SOLAIRPortable

AIRBORNE PARTICLE COUNTERS



HE SOLAIR series portable particle counters incorporate our extreme life laser diode technology sensor to produce the industry's longest laser diode life of 20+ year MTTF (based on continuous 24/7 operation). Using a new, lighter extended-life battery and external AC adapter, the SOLAIRs 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 and easy to learn and use.



FEATURES

- 0.3 100 µm sensitivity
- 1.0 CFM, 50 & 100 LPM
- Up to 8 channels of simultaneous count data
- 21 CFR Part 11 compliant secure USB flash transfer
- Extreme life laser diode technology >20-year MTTF
- 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: FS-209E, ISO-14644-1 & EU GMP Annex 1
- 2 year warranty



ECHNICAL DATASHEET

SOLAIR Portable Airborne Particle Counters

	1 CFM		HIGH FLOW
Model	3100	5100	3350
Size range	0.3 - 25.0 μm	¦ 0.5 - 25.0 μm	0.3 - 25.0 μm
Standard 6 channels	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm	¹ 0.5, 0.7, 1.0, 3.0, 5.0, 10.0 μm	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm
	0.3, 0.5, 1.0, 5.0, 10.0, 25.0 μm	¹ 0.5, 1.0, 3.0, 5.0, 10.0, 25.0 μm	0.3, 0.5, 1.0, 5.0, 10.0, 25.0 μm
Standard 8 channel	0.3,0.5,0.7,1.0,3.0,5.0,7.0,10.0 μm 0.5,0.7,1.0,2.0,3.0,5.0,7.0,10.0 μm		100 LPM
Optional 8 channel		1	50%@0.3μm;100% for particles
Flow rate	1 CFM (28.3 LPM)	1 CFM (28.3 LPM)	> 0.45 µm (per ISO 21501-4)
Counting efficiency	50%@0.3µm;100% for particles	1 50%@0.5μm;100% for particles	
	> 0.45 µm (per ISO 21501-4)	i > 0.75 μm (per ISO 21501-4)	
Concentration limits	1,000,000 particles/ft³, (35,300,000/m³) @ 10% coincidence		400,000 particles/ft³, (14,120,000/m³) @ 10% coincidence
	loss suitable for ISO classes 1-8 cleanrooms.		loss suitable for ISO classes 1-8 cleanrooms.
Dimensions	9.5"(l) x 8.0"(w) x 10.2"(h) (24.13 x 20.32 x 25.9 cm)		14.65"(l) × 8.0"(w) × 10.4"(h) (37.0 × 20.0 × 26.0 cm)
Weight	With battery: 13.95 lbs (6.33 kg), without battery 12.35 lbs (5.6 kg)		With battery: 25.83 lbs (11.73 kg), without battery 22.75 lbs (10.32 kg)
Model	BOULDER COUNTER		
Size range	5.0 - 100.0 μm		
Standard 6 channels	5.0, 10.0, 25.0, 40.0, 50.0, 100.0 μm		
Optional 6 channels	5.0, 10.0, 20.0, 30.0, 50.0, 100.0 μm		
Flow rate	1 CFM (28.3 LPM)		
Counting efficiency	50% @ 5.0 μ m; 100% for particles > 7.5 μ m (per ISO 21501-4)		1
Concentration limits	1,000,000 particles/ft³ @ 10% coincidence loss		
Dimensions	9.5"(l) × 8.0"(w) × 10.2"(h) (24.13 × 20.32 × 25.9 cm)		
Weight	With battery: 13.95 lbs (6.33 kg), without battery 12.35 lbs (5.6 kg)		

Features Laser Source Extreme Life Laser Diode with > 20 years MTTF Printer Available with and without internal printer Zero Count Level < 1 count / 5 minutes (per ISO 21501-4) Reports FS-209, ISO 14644-1:2015, ISO 14644-1:1999, EU GMP Annex 1 Calibration Alarm On counts & low battery, Includes ext. alarm connection Meets ISO 21501-4 calibration using NIST traceable PSL spheres **Count Modes** Automatic, manual, beep, concentration, cumulative/differential **Enclosure Data Storage Sample Output** Internally filtered to HEPA standards (>99.97 @ $0.3 \mu m$) 3,000 sample records, rotating buffer **Communication Modes** Vacuum Source Internal closed-loop controlled pump USB, Ethernet, RS-485, USB flash drive

Supporting Software 100-250 VAC, 47-63 HZ Power LMS Express, LMS Express RT, LMS Pharma, LMS Pro

Touch Screen 5.7 inch (14.47 cm) color TFT touch screen display Languages English (US), French, German, Spanish, Italian, Russian, **Location Labels**

Japanese, Korean and Chinese Up to 200 location labels

Included Operating manual on CD, LMS Express transfer software, isokinetic sample probe, purge filter, power cables, spare fuse, printer, printer paper

Optional Printed operating manual, wireless network adapter, removable rechargeable Li-lon battery, carrying case with wheels, temperature/relative humidity probe, intelligent filter scanner probe, air velocity probe, ext. battery charger, software (LMS ExpressRT, LMS Pharma, LMA Pro), validation documentation, cleanroom cart

Distributed By:

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



Lighthouse Worldwide Solutions reserves the right to change specifications without notice

