



Knowledge Beyond Measure.

# AeroTrak™+ Portable Airborne Particle Counters

A100 Series



Unmatched  
5 Year Laser  
Warranty

**AeroTrak™+ Portable Airborne Particle Counters (APCs) are ideal for all industries for cleanroom certification, monitoring and specialized tasks including gas testing and filter scanning.**

AeroTrak™+ Portable APCs provide the newest features—data integrity (including Annex 1), communication options, and an intuitive GUI—that lead to a better customer experience and easy compliance. Standalone or as part of an easy to use complete monitoring system, AeroTrak+ Portable APCs meet your needs.

### Choose Your Model

| Model       | Flow Rate  | Channel Size Options                          | Recommended Manufacturing Application  |
|-------------|--|---|--|
| A100-31     | 1 CFM (28.3 LPM)                                     | 0.3 µm to 10 µm, (6) user selectable channels | Pharmaceutical, Semiconductor, Electronics, Aerospace, Optics, Automotive, Clean Manufacturing |
| A100-35     | 1.77 CFM (50 LPM)                                    | 0.3 µm to 10 µm, (6) user selectable channels | Pharmaceutical, Medical, Manufacturing   |
| A100-51     | 1 CFM (28.3 LPM)                                     | 0.5 µm to 10 µm, (6) user selectable channels | Pharmaceutical, Semiconductor, Electronics, Aerospace, Optics, Automotive, Clean Manufacturing |
| A100-55     | 1.77 CFM (50 LPM)                                    | 0.5 µm to 10 µm, (6) user selectable channels | Pharmaceutical, Medical, Manufacturing   |
| A100-50     | 3.5 CFM (100 LPM)                                    | 0.5 µm to 10 µm, (6) user selectable channels | Pharmaceutical, Medical, Manufacturing   |
| A100-(xx) A | "A" suffix adds analog input and output to any model |   |  |

### Features and Benefits

- One instrument does it all- classify, monitor, filter scan, gas testing and root-cause analysis
- Highly visible status conditions - LED light bar viewable 20 meters / 360°
- Access user controls for GMP compliance
- Sample the correct volume of gas with built in gas correction factors
- Automated ISO 14644-1 and GMP (EU GMP and China GMP) reporting and instrument workflow with included TrakPro™ Lite Secure Software
- Filter test and investigate mode (both audible and visual)
- ISO 21501-4 calibration compliance
- WiFi® enabled connectivity
- Industry best 5 year laser warranty
- Fit for purpose - easy to clean, stainless steel housing
- Simplify integration into third party systems with 4-20 mA analog particle data output and environmental sensor input options
- Multiple instrument reporting supported by latest TrakPro™ Lite Secure Software

**Ready for Measurement.  
Engineered for You.  
Portable Particle Counters to  
Make Your Job Easy.**

## Specifications

# AeroTrak™ + Portable Airborne Particle Counters

## A100 Series

### Specific Model Specifications

|                        | A100-31   | A100-35   | A100-51   | A100-55   | A100-50   |
|------------------------|---|---|---|---|---|
| Size Range             | 0.3 µm to 10 µm   |   |   | 0.5 µm to 10 µm                                 |   |
| Flow Rate              | 1 CFM (28.3 LPM) with ± 5% accuracy   | 1.77 CFM (50 LPM) with ± 5% accuracy            | 1 CFM (28.3 LPM) with ± 5% accuracy             | 1.77 CFM (50 LPM) with ± 5% accuracy            | 3.53 CFM (100 LPM) with ± 5% accuracy           |
| Particle Channel Sizes | 0.3 µm to 10.0 µm, (6) user selectable channels   | 0.3 µm to 10.0 µm, (6) user selectable channels | 0.5 µm to 10.0 µm, (6) user selectable channels | 0.5 µm to 10.0 µm, (6) user selectable channels | 0.5 µm to 10.0 µm, (6) user selectable channels |
| Size Resolution        | <15% @ 0.3 µm (per ISO 21501-4)   |   |   | <15% @ 0.5 µm (per ISO 21501-4)                 |   |
| Counting Efficiency    | 50% at 0.3 µm; 100% for particles >0.45 µm  |   |   | 50% at 0.5 µm, 100% for particles >0.75 µm      |   |
| Concentration Limit    | 8,110,000/ft <sup>3</sup> (286,383,300/m <sup>3</sup> ) @ 10% coincidence loss all models |   |   |   |   |

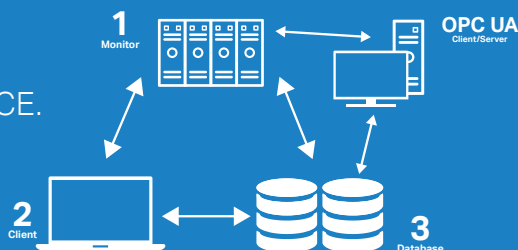
### For All Models

|                                 |  |                        |   |
|---------------------------------|--|------------------------|---|
| Light Source                    | Laser Diode  | Data Storage           | 250,000 sample records, 15 minutes of 1 second data with FMS  |
| Vacuum Source                   | Internal pump with patented flow control technology and automatic manifold detection (patent pending)  | Access Control Reports | Multilevel user access with audit trail ISO 14644-1, EU-GMP, China GMP. Reports can be printed or exported to secure XML or PDF   |
| Laser Warranty                  | Five Years   | Dimensions (HxWxD)     | 8.9 in x 9.8 in x 8.7 in (22.6 cm x 25 cm x 22.2 cm)  |
| Instrument Warranty             | Two Years  | Weight                 | 4.8 kg (10.5 lbs) with battery<br>4.3 kg (9.5 lbs) without battery<br>5.2 kg (11.5 lbs) with two batteries  |
| Calibration Frequency           | One Year   | Power (AC Adapter)     | 100 – 240 VAC, 50 – 60 Hz, 1.5A Max<br>Mains supply voltage fluctuations not exceeding +/- 10% of rated voltage, DC power requirement to instrument: 24 VDC @ 5.0 Amps                    |
| Communication                   | Modbus TCP, Ethernet, USB, Wireless  | Storage Range          | -40° to 158°F (-40° to 70°C) / Up to 98% non-condensing relative humidity   |
| Near Field Communication        | Operator and location  | Printer                | Built-in thermal printer (foreign languages supported)  |
| Wireless Option                 | RTU Wireless Option Available  | Included Accessories   | Power cord, battery, isokinetic probe, 3 m (10 ft) tubing, purge filter, printer paper, USB cable, alarm connector. Quick Start Guide, Operation Manual and TrakPro™ Lite Secure Software |
| External Surface                | Stainless steel  | Optional Accessories   | Electronic filter scanning probe, basic filter scanning probe, additional battery, dual-port external battery charger, printer paper, isokinetic probes, sample tubing, shipping case     |
| Analog Output Options           | 4 Channels 4-20 mA output;<br>3 User selectable particle sizes-linear or log-scale<br>1 Status channel |                        |   |
| Standards                       | CE, JIS B9921, ISO 21501-4   |                        |   |
| Operating Range                 | 34° to 95°F (1° to 35°C),<br>5% to 95% non-condensing  |                        |   |
| Zero Count                      | <1 count / 5 minutes at the 95% UCL (per ISO 21501-4 and JIS)  |                        |   |
| Sampling Duration               | 1 second to 24 hours, continuous   |                        |   |
| Languages                       | English, French, German, Italian, Polish, Portuguese, Spanish, Chinese (Simplified), Japanese, Korean  |                        |   |
| Status Indicator (LED Lightbar) | Sampling, Alert, Sampling Complete   |                        |   |
| Alarm Output                    | Normal open dry contact rated 0 to 60 V AC/DC, 1.5 A peak, 0.5 A continuous                            |                        |   |

**NO INTERRUPTIONS.  
NO DATA LOSS.  
NO-HASSLE COMPLIANCE.**

Complete facility monitoring systems offered by TSI®.

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**Knowledge Beyond Measure.**

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| <b>Germany</b> | Tel: +49 241 523030    |                  |                       |

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