by sample print strips; final reports for ISO/FS209/BS cleanroom qualification; averages of multiple runs; print-on-alarm; 2 channel pharma reports; sampling configuration printout
Key software features:	Pharma mode, scheduled sampling, historical data filtering, sorting and review, password protection, recipes
External surface:	KYDEX chassis, polyester display screen, and zinc-plated steel bottom are all ESA/ESD compliant
Cleaning materials:	bleach, formaldehyde, ethyl/isopropyl alcohol, peroxide/quaternary ammonium solutions
Data security:	data records stored in box cannot be altered
Sampling security:	sampling recipes can be protected
Monitor filtering:	internally filters both pump exhaust (99.9999+% @ 0.1 μm) and cabinet (98.0% @ 0.3 μm)**
Dimensions (l, w, h):	18 x 14 x 13 in. (45 x 35 x 32 cm). Battery/charger: 16 x 12 x 15 in. (40 x 31 x 37 cm).
Weight:	36 lb (16 kg). Battery/charger: 80 lb. (27 kg)
Power:	85-264 V, 50-60 Hz; available with domestic or international cord
Operating environment:	Temperature: 15 - 30°C. Humidity: 10 - 85% non-condensing

*available from Particle Measuring Systems, Inc.

**to be increased to 99.5% @ 0.3 μm

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

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Microsoft[®] is a registered trademark of Microsoft Corporation

KYDEX[®] is a registered trademark of the Kleerdex Company

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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