# ApexZ3

### AIRBORNE PARTICLE COUNTER



hen you are looking to take your environmental monitoring program to the next level, the ApexZ3 is your solution. The power of the ApexZ3 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 is famous for re-defining particle counting when we launched our first products. Now the ApexZ3 is doing it again with features such as a handle with integrated status lights\*, integrated Wi-Fi, 11-hour battery life with hot-swappable smart batteries, and a true multi-touch enabled display.

The ApexZ3 is designed to be integrated into your environmental monitoring program. With the ability to wirelessly send data to your computer or server, the ApexZ3 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 ApexZ3 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 ApexZ3 can take you.

#### FEATURES

- 0.3 10.0µm Particle Size Channels
- 1.0 CFM Flow Rate
- 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

## **ApexZ3 Airborne Particle Counter**

Features	
Size Range	0.3 - 10.0 μm
Standard 6 Channels	0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm
Flow rate	1.0 CFM (28.3 LPM)
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)
Concentration Limits	1,000,000 particles / ft³ @ 10% coincidence loss
Counting Efficiency	50% @ 0.3 $\mu$ m; 100% for particles > 1.5 X first channel particle size
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)
<b>Supporting Software</b>	LMS Express, LMS Express RT, LMS Pharma, LMS Professional, LMS XChange
<b>Environmental Sensor</b>	Temperature/Relative Humidity probe: 0 to $150^{\circ}$ F (-17.8 to $65.6^{\circ}$ C) $\pm 1.8^{\circ}$ F (0.5 $^{\circ}$ 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 Inlet	3/8 inch Inlet nozzle
Sample Output	Internally filtered to HEPA standards (>99.97% @ 0.3 μm); 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-lon 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	, , , , , , , , , , , , , , , , , , , ,
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, 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, 1 li-lon 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-lon 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.

