



# ApexZ

## Remote Airborne Particle Counter

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#### Distributed By:



Manufactured in the USA from globally sourced materials



### TECHNICAL DATASHEET

## ApexZ Airborne Particle Counters

Features / Models	ApexZ3	ApexZ50
<b>Minimum Size Detection</b>	0.3 µm	0.5 µm
<b>Standard 6 channel sizes</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 (3.5 CFM)
<b>Sample Inlet</b>	3/8 Inch Inlet Barb	1/2 Inch Inlet Barb
<b>Concentration Limits</b>	1,000,000 Particles/ft <sup>3</sup> @10% (35,300,000/m <sup>3</sup> ) Coincidence loss suitable for ISO classes 1-8 cleanrooms	300,000 Particles/ft <sup>3</sup> @10% (10,590,000/m <sup>3</sup> ) Coincidence loss suitable for ISO classes 1-8 cleanrooms
<b>Communication</b>	Ethernet, USB standard, Wi-Fi (802.11 b/g/n)	
<b>Data Storage Records</b>	10,000 Records, 2500 Locations, 250 Groups, 500 Presets, 500 Sample Plans, 500 Certifications, 100 Reports, 250 Users	
<b>Count Modes</b>	Sample, Concentration, Beep, Custom Recipes, and Certification modes	
<b>Printer</b>	Embedded panel-mount thermal printer, also available without printer; print wirelessly via a network printer	
<b>Reports</b>	FED 209E, ISO 14644-1:1999, ISO 14644-1:2015, & EU GMP 2022 regulatory pass/fail reports on screen or printer	
<b>Self Diagnostics</b>	Laser Power/Current/Supply, Flow out-of-range, No flow, PA Background/Supply/Health	
<b>Alerts</b>	User-configurable warnings and alarms	
<b>Enclosure</b>	Chemically resistant polycarbonate blend, conductive lining, VHP compatible	
<b>Touch Screen Display</b>	7.0 inch (8.89 cm), 1200 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>Power</b>	External power supply: 24 VDC, 5 A max draw	
<b>Light Source</b>	Extreme Life Laser Diode	
<b>Calibration</b>	ISO 21501-4 Compliant and Accredited ISO 17025	
<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>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>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>Battery</b>	2x Li-Ion battery slot capacity, removable and rechargeable, up to 11 hours nominal use, 50% duty cycle	
<b>Temperature Humidity</b>	50°F to 104°F (10°C to 40°C), 20% to 95% relative humidity, non-condensing	
<b>Weight</b>	7.05 lbs (3.19 kg) without batteries, battery weight 1.35 lbs (0.61 kg)	
<b>Languages</b>	English, Spanish, Portuguese, German, French, Italian, Russian, Chinese, Korean, Japanese, Turkish, Thai	
<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>Supporting Software</b>	LMS Express, LMS Express RT, LMS Pharma, LMS Professional, LMS XChange	
<b>Includes</b>	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 feet of Beveline tubing 13/8" 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	
<b>Optional</b>	USB Barcode Scanner, Temperature & humidity probe, 1 CFM isokinetic sample probe, USB Wi-Fi Dongle, high-pressure diffuser (ported or vented), li-Ion batteries, Beveline 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



## Includes LMS XChange Software: To Simplify Your Contamination Control Strategy



Manage Your Sites  
Environmental Monitoring Plans

21 CFR Part 11  
Compliant

Built-In Audit Log  
For Traceability

Quickly Update Your  
Instrument Configuration

Works With All Lighthouse  
Instruments

Wireless Fleet and  
Configuration Management

### Simpler Particle Counter Management From Your Computer

- ✓ LMS XChange streamlines particle counter data management with a simple interface for quick wireless configuration and data retrieval directly from your workstation.
- ✓ This Software enhances fleet management by allowing a single configuration to be wirelessly deployed across over 50 ApexZ particle counters simultaneously, ensuring uniformity and efficiency.

### Automate Your Workflow and Eliminate Sample Errors:

Streamline your cleanroom operations. Set up sample plans and establish validated routines tailored to specific locations. Efficiently assign sampling routines to designated locations to meet routine monitoring and certification standards.

### 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.

## ApexZ & LIMS Integration: Powering Precision in Pharma Cleanrooms

### Seamless Connectivity with MODA & Labware 8

The ApexZ particle counter is engineered for effortless integration with leading LIMS systems like MODA and Labware 8. This easy integration empowers laboratories to streamline their cleanroom monitoring processes with precision and ease.

### Advanced API for Robust Integration

Equipped with a versatile API, ApexZ communicates flawlessly with your existing LIMS, offering both wireless and wired networking capabilities. The system ensures reliable data transfer, even in settings where the internet is unstable.



### Command & Control with ApexZ

Control your particle counter remotely with API commands, such as:

Setting sampling parameters  
Managing current location data  
Conducting zero count  
Starting/stopping samples remotely

### Your Data, Your Reports

Customizable data reports and built-in cleanroom certification reports that align with 21 CFR Part 11 requirements, which offers an additional layer of compliance and adaptability.

### Discover More

For a more detailed understanding of the supported API commands and to explore the full potential of ApexZ's integration with MODA or Labware 8, contact your local sales representative, or reach out to us for the comprehensive API Documentation.