

# SOLAIR1100LD

## AIRBORNE PARTICLE COUNTER

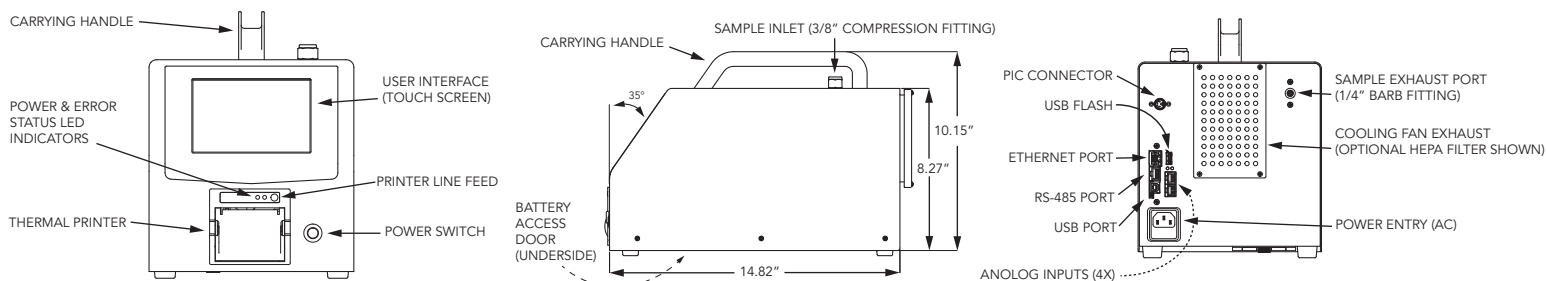


**T**HE SOLAIR 1100LD (Laser Diode) leads the industry as the first of its kind portable particle counter with 0.10 micron sensitivity and 1.0 CFM (28.3 LPM) flow rate using laser diode technology. Conventional HeNe (Helium Neon) particle counters require frequent cleaning, periodic laser tube replacement and suffer low concentration limits. The SOLAIR 1100LD is designed to operate in ISO class 1 to class 7 cleanrooms without concerns of it exceeding concentration limits.

Weighing just 23.35 lbs (10.6 kg) with Li-Ion battery option, the SOLAIR 1100LD is the smallest, lightest and coolest running 0.1 micron 1.0 CFM portable particle counter on the market.

### FEATURES

- 0.1- 1.0  $\mu\text{m}$  sensitivity
- 1.0 CFM (28.3 LPM)
- Up to 8 channels of simultaneous count data
- 21 CFR Part 11 compliant secure USB flash transfer
- Laser Diode Sensor Technology
- 5.7 inch color touch screen display
- Thermal printer
- Stainless steel construction
- Ethernet/RS485/Modbus, 4x 4-20mA analog outputs
- 3,000 record data storage
- 50-record configurable Recipe database
- Report wizard: ISO-14644-1, EU GMP Annex 1, FS-209E



## TECHNICAL DATASHEET

# SOLAIR 1100LD Portable Airborne Particle Counter

<b>Model</b>	<b>1100LD</b>
<b>Size Range</b>	0.10 - 1.0 $\mu\text{m}$
<b>Standard 8 channels</b>	0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 0.7, 1.0 $\mu\text{m}$
<b>Optional 8 channels</b>	0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 1.0, 5.0 $\mu\text{m}$
<b>Counting Efficiency</b>	50% @ 0.1 $\mu\text{m}$ ; 100% for particles > 0.15 $\mu\text{m}$ per ISO 21501-4

### Features

<b>Flow rate</b>	1.0 CFM (28.3 LPM)
<b>Laser Source</b>	Laser Diode
<b>Zero Count Level</b>	< 1 count / 5 minutes per ISO 21501-4
<b>Concentration Limits</b>	1,000,000 particles /ft <sup>3</sup> (34,300,000/m <sup>3</sup> ) @ 10% coincidence loss
<b>Calibration</b>	Meets ISO 21501-4 calibration using NIST traceable PSL spheres, DMA and condensation particle counter
<b>Count Modes</b>	Automatic, manual, beep, concentration, cumulative/differential, realtime with LMS software
<b>Data Storage</b>	3,000 sample records, rotating buffer, particle and environmental data, location and time
<b>Communication Modes</b>	USB, Ethernet, RS-485, USB flash drive
<b>Supporting Software</b>	LMS Express, LMS Express RT, LMS Pharma, LMS Pro
<b>Touch Screen Display</b>	5.7 inch (14.47 cm), color TFT touch screen display
<b>4-20mA Analog Inputs</b>	Inputs for up to 4 environmental sensors, temperature, relative humidity, air velocity, differential pressure
<b>Printer</b>	Available with or without a built-in thermal printer
<b>Reports</b>	FS-209, ISO 14644-1:2015, ISO 14644-1:1999, EU GMP Annex 1
<b>Enclosure</b>	Stainless steel
<b>Alarms</b>	Integrated adjustable alarm and external alarm connector; alarms on counts, low battery and sensor failure
<b>Sample Output</b>	Internally filtered to 100% @ 0.1 $\mu\text{m}$ , 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, external AC/DC adapter
<b>Battery</b>	Optional Li-Ion removable rechargeable
<b>Recharge Time</b>	Typical recharge time 7.5 hours
<b>Dimensions</b>	14.65" (l) x 8.0" (w) x 10.4" (h), [37 x 20 x 26 cm]
<b>Weight</b>	With battery: 23.35 lbs (10.6 kg), without battery 20.25 lbs (9.19 kg)
<b>Languages</b>	English (U.S.), French, German, Spanish, Italian, Russian, Japanese, Korean, Chinese
<b>Environmental Conditions</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

### Included

Operating manual on CD; isokinetic sample probe; purge filter; power cable and spare fuse; LMS Express software; printer and printer paper.

### Optional

Printed operating manual; network adapter; wireless network adapter; Internal removable rechargeable battery; carrying case with wheels; cleanroom cart; temperature/relative humidity probe, air velocity probe; differential pressure probe; filter scanning probes, high pressure diffuser; 32-port universal manifold; LMS Express RT, LMS Pharma, LMS Pro software, validation documentation.

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