

# ApexZ3

## AIRBORNE PARTICLE COUNTER



**W**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.

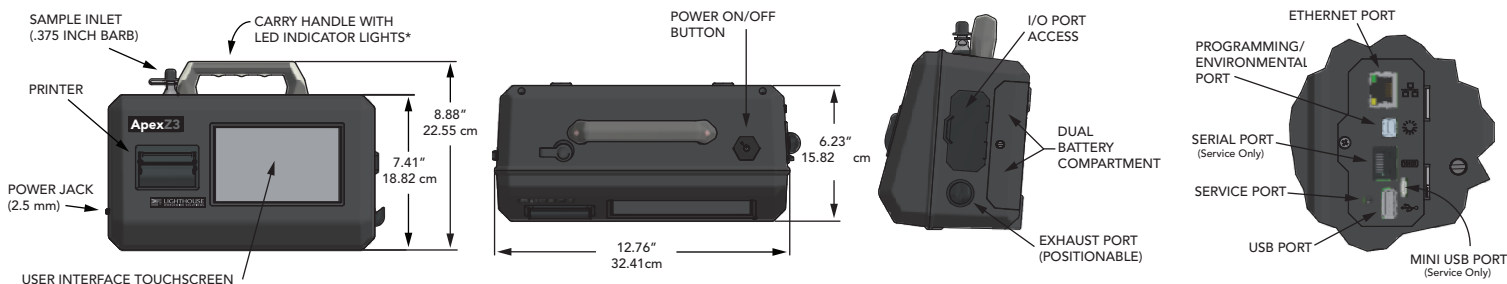
Lighthouse is famous for re-defining particle counting when we launched our first products. Now the ApexZ3 is doing it again with features such as a handle with integrated status lights\*, an app for remote control and configuration, integrated Wi-Fi, 11-hour battery life with hot-swappable smart batteries, 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. Rooms\* and custom sample recipes 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.

### F E A T U R E S

- 0.3 - 10.0 $\mu$  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

|                              |  |
|------------------------------|--|
| <b>Size Range</b>            | 0.3 - 10.0 $\mu\text{m}$   |
| <b>Standard 6 Channels</b>   | 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 $\mu\text{m}$  |
| <b>Flow rate</b>             | 1.0 CFM (28.3 LPM)   |
| <b>Laser Source</b>          | Extreme Life Laser Diode 15 year MTTF  |
| <b>Zero Count Level</b>      | < 1 count / 5 minutes (per ISO 21501-4)  |
| <b>Concentration Limits</b>  | 1,000,000 particles / ft <sup>3</sup> @ 10% coincidence loss   |
| <b>Counting Efficiency</b>   | 50% @ 0.3 $\mu\text{m}$ ; 100% for particles > 1.5 X first channel particle size                                       |
| <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, Custom Recipes and Certification modes  |
| <b>Data Storage</b>          | 10,000 sample records, 999 locations, 50 Rooms*, 50 recipes, 100 report sessions                                       |
| <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 Pro   |
| <b>Environmental Sensors</b> | 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              |
| <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>Printer</b>               | Embedded panel-mount 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 Inlet</b>          | 3/8 inch Inlet nozzle  |
| <b>Sample Output</b>         | Internally filtered to HEPA standards (>99.97% @ 0.3 $\mu\text{m}$ ); 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 Range</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, Dutch, French, Italian, Russian, Chinese, Korean, Japanese, Turkish, Thai                |

**Includes** USB flash drive 512 MB with lanyard, ISO probe 1 CFM, ISP clamp, zero count filter, 24 VDC 5.0 amp power adapter and power cord, 1 li-Ion smart battery included (2 battery slot capacity), 2x rolls of printer paper, Operators Manual (on USB flash drive), Calibration Certificate

**Optional** Temperature & humidity probe, isokinetic sample probe 1 CFM with 6ft tubing, high pressure diffuser (ported or vented), additional li-Ion batteries, external battery charger w/AC power cord, printed operators manual, carry case

### Distributed By:



\* Patent Pending  
Lighthouse Worldwide Solutions reserves the right to change specifications without notice.

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