



## SOLAIR 1100LD

### Airborne Particle Counter

The **SOLAIR 1100LD** (Laser Diode) leads the industry as the first of its kind portable particle counter with 0.10 micron sensitivity and 1.0 CFM (28.3 LPM) flow rate using long life laser diode technology. Conventional HeNe (Helium Neon) particle counters require frequent cleaning, periodic Laser tube replacement and suffer low concentration limits. The **SOLAIR 1100LD** is designed to operate in ISO Class 1 to Class 7 cleanrooms without concerns of it degrading its environment or exceeding concentration limits. The SOLAIR 1100LD uses an optics and photodiode system designed to reduce or eliminate the temperature issues associated with high power laser diode sensors.

The thermally-controlled exhaust system and HEPA filter option prevent any external contamination. Weighing just 26 Lbs (11.8 Kg) with the Li-Ion battery option, the **SOLAIR 1100LD** is the smallest, lightest and coolest running 0.10 micron, 1.0 CFM portable particle counter on the market.

The easy to use icon-driven interface with multiple languages simplifies training and SOP writing. Its Cleanroom Standard report wizards make the **SOLAIR 1100LD** the preferred cleanroom certification tool and eliminate the need for complex UCL calculations. Its flexible communication and data logging capabilities enable the **SOLAIR 1100LD** to connect to Ethernet or RS-485 networks, connect point-to-point to a PC using USB or securely export its data to a USB Flash Drive.

The **SOLAIR 1100LD** can be used as a portable instrument or easily integrated into a facility monitoring system.

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

Lighthouse is an ISO 9001:2008 Registered company.  
[www.golighthouse.com](http://www.golighthouse.com)

### Features:

- ★ 0.10 µm to 1.0 µm Standard Size Range
- ★ 1.0 CFM (28.3 LPM) Flow Rate
- ★ Simultaneous Display of up to 8 Particle Sizes
- ★ Designed for ISO 21501-4 Compliance:
  - Unit-to-Unit Accuracy and Repeatability
- ★ Designed to Enable 21 CFR Part 11 Compliance when used with Additional Software
- ★ Long-life Laser Diode Sensor Technology
- ★ 5.7-inch (14.47 cm) Color Touch Screen
- ★ Optional Removable, Rechargeable Li-Ion Battery
- ★ 3,000-sample Data Storage Memory
- ★ Stainless Steel Enclosure
- ★ 200 Alphanumeric Location Labels
- ★ Optional Easy-to-Load Thermal Printer
- ★ User-Definable Printouts
- ★ Test Wizard for Cleanroom Pass/Fail Reports:
  - FS-209E, ISO-14644-1 or EU GMP Annex 1
- ★ Easily Configured Interface with Zoom Capability
- ★ Open Architecture Connectivity with OPC Server
- ★ Multiple Communication Interfaces - USB, Ethernet, RS-485 and USB Flash Drive
- ★ Multiple-language Support:
  - English, Français, Deutsch, Italiano, Español

### Benefits:

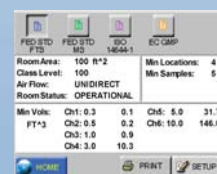
- ★ 2 Year Warranty
- ★ User Friendly Interface
- ★ Easy-to-Read Display
- ★ International Support
- ★ Low Cost of Ownership



User Friendly Configuration



Alphanumeric Location Labels



Multiple Cleanroom Standard Reports via Printer



## Specifications:

<b>Size Range:</b>	0.10µm - 1.0µm, optional ranges up to 5.0µm
<b>Channel Sizes:</b>	Standard: 0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 0.7, 1.0µm
<b>Flow Rate:</b>	1.0 CFM (28.3 LPM)
<b>Counting Efficiency:</b>	50% @ 0.1µm; 100% for particles > 0.15µm (per JIS)
<b>Light Source:</b>	Long Life Laser Diode
<b>Zero Count Level:</b>	<1 count / 5 minutes
<b>Concentration Limits:</b>	500,000 Particles / ft <sup>3</sup> (17,150,000 / m <sup>3</sup> ) @ 5% Coincidence Loss
<b>Calibration:</b>	NIST Traceable, per ISO 21501-4 (Unit-to-Unit Accuracy and Repeatability)
<b>Count Modes:</b>	Automatic, Manual, Beep, Concentration, Cumulative/Differential, Real Time (with <i>LMSNet</i> or <i>LMS Express RT</i> software)
<b>Data Storage:</b>	3,000 Sample Records, Rotating Buffer (particle and environmental data with location and time)
<b>Communication Modes:</b>	USB, Ethernet, RS-485 and Secure Data Transfer (LSDT) to and Storage on USB Flash Drive
<b>Supporting Software:</b>	<i>LMS XChange</i> , <i>LMS Express</i> and <i>Express RT</i> ; <i>LMS Standard</i> ; <i>LMS Pharma</i> ; <i>CREWin</i>
<b>4-20mA Analog Sensors:</b>	Optional Sensors (up to 4) Include Temperature/Relative Humidity, Air Velocity and Differential Pressure
<b>Touch Screen Display:</b>	5.7-inch (14.47 cm) Color, 320x240
<b>Printer:</b>	Optional, Built-in, Thermal
<b>Reports:</b>	FS-209E, ISO-14644-1 and EU GMP Annex 1
<b>Enclosure:</b>	Stainless Steel
<b>Alarms:</b>	Integrated Adjustable Alarm and External Alarm Connector. Alarms on Counts, Low Battery, Sensor Failure
<b>Sample Output:</b>	Internally Filtered to 100% @ 0.1µm, Optional HEPA Filtration for Cooling System Exhaust
<b>Vacuum Source:</b>	Internal Pump, Automatic Flow Control
<b>Power:</b>	100-240 VAC, 50-60 Hz
<b>Battery:</b>	Optional Internal Li-Ion Removeable/Rechargeable Battery
<b>Dimensions:</b>	14.65" (l) x 8" (w) x 10.4" (h) [37 x 20 x 26 cm]
<b>Weight:</b>	With Battery: 26 lbs (11.8 kg) Without Battery: 23 lbs (10.43 kg)

## Environmental Conditions:

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

## Accessories:

<b>Included:</b>	Operating Manual on CD; Isokinetic Sample Probe with Tripod and Tubing; Purge Filter; Power Cable and Spare Fuse; <i>LMS XChange</i> Software; Printer; Printer Paper
<b>Optional:</b>	Printed Operating Manual; <i>Network Adapter</i> ; <i>Wireless Network Adapter</i> ; Internal Removeable, Rechargeable Battery; Carrying Case with Wheels; Cleanroom Cart; Temperature/Relative Humidity Probe; Air Velocity Probe; Differential Pressure Probe; Filter Scanning Probe; High Pressure Difuser; 32-Port <i>Universal Manifold</i> ; <i>LMS Express</i> and <i>Express RT</i> Software; <i>LMSNet</i> Software; Validation Documentation

### Manufactured by:



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### Distributed by:



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

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