Lighthouse SOLAIR 3100+ and SOLAIR 5100+ portable airborne particle counters incorporate our Extreme Life Laser Diode Technology sensor to produce the industry’s first 20-year MTTF laser lifespan.

The SOLAIR 3100+ and SOLAIR 5100+ provide excellent sensitivity of 0.3 and 0.5μm, respectively, at a flow rate of 1.0 CFM (28.3 LPM) and a dynamic range of up to 25.0μm.

The integrated 5.7-inch (14.47 cm) color touch screen interface makes these instruments easy to configure and operate. Both counters can store 3,000 records of particle count data from up to 8 channels and environmental data from up to four analog sensors (4-20mA). All data can be quickly and reliably transferred to a computer or printed on its built-in thermal printer.

Demonstrating their versatility, the SOLAIR 3100+ or SOLAIR 5100+ can be used as a portable instrument or integrated into a facility monitoring system.

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

Lighthouse is an ISO 9001:2000 Registered Company

www.golighthouse.com
Specifications:

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<tr>
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<th>3100+</th>
<th>5100+</th>
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<tbody>
<tr>
<td><strong>Size Range:</strong></td>
<td>0.3 - 25.0µm</td>
<td>0.5 - 25.0µm</td>
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<tr>
<td><strong>Standard Channel Sizes:</strong></td>
<td>0.3, 0.5, 1.0, 3.0, 5.0, 10.0µm</td>
<td>0.5, 0.7, 1.0, 3.0, 5.0, 10.0µm</td>
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<tr>
<td></td>
<td>0.3, 0.5, 1.0, 5.0, 10.0, 25.0µm</td>
<td>0.5, 1.0, 3.0, 5.0, 10.0, 25.0µm</td>
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<tr>
<td><strong>8-Channel:</strong></td>
<td>0.3, 0.5, 0.7, 1.0, 3.0, 5.0, 7.0, 10.0µm</td>
<td>0.5, 0.7, 1.0, 2.0, 3.0, 5.0, 7.0, 10.0µm</td>
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</tbody>
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**Flow Rate:**
1.0 CFM (28.3 LPM)

**Counting Efficiency:**
3100+, 50% @ 0.3µm; 100% @ sizes > 0.45µm; 5100+, 50% @ 0.5µm; 100% @ sizes > 0.75µm Per JIS B 9921, ISO 21501-4

**Light Source:**
Extreme Life Laser Diode Technology with >20 Year Mean Time To Failure (MTTF)

**Zero Count Level:**
<1 count / 5 minutes (per JIS B 9921)

**Concentration Limits:**
500,000 particles / ft³ @ 5% coincidence loss

**Calibration:**
NIST Traceable, per ISO 21501-4

**Count Modes:**
Manual, Automatic, Beep, Concentration and Real Time (with LMSNet or LMS Express RT/RT+)

**Data Storage:**
3,000 Sample Records (Rotating Buffer) which includes particle and environmental data, locations and times

**Communication Modes:**
RS-232 via RJ-45 to PC, RS-485/MODBUS

**Supporting Software:**
LMS XChange, LMS Express, LMS Express RT/RT+, LMSNet

**Environmental Sensors:**
Optional (up to 4); Temperature/Relative Humidity, Air Velocity, Differential Pressure

**Touch Screen Display:**
5.7-inch (14.47 cm) color, 320x240

**Printer:**
Built-in Thermal Printer

**Reports:**
ISO-14644-1, FS-209E & EU GMP Annex 1

**Alarm:**
Integrated, Adjustable Alarm and External Alarm Connection: Alarms on Counts and Low Battery

**Enclosure:**
304 Stainless Steel

**Sample Output:**
Internally filtered to HEPA standards (>99.97% @ 0.3µm)

**Vacuum Source:**
Internal flow-controlled pump

**Power:**
100-240 VAC, 50-60 Hz

**Battery:**
Li-Ion, Removable & Rechargeable

**Dimensions:**
9.96” (l) x 8.0” (w) x 10.16” (h) [25.3 x 20.32 x 25.81 cm]

**Weight:**
With Battery: 14.9 lbs (6.8 kg); Without Battery: 12.95 lbs (5.9 kg)

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; Removable/Rechargeable Li-Ion Battery; Power Cable and Spare Fuse; LMS XChange Software; Printer; Printer Paper

- **Optional:**
  Printed Operating Manual; Network Adapter; Wireless Network Adapter; Shipping Case with Wheels; Cleanroom Cart; Temperature/Relative Humidity Probe; Air Velocity Probe; Differential Pressure Probe; Filter Scanning Probe; High Pressure Diffuser; Spare Removable/Rechargeable Li-Ion Battery; External Battery Charger; 32-port Universal Manifold System; LMS Express/RT/RT+ Software; LMSNet Software; Validation Manual

Manufactured by:
Lighthouse Worldwide Solutions
www.golighthouse.com
info@golighthouse.com
Tel: 800 945 5905
510 438 0500 (Outside of USA)

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