



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

**ApexZ Airborne Particle Counters**

Features	ApexZ3	ApexZ50
<b>Size Range</b>	0.3 - 10.0 µm	0.5 - 10.0 µm
<b>Standard 6 Channels</b>	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 µm	0.5, 0.7, 1.0, 3.0, 5.0, 10.0 µm
<b>Flow Rate</b>	1.0 CFM (28.3 LPM)	100 LPM
<b>Concentration Limits</b>	1,000,000 particles / ft <sup>3</sup> @ 10% coincidence loss	300,000 particles / ft <sup>3</sup> @ 10% coincidence loss
<b>Counting Efficiency</b>	50% @ 0.3µm; 100% for particles >1.5X first channel particle size	50% @ 0.5µm; 100% for particles >1.5X first channel particle size
<b>Sample Inlet</b>	3/8" Inlet nozzle	1/2" Inlet nozzle
<b>Laser Source</b>	Extreme Life Laser Diode	
<b>Zero Count Level</b>	< 1 count / 5 minutes (meets specifications of JIS B 9921 and reporting requirements of ISO 21501-4 Annex C)	
<b>Calibration</b>	Designed for ISO 21501-4 Compliance	
<b>Self-Diagnostics</b>	Laser Power/Current/Supply, Flow out-of-range, No flow, PA Background/Supply/Health	
<b>Count Modes</b>	Sample, Concentration, Beep, Quick Certification	
<b>Data Storage</b>	10,000 Sample Records, 2,500 Locations, 250 Groups, 500 Presets, 500 Sample Plans, 500 Certifications, 100 Reports, 250 Users	
<b>Communication</b>	Ethernet, USB standard, Wi-Fi (802.11 b/g/n)	
<b>Supporting Software</b>	LMS Express, LMS Express RT, LMS Pharma, LMS Professional, LMS XChange	
<b>Environmental Sensors</b>	Temperature/Relative Humidity probe: 0 to 150°F (-17.8 to 65.6°C) ±1.8°F (0.5°C), 0-100% ± 2% RH	
<b>Touch Screen Display</b>	7.0" (8.89 cm), 1280 x 800 IPS color touch screen	
<b>Speakers</b>	2x adjustable up to 70 dB to indicate status and alerts	
<b>Carry Handle</b>	With RGB light pipe for status and alarms	
<b>Printer</b>	Embedded panel-mount printer, also available without printer	
<b>Reports</b>	FED 209E, ISO 14644-1:1999, ISO 14644-1:2015, & EU GMP regulatory pass/fail reports on screen or printer	
<b>Alert</b>	User configurable warnings and alarms	
<b>Sample Output</b>	Internally filtered to HEPA standards (>99.97% @ 0.3 µm); with rotatable exhaust fitting for directed flow	
<b>Vacuum Source</b>	Internal blower, automatic flow control	
<b>Enclosure</b>	Chemically Resistant Polycarbonate blend, conductive lining, VHP compatible	
<b>Power</b>	External power supply: 24 VDC, 5 A max draw	
<b>Battery</b>	2x Li-Ion battery slot capacity, removable and rechargeable, 11 hours nominal use, 50% duty cycle (no printing)	
<b>Dimensions</b>	12.76" (l) x 6.23" (w) x 8.88" (h), [32.41 (l) x 15.82 (w) x 22.55 (h) cm]	
<b>Temperature/Humidity</b>	35°F to 104°F (2°C to 40°C), 20% to 95% relative humidity, non-condensing	
<b>Weight</b>	7.05 lbs (3.19 kg) without batteries, single battery weight 1.35 lbs (0.61 kg)	
<b>Languages</b>	English, Spanish, Portuguese, German, French, Italian, Russian, Chinese, Korean, Japanese, Turkish, Thai	

**Includes** USB flash drive with lanyard, ISO probe 1 CFM (ApexZ3), 100 LPM (ApexZ50), ISP clamp, zero count filter, 24 VDC 5.0 amp power adapter and power cord, 10' Beveline XX tubing 3/8" ID x 1/2" OD (ApexZ3), 1/2" ID x 5/8" OD BevXX (ApexZ50), 1 li-Ion smart battery included (2 battery slot capacity), 2x rolls of printer paper, Operators Manual on USB flash drive, Calibration Certificate

**Optional** USB Barcode Scanner, Temperature & humidity probe, isokinetic sample probes, high pressure diffuser (ported or vented), li-Ion batteries, Beveline XX tubing, external battery charger w/AC power cord, printed operators manual, carry case



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

# ApexZ

## AIRBORNE PARTICLE COUNTERS

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## AIRBORNE PARTICLE COUNTERS





### Faster and simpler particle counting using your current SOPs:

- ✓ Flexible and simple user interface matches any particle counter SOP you use today.
- ✓ Organize your cleanroom workflows with sample plans and validated location protocols.
- ✓ Automate any or all data transfer within your IT environment.

### Automate your workflow and Eliminate sample errors:

- ✓ Organize your entire cleanroom with sample plans; validated routines by location in any or all environments.
- ✓ Map all sampling routines to pre-defined locations for both routine monitoring and certification requirements.



### Stop particle excursion madness and Immediately document and trouble-shoot any alarm:

- ✓ Comment via data tags on any sample routine excursion to document the event digitally in the data record and audit trail.
- ✓ One-click zero count test ensures excursion event is not a false-positive alert or alarm condition.
- ✓ Simplified excursion reporting from data tags ensures no guess work after exiting the cleanroom environment.



### Save Time with Simplified User Management:

- ✓ Log into your particle counter with your existing network ID and Password, via Active Directory Groups.
- ✓ Customize User access levels to match your existing procedures within 21 CFR part 11.



### Configure, validate and start particle counting quickly via LMS XChange:

- ✓ Build validated standard sample configurations and upload them into one or all particle counters.
- ✓ Build cleanroom sample plans for any environment - 1 click upload.
- ✓ LMS XChange software is available free to any Lighthouse Worldwide Solutions' customer.

### Ensure compliance to 21 CFR part 11 data requirements:

- ✓ Traceability and data security assured with ApexZ audit trail.
- ✓ 10 customizable user access levels.
- ✓ Simplify the operator's daily workflow by using global settings to ensure administrator features are hidden.



### Maximize uptime and production efficiency in your cleanroom:

- ✓ Long life dual batteries operate 10-12 hours.
- ✓ Small, compact 7 lb design can be easily transferred with no ergonomic impact from room to room.
- ✓ Maximize walk-away time with visual status lights on the handle for sampling, alert and idle.
- ✓ Full suite of on-site and factory services for install, validation, data integration, change management and calibration needs.

### Wipedown with Confidence:

- ✓ Eliminates risk of cleaning agents leaking into the instrument during your wipe down process.
- ✓ The industries' only fully sealed, chemically compatible particle counter.

## Save time. Eliminate Errors. Data transfer your way!

### Seamlessly integrate data into your existing processes today:

- ✓ Integrated printer (also available without printer).
- ✓ Direct data output to .CSV, .LSDX or .PDF.

### Transfer data directly to secure folders on your network:

- ✓ Flexibly connect via WiFi, Ethernet or USB to send secure data your way.
- ✓ Provides secure location for data transfer to LIMS or ERP.
- ✓ Eliminate manual data transfer errors.

### Connect your ApexZ directly to your LIMS or ERP:

- ✓ Complete and customizable data integration to your existing LIMS and ERP systems via API.
- ✓ Project Management, data integration and validation services to speed data integration.

### Real-time holistic data streaming via Lighthouse software suite:

- ✓ Customized reports for data views your way.
- ✓ Release cleanrooms faster; fully configured for all cleanroom parameters for real-time release decisions.
- ✓ Real-time cleanroom management ensures SOP adherence and room status instantaneously.
- ✓ Visibility to cleanroom management work orders through the entire fill procedure.

