

Compare Solair Airborne Particle Counters

| | 1100 LD | 3100 | 5100 | 3350 | Boulder Counter |
|-----------------------------|---|--|--|---|--|
| Specifications | | | | | |
| Size Range | 0.1 - 1.0 µm Optional ranges up to 5.0 µm | 0.3 - 25.0µm | 0.5 - 25.0µm | 0.3 - 25.0 µm | 5.0 - 100.0 um |
| Channel Sizes | Standard 8 channels: 0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 0.7, 1.0µm Optional 8 channels: 0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 1.0, 5.0 µm | Standard: 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 µm Standard: 0.3, 0.5, 1.0, 5.0, 10.0, 25.0 µm 8-Channel: 0.3, 0.5, 0.7, 1.0, 3.0, 5.0, 7.0, 10.0 µm | Standard: 0.5, 0.7, 1.0, 3.0, 5.0, 10.0 µm Standard: 0.5, 1.0, 3.0, 5.0, 10.0, 25.0 µm 8-Channel: 0.5, 0.7, 1.0, 2.0, 3.0, 5.0, 7.0, 10.0 µm | Standard: 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 µm Optional: 0.3, 0.5, 1.0, 5.0, 10.0, 25.0 µm | Standard: 5.0, 10.0, 25.0, 40.0, 50.0, 100.0µm |
| Flow Rate | 1.0 CFM (28.3 LPM) | | | 100 LPM | 28.3 LPM |
| Counting Efficiency | 50% @ 0.1 µm; 100% for particles > 0.15 µm per ISO 21501-4 | 50% @ 0.3 µm; 100% @ sizes > 0.45 µm | 50% @ 0.5 um; 100% @ sizes > 0.75 µm | 50% @ 0.3 µm; 100% @ sizes > 0.45 µm | 50% @ 5.0 um |
| Concentration Limits | 500,000 Particles / ft3 (17,150,000 / m3) @ 5% Coincidence Loss | 1,000,000 particles/ft3 (35,300,000/m3) @ 10% coincidence loss Suitable for ISO classes 1-8 cleanrooms | 400,000 particles/ft3 (14,120,000/m3) @ 10% coincidence loss Suitable for ISO classes 1-8 cleanrooms | 500,000 particles/ft3 @ 5% coincidence loss | |
| Light Source | Long Life Laser Diode | Extreme Life Laser Diode Technology with >20-year Mean Time To Failure (MTTF) | | | |
| Dimensions | 14.65"Lx8.0"Wx10.4"H (37x20x26cm) | 9.5"Lx8.0"Wx10.2"H (24.13x20.32x25.9cm) | 14.65"Lx8.0"Wx10.4"H (37x20x26cm) | 9.5"Lx8.0"Wx10.2"H (24.13x20.32x25.9cm) | |
| Weight | With battery: 23.55 lbs (10.68 kg) Without battery: 20.45 lbs (9.28 kg) | With battery: 13.40 lbs (6.08 kg) Without battery: 12.00 lbs (5.44 kg) | With battery: 26.15 lbs (11.86 kg) Without battery: 23.05 lbs (10.46 kg) | With battery: 13.40 lbs (6.08 kg) Without battery: 12.00 lbs (5.44 kg) | |
| Zero Count Level | < 1 count / 5 minutes (per JIS B 9921) | | | | |
| Calibration | Meets ISO 21501-4 Calibration using NIST Traceable PSL Spheres, DMA and Condensation Particle Counter | | | | |
| Count Modes | Automatic, Manual, Beep, Concentration, Cumulative/Differential, Real Time (with LMSNet or LMS Express RT software) | | | | |
| Data Storage | 3,000 Sample Records, Rotating Buffer (particle and environmental data with location and time) | | | | |
| Communication Modes | USB, Ethernet, RS-485 and Secure Data Transfer (LSDT) to and Storage on USB Flash Drive | | | | |
| Supporting Software | LMS Express and Express RT; LMS Pharma | | | | |

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|---------------------------------|---|--|
| Environmental Sensors | Optional (up to 4) temperature/relative humidity, air velocity, differential pressure or others | |
| Touch Screen Display | 5.7-inch (14.47 cm) Color TFT Touch Screen Display | |
| Reports | Pass/Fail Report Wizard for ISO-14644-1, EU GMP Annex 1 and FS-209 Report Formats | |
| Alarms | Integrated alarm buzzer and external alarm connector. Alarms on counts, low battery, sensor failure | |
| Sample Output | Internally Filtered to 100% @ 0.1µm, Optional HEPA Filtration for Cooling System Exhaust | Internally filtered to HEPA standards (>99.97% @ 0.3µm) |
| Vacuum Source | Internal closed-loop controlled pump. Allows the use of 3/8" ID sample tubing of up to 12 meters (40 feet) @ 50 & 100LPM | |
| Enclosure | Stainless Steel | |
| Power | 100-240 VAC, 50-60 Hz, External AC/DC Adapter | |
| Battery | Optional: Li-Ion, Removable & Rechargeable (typical recharge time 7.5 hours) | |
| Languages | English (U.S.), French, German, Italian, Spanish, Chinese, Russian, Japanese, Korean | |
| 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 and Express Software; Printer; Printer Paper | |
| Optional | Printed Operating Manual; Network Adapter; Wireless Network Adapter; 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 Universal Manifold; LMS Express RT Software; LMSNet Software; Validation Documentation | 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 |