

AELAB Laser dust particle counter

Performance characteristics:

- Stainless steel shell, resistant to disinfectants commonly used in clean rooms
- Built-in high-precision mass flow meter, ensuring flow accuracy of $\pm 3\%$
- 10" capacitive touch screen
- Capable of storing over 10 million sampling data
- Can store 50,000 rooms and 500,000 points
- Multi-level authority management with audit trail function
- Compliant with FDA 21 CFR Part 11
- Compliant with GB/T 29024.4-2017/ISO 21501-4:2007
- Can directly generate reports compliant with GB/T 25915.1-2021/ISO 14644-1:2005
- USB output (supports direct export of PDF reports and data sources via USB flash drive)



Settings

- Clear command layout
- Customizable personalized sampling plans for any room

Sampling

- Real-time concentration curve for better understanding of environmental particle conditions
- Quick editing function for sampling parameters, making each sampling process more flexible

Data

- Data is organized by room, with free switching of counting units
- Automatically generates point average, total average and statistical data
- Can generate reports compliant with multiple relevant standards

Specification Sheet

Parameter	AE-310 Specifications
Dimensions	279 × 202 × 295 mm
Weight	6 kg (including battery)
Language	Chinese / English
Power Supply	DC 16.8 V (rechargeable lithium battery)
Particle Size Channels	0.3, 0.5, 1.0, 2.0, 5.0, 10.0 µm
Sampling Interval	1 second – 999,999 seconds (adjustable)
Sampling Flow Rate	28.3 LPM
Maximum Allowed Concentration	35,000 particles/L (for dust particles ≥0.5 µm)
Sample Concentration Limitation	Sample air must not contain acidic or corrosive gases
Alarms	Flow alarm, battery alarm, count alarm
Exhaust	Built-in HEPA filter (>99.997% @ 0.3 µm)
Printer	Built-in thermal printer, optional Bluetooth needle printer
Data Storage	10 million normal data records, 100,000 statistical data records
Data Security	3-level access control: Administrator, Technician, Operator

Parameter	AE-550 Specifications
Dimensions	279 × 202 × 295 mm
Weight	6.5 kg (including battery)
Language	Chinese / English
Power Supply	DC 16.8 V (rechargeable lithium battery)
Particle Size Channels	0.5, 1.0, 2.0, 5.0, 10.0, 25.0 µm
Sampling Interval	1 second – 999,999 seconds (adjustable)
Sampling Flow Rate	50 LPM
Maximum Allowed Concentration	35,000 particles/L (for dust particles ≥0.5 µm)
Sample Concentration Limitation	Sample air must not contain acidic or corrosive gases
Alarms	Flow alarm, battery alarm, count alarm
Exhaust	Built-in HEPA filter (>99.997% @ 0.3 µm)
Printer	Built-in thermal printer, optional Bluetooth needle printer
Data Storage	10 million normal data records, 100,000 statistical data records
Data Security	3-level access control: Administrator, Technician, Operator

Parameter	AE-5100 Specifications
Dimensions	279 × 202 × 295 mm
Weight	7 kg (including battery)
Language	Chinese / English
Power Supply	DC 16.8 V (rechargeable lithium battery)
Particle Size Channels	0.5, 1.0, 2.0, 5.0, 10.0, 25.0 μm
Sampling Interval	1 second – 999,999 seconds (adjustable)
Sampling Flow Rate	100 LPM
Maximum Allowed Concentration	35,000 particles/L (for dust particles ≥0.5 μm)
Sample Concentration Limitation	Sample air must not contain acidic or corrosive gases
Alarms	Flow alarm, battery alarm, count alarm
Exhaust	Built-in HEPA filter (>99.997% @ 0.3 μm)
Printer	Built-in thermal printer, optional Bluetooth needle printer
Data Storage	10 million normal data records, 100,000 statistical data records
Data Security	3-level access control: Administrator, Technician, Operator