LIGHTHOUSE
WORLDWIDE SOLUTIONS
Technology That Counts!



EXTREME LIFE LASER DIODE TECHNOLOGY



SOLAIR 3100
SOLAIR 5100

1.0 CFM (28.3 LPM) Airborne Particle Counters

The ***SOLAIR 3100*** and ***SOLAIR 5100*** portable airborne particle counters incorporate our ***Extreme Life Laser Diode Technology*** sensor to produce the industry's longest laser diode life of 20+ years MTTF (based on continuous 24/7 operation). Using a new, lighter extended-life battery and external AC adapter, the ***SOLAIR***s are even more portable.

The ***SOLAIR*** features one of the industry's best User Interfaces (UI) to configure and operate the instrument with intuitive ICON-driven screens and menus that are simple, easy to learn and use.

The ***SOLAIR*** can store up to 3,000 records of particle count data from up to 8 particle channels and the configurable recipe database can store up to 50 recipes for sampling and reports. All data can be quickly and reliably transferred to a computer, a Facility Monitoring System or a Building Automation System.

Secure data transfer (per 21 CFR Part 11) to a USB Flash Drive can be accomplished by using the Lighthouse Secure Data transfer feature and ***LMS Express*** or ***Express RT*** software to read it. Flexible communications with these instruments is made possible by the integrated Ethernet, RS-485, USB and USB Flash Drive interfaces.

SOLAIRs are designed, manufactured and calibrated to ISO 21501-4 to ensure particle counting accuracy.

Designed and built by
Lighthouse - a name you can trust.

Lighthouse is an ISO 9001:2008 Registered Company

www.golighthouse.com

Features:

- ★ SOLAIR 3100: 0.3µm to 25.0µm
- ★ SOLAIR 5100: 0.5µm to 25.0µm
- ★ 1.0 CFM (28.3 LPM) Flow Rate
- ★ Simultaneous Display of up to 8 Particle Sizes
- ★ 21 CFR Part 11 Compliant Secure Data Transfer via USB Flash Drive
- ★ Extreme Life Laser Diode Technology >20-year MTTF Laser Lifespan
- ★ Thermal Printer
- ★ Stainless Steel Construction
- ★ Designed for ISO 21501-4 Compliance: Unit-to-Unit Accuracy & Repeatability Assured
- ★ Multiple Communication Interfaces - USB, RS-485, Ethernet and USB Flash Drive
- ★ 5.7-inch Color TFT Touch Screen Display
- ★ 3000-record Data Storage Memory
- ★ 50-record Configurable Recipe Database
- ★ User-Definable Printouts
- ★ Open Architecture Connectivity with OPC Server
- ★ Report Wizard for Cleanroom Pass/Fail Reports: FS-209E, ISO-14644-1 or EU GMP Annex 1

Benefits:

- ★ User Friendly Interface with Multiple Languages
- ★ International Support
- ★ 2 year Warranty
- ★ Easy Integration to External Systems with OPC Server

Applications:

- ★ Cleanroom Monitoring
- ★ Facility Certification Testing
- ★ Trend Analysis
- ★ Tool and Equipment Testing
- ★ Multi-Point Facility Monitoring (with 6 or 32 port Manifold System)
- ★ Compressed Gas Monitoring (with High Pressure Controller)

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Specifications:

	3100	5100
Size Range:	0.3 - 25.0µm	0.5 - 25.0µm
Standard Channel Sizes:	0.3, 0.5, 1.0, 3.0, 5.0, 10.0µm 0.3, 0.5, 1.0, 5.0, 10.0, 25.0µm	0.5, 0.7, 1.0, 3.0, 5.0, 10.0µm 0.5,1.0, 3.0, 5.0, 10.0, 25.0µm
8-Channel:	0.3, 0.5, 0.7, 1.0, 3.0, 5.0, 7.0, 10.0µm	0.5, 0.7, 1.0, 2.0, 3.0, 5.0, 7.0, 10.0µm

Flow Rate:	1.0 CFM (28.3 LPM)
Counting Efficiency:	3100, 50% @ 0.3µm; 100% @ sizes > 0.45µm; 5100, 50% @ 0.5µm; 100% @ sizes > 0.75µm Per JIS B 9921 and ISO 21501-4
Light Source:	*Extreme Life Laser Diode Technology* with >20-year Mean Time To Failure (MTTF)
Zero Count Level:	<1 count / 5 minutes (per JIS B 9921)
Concentration Limits:	1,000,000 Particles/ft^3 (35,300,000/M^3) @10% Coincidence Loss, Suitable for ISO classes 1 through 8 Cleanrooms
Calibration:	Meets ISO 21501-4 Calibration using NIST Traceable PSL Spheres, DMA and Condensation Particle Counter
Count Modes:	Automatic, Manual, Beep, Concentration, Cumulative/Differential and Real Time (with *LMSNet* or *LMS Express RT*)
Data Storage:	3,000 Sample Records (Rotating Buffer), which includes particle and environmental data with locations and times
Communication Modes:	USB; Ethernet; RS-485; Secure Data Transfer to and Storage on USB Flash Drive
Supporting Software:	*LMS XChange*, *LMS Express* and *Express RT; LMS Standard; LMS Pharma; CREWin*
Touch Screen Display:	5.7-inch (14.47 cm) Color TFT Touch Screen Display
Location Labels:	Up to 400, based on Location Label Length
Printer:	Built-in Thermal Printer (non-printer model available)
Reports:	Pass/Fail Report Wizard for ISO-14644-1, EU GMP Annex 1 and FS-209 Report Formats
Alarm:	Integrated Alarm Buzzer and External Alarm Connection. Alarms on Counts and Low Battery
Enclosure:	Stainless Steel
Sample Output:	Internally filtered to HEPA standards (>99.97% @ 0.3µm)
Vacuum Source:	Internal Closed-loop Controlled Pump: allows the use of Sample Tubing of up to 12 Meters (40 feet) in length
Power:	100-240 VAC, 50-60 Hz, External AC/DC Adapter
Battery:	Lightweight Extended-life Li-Ion, Removable & Rechargeable
Dimensions:	9.5” (d) x 8.0” (w) x 10.2” (h) [24.13 x 20.32 x 25.9 cm]
Weight:	With Battery: 13.0 lbs (5.89 kg); Without Battery: 11.5 lbs (5.2 kg)
Languages:	English, Français, Deutsch, Italiano, Español, Chinese (Simplified)

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Environmental Conditions:

Operating: 50°F to 104°F (10°C to 40°C) / 20% to 95% non-condensing
Storage: 14°F to 122°F (-10°C to 50°C) / Up to 98% non-condensing

Accessories:

Included: Operating Manual on CD; Isokinetic Sample Probe with Tripod and Tubing; Purge Filter; Power Cable and Spare Fuse; LMS XChange Software; Printer; Printer Paper

Optional: Wireless Network Adapter; Removable Rechargeable Li-Ion Battery; Carrying Case with Wheels; Temperature/Relative Humidity Probe; Differential Pressure Probe; Intelligent Filter Scanning Probe; Air Velocity Probe; Spare Removable Rechargeable Li-Ion Battery; External Battery Charger; LMS Express, RT Software; LMS Pharma Edition Software; LMS Standard Software; Validation Documentation; Printed Operating Manual; Cleanroom Cart

Manufactured by:

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Distributed by:

Lighthouse Worldwide Solutions reserves the right to change specifications without notice.

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