



T E C H N I C A L D A T A S H E E T

SOLAIR1100LD

AIRBORNE PARTICLE COUNTER

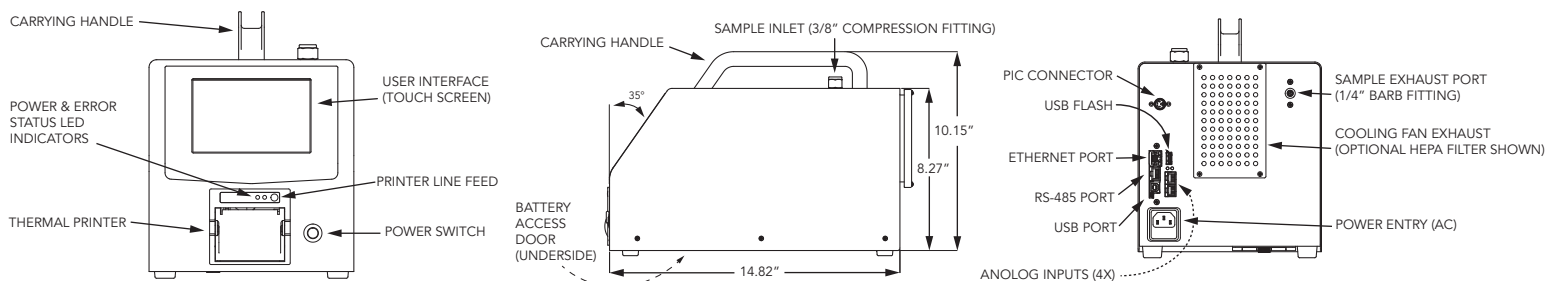


THE SOLAIR 1100LD (Laser Diode) leads the industry as the first of its kind portable particle counter with 0.10 micron sensitivity and 1.0 CFM (28.3 LPM) flow rate using laser diode technology. Conventional HeNe (Helium Neon) particle counters require frequent cleaning, periodic laser tube replacement 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.

F E A T U R E S

- 0.1- 1.0 μm 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

Model	1100LD
Size Range	0.10 - 1.0 μm
Standard 8 channels	0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 0.7, 1.0 μm
Optional 8 channels	0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 1.0, 5.0 μm
Counting Efficiency	50% @ 0.1 μm ; 100% for particles > 0.15 μm per ISO 21501-4

Features

Flow rate	1.0 CFM (2.83 LPM)
Laser Source	Laser Diode
Zero Count Level	< 1 count / 5 minutes per ISO 21501-4
Concentration Limits	1,000,000 particles /ft ³ (34,300,000/m ³) @ 10% coincidence loss
Calibration	Meets ISO 21501-4 calibration using NIST traceable PSL spheres, DMA and condensation particle counter
Count Modes	Automatic, manual, beep, concentration, cumulative/differential, realtime with LMS software
Data Storage	3,000 sample records, rotating buffer, particle and environmental data, location and time
Communication Modes	USB, Ethernet, RS-485, USB flash drive
Supporting Software	LMS Express, LMS Express RT, LMS Pharma, LMS Pro
Touch Screen Display	5.7 inch (14.47 cm), color TFT touch screen display
4-20mA Analog Inputs	Inputs for up to 4 environmental sensors, temperature, relative humidity, air velocity, differential pressure
Printer	Available with or without a built-in thermal printer
Reports	FS-209, ISO 14644-1:2015, ISO 14644-1:1999, EU GMP Annex 1
Enclosure	Stainless steel
Alarms	Integrated adjustable alarm and external alarm connector; alarms on counts, low battery and sensor failure
Sample Output	Internally filtered to 100% @ 0.1 μm , optional HEPA filtration for cooling system exhaust
Vacuum Source	Internal pump, automatic flow control
Power	100-240 VAC, 50-60 Hz, external AC/DC adapter
Battery	Optional Li-Ion removable rechargeable
Recharge Time	Typical recharge time 7.5 hours
Dimensions	14.65" (l) x 8.0" (w) x 10.4" (h), [37 x 20 x 26 cm]
Weight	With battery: 23.35 lbs (10.6 kg), without battery 20.25 lbs (9.19 kg)
Languages	English (U.S.), French, German, Spanish, Italian, Russian, Japanese, Korean, Chinese
Environmental Conditions	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

Included

Operating manual on CD; isokinetic sample probe with tripod and tubing; 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.



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