

# ApexZ

## AIRBORNE PARTICLE COUNTERS



**W**hen you are looking to take your environmental monitoring program to the next level, the ApexZ is your solution. The power of the ApexZ starts with the most complete system of self-diagnostics in the industry, an enclosure that is sealed, easy to wipe-down, and chemically compatible with all major cleaning solutions, and much more.

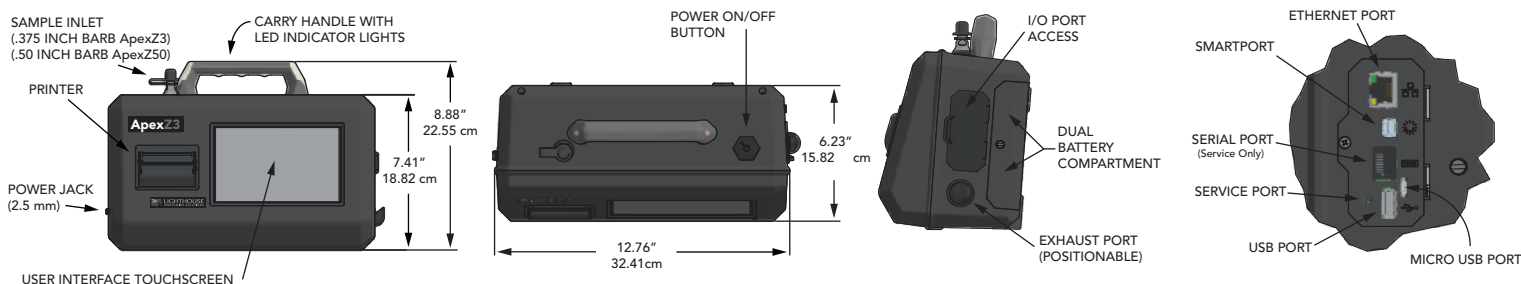
Lighthouse has been re-defining particle counting since our very first products. Now the ApexZ is doing it again with features including a handle with integrated status lights\*, integrated Wi-Fi, bar code scanner capability, 11-hour battery life with hot-swappable smart batteries, and a true multi-touch enabled display.

The ApexZ is designed to be integrated into your environmental monitoring program. With the ability to wirelessly send data to your computer or server, the ApexZ can be used as a wireless real time sensor. Groups, presets, sample plans and certifications can help to automate and simplify your monitoring routine. The ApexZ gives you various user and security levels, audit trails, and data tags that allow you to record things like batch and lot information, room status, or any other information you want associated with your particle counts. For large scale production facilities, we even offer custom integration and automation solutions.

Contact your local Lighthouse representative and see for yourself where the ApexZ can take you.

### F E A T U R E S

- 0.3 - 10.0 $\mu$ m or 0.5 - 10.0  $\mu$ m Particle Size Channels
- 1.0 CFM or 100 LPM Flow Rates Available
- 21 CFR Part 11 Compliant
- Self-Diagnostics
- 7.0 inch Multi-Touch Display
- Sealed VHP Compatible Enclosure
- Integrated Status Lights
- Hot Swappable Smart Batteries
- Wi-Fi, Ethernet and USB Data Transfer Options
- Built-In Cleanroom Certification Reports
- 2 Year Warranty



## TECHNICAL DATASHEET

### ApexZ Airborne Particle Counters

Features	ApexZ3	ApexZ50
Size Range	0.3 - 10.0 $\mu\text{m}$	0.5 - 10.0 $\mu\text{m}$
Standard 6 Channels	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 $\mu\text{m}$	0.5, 0.7, 1.0, 3.0, 5.0, 10.0 $\mu\text{m}$
Flow rate	1.0 CFM (28.3 LPM)	100 LPM
Concentration Limits	1,000,000 particles / $\text{ft}^3$ @ 10% coincidence loss	300,000 particles / $\text{ft}^3$ @ 10% coincidence loss
Counting Efficiency	50% @ 0.3 $\mu\text{m}$ ; 100% for particles >1.5X first channel particle size	50% @ 0.5 $\mu\text{m}$ ; 100% for particles >1.5X first channel particle size
Sample Inlet	3/8 inch Inlet nozzle	1/2 inch Inlet nozzle
Laser Source	Extreme Life Laser Diode	
Zero Count Level	< 1 count / 5 minutes (meets specifications of JIS B 9921 and reporting requirements of ISO 21501-4 Annex C)	
Calibration	Designed for ISO 21501-4 Compliance	
Self-Diagnostics	Laser Power/Current/Supply, Flow out-of-range, No flow, PA Background/Supply/Health	
Count Modes	Sample, Concentration, Beep, Quick Certification	
Data Storage	10,000 Sample Records, 2500 Locations, 250 Groups, 500 Presets, 500 Sample Plans, 500 Certifications, 100 Reports, 250 Users	
Communication	Ethernet, USB standard, Wi-Fi (802.11 b/g/n)	
Supporting Software	LMS Express, LMS Express RT, LMS Pharma, LMS Professional, LMS XChange	
Environmental Sensors	Temperature/Relative Humidity probe: 0 to 150°F (-17.8 to 65.6°C) $\pm$ 1.8°F (0.5°C), 0-100% $\pm$ 2% RH	
Touch Screen Display	7.0 inch (8.89 cm), 1200 x 800 IPS color touch screen	
Speakers	2x adjustable up to 70 dB to indicate status and alerts	
Carry Handle	With RGB light pipe for status and alarms	
Printer	Embedded panel-mount printer, also available without printer	
Reports	FED 209E, ISO 14644-1:1999, ISO 14644-1:2015, & EU GMP regulatory pass/fail reports on screen or printer	
Alert	User configurable warnings and alarms	
Sample Output	Internally filtered to HEPA standards (>99.97% @ 0.3 $\mu\text{m}$ ); with rotatable exhaust fitting for directed flow	
Vacuum Source	Internal blower, automatic flow control	
Enclosure	Chemically Resistant Polycarbonate blend, conductive lining, VHP compatible	
Power	External power supply: 24 VDC, 5 A max draw	
Battery	2x Li-Ion battery slot capacity, removable and rechargeable, 11 hours nominal use, 50% duty cycle no printing	
Dimensions	12.76" (l) x 6.23" (w) x 8.88" (h), [32.41 (l) x 15.82 (w) x 22.55 (h) cm]	
Temperature/Humidity	35°F to 104°F (2°C to 40°C), 20% to 95% relative humidity, non-condensing	
Weight	7.05 lbs (3.19 kg) without batteries, battery weight 1.35 lbs (0.61 kg)	
Languages	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 feet of Beveline XX 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

**Optional** USB Barcode Scanner, Temperature & humidity probe, 1 CFM isokinetic sample probe, high pressure diffuser (ported or vented), li-Ion batteries, Beveline XX tubing, external battery charger w/AC power cord, printed operators manual, carry case

#### Distributed By:



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

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