MicronView

Certified with: CE FC

mini APC

Airborne Particle Counter-mini

Capability & Feature

- 4.2kg(9.26lbs)(without battery)
- 8"LCD capacitive touch screen
- Sealed 316L stainless steel enclosure, resistant to disinfectants commonly used in cleanrooms
- Multi-level authority management, featured with audit trail, complies with FDA 21 CFR Part 11
- Available dual flow rate model (28.3 L/min & 100 L/min) significantly reduces costs and improves efficiency

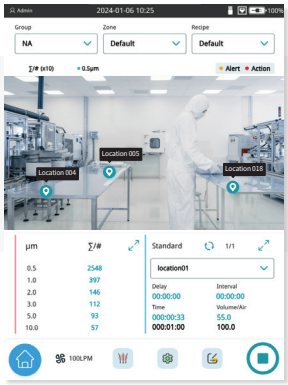
MICRONVIEW

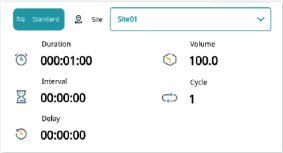
Sampling

Intuitive

Practical

- Simultaneously displays three panels: real-time sampling view, detection readings, and sampling scheme. Select any panel to enlarge and view more details.
  - Real-time Sampling View: Visual representation of the sampling location layout
  - Sampling Readings: Synchronized display of particle detection readings at each location
  - Sampling Scheme: Quickly switch between location and sampling modes

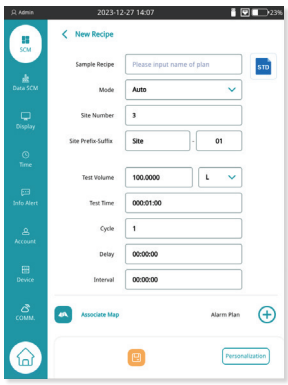




1 Real-time Sampling View

2 Sampling Readings

3 Sampling Scheme

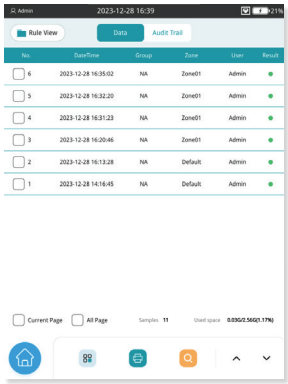


Setting

Simple

Flexible

- Powerful functionality, simple interface, and user-friendly operation
- One-click software system upgrade
- Customizable multi-sampling schemes for any room



Data

Detailed

Flexible

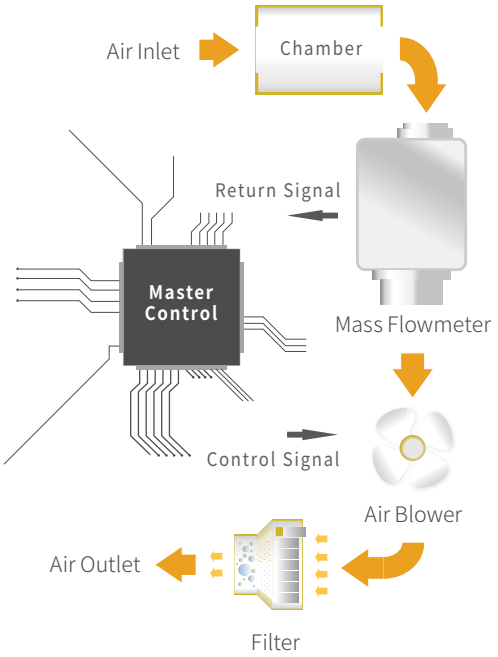
- Standard Reports: One-click generation of ISO/EU GMP/ CHINESE GMP/Fed Std reports
- Data Review and Export:
  1.Summarize data by sampling location or zone
  2.Freely switch counting units: #, #/ft^3, #/m^3
  3.Automatically generate UCL values and averages
  4.Precisely search sampling data by time, zone, operator, etc.
- Data Integrity: featured with audit trail

Data communication and process mode

USB Port	WIFI
Ethernet Port (Internal LAN or Internet)	PDF File

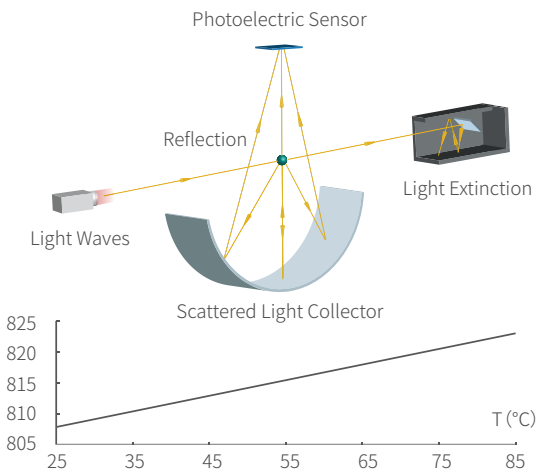
- 5 million sampling data records can be stored
- Configurable for 20,000 rooms and 200,000 sampling locations
- Preset zone settings, sampling schemes can be exported and imported into other mini APCs
- Multi-level access management with audit trail functionality
- Communication methods: WIFI, USB, etc.
- One-click generation of ISO/EU GMP/CHINESE GMP/Fed Std reports

System Air Flow



Air flow is monitored by a mass flow meter. The PID controller automatically adjusts blower speed. A reaction speed of 100ms ensures stable flow and flow rate accuracy within ±5%.

Optical System



The simulation curve of wavelength varying with temperature

MicronView's Airborne Particle Counter laser temperature control system ensures the laser temperature remains fixed, extending the working life of the laser and keeping the output wavelength stable. This ensures the monitoring process is not affected by external temperature and readings remain reliable. The surface of the scattered light collector is gold plated for corrosion resistance and reliability.

Specification Sheet

Specification		Airborne Particle Counter - mini I mini APC			
		A210	A220	A230	A240
Flow Rate	Ambient air	100 LPM±5%	50 LPM±5%	28.3 LPM±5%	100 LPM±5% 28.3 LPM±5%
	Compressed gases	100 LPM±5%	50 LPM±5%	28.3 LPM±5%	100 LPM±5% 28.3 LPM±5%
Flow Rate Control		Built-in mass flow meter, automatic closed-loop			
Size Range		0.5 µm to 25 µm	0.3 µm to 25 µm		0.5 µm to 25 µm
Size Channels		0.5 µm, 1.0 µm, 2.0 µm, 3.0 µm, 5.0 µm, 10.0 µm	0.3µm, 0.5 µm, 1.0 µm, 3.0 µm, 5.0 µm, 10.0 µm		0.5 µm, 1.0 µm, 2.0 µm, 3.0 µm, 5.0 µm, 10.0 µm
Size Resolution		<15% @ 0.5 µm (meets ISO 21501-4)			
Count Efficiency		50% ±20% for 0.5 µm, 100% ±10% for >0.75 µm (meets ISO 21501-4 and JIS B9921)	50% ±20% for 0.3 µm, 100% ±10% for >0.45 µm (meets ISO 21501-4 and JIS B9921)		50% ±20% for 0.5 µm, 100% ±10% for >0.75 µm (meets ISO 21501-4 and JIS B9921)
Concentration Limit		560,000 particles/ft^{3}at 10% coincidence loss	840,000 particles/ft^{3}at 10% coincidence loss	1,400,000 particles/ft^{3}at 10% coincidence loss	560,000 particles/ft^{3}at 10% coincidence loss

Laser Source	Long life laser			
Zero Count	<1 count/5 min			
Exhaust	Built-in HEPA filter, filter efficiency:＞99.999% @0.3 μm			
Room/Location	20,000 rooms and 200,000 locations			
Sampling Mode	Manual, auto, beep			
Sampling Time	1 second to 168 hours			
Cycles	1000 samples per location			
Communication	RJ45, USB, SENSER-HUB, WIFI			
Data Storage	2.5GB, it can storage 5,000,000 sets of sample records			
Alarm	Built-in alarm buzzer, with alarm light, external sound and light alarm			
Display	8" LCD capacitive touch screen			
Language	Chinese, English			
Data Security	Authority management, default authority include administrator, supervisor and operator, customized authority available			
Data Reliability	Compliant with 21 CFR Part 11			
Reports	Compliant with ISO/EUGMP/CHINESEGMP/Fed Std			
Printer	Built-in thermal printer, support external printer			
Calibration Frequency	Recommend once a year			
Dimensions	H238xW170xD220 mm / H9.37xW6.69xD8.66 in			
Weight	4.2kg / 9.26 lbs (without battery), 5.2 kg / 11.46 lbs (Incl. 2 batteries)			
Enclosure	316L stainless steel			
Power	AC 100-240 V, 50 Hz / 60 Hz			
Battery	10.8V, 9000mAhx2 rechargeable lithium battery			
Working Endurance	6 hours of sample time	8.5 hours of sample time	6.5 hours of sample time	100 LPM: 6 hours of sample time 28.3 LPM: 12 hours of sample time
Max Power Consumption	AC 90W			
Operation Conditions	Temperature: 5°C -35°C / 41°F - 95°F, Relative humidity: 5-90% non-condensing			
Storage Conditions	Temperature: 0°C -40°C / 32°F - 104°F, Relative humidity: 5-95% non-condensing			
Safety	EN 61010-1:2010+A1:2019+AC:2019, EN 61326-1:2013, EN IEC 61326-1:2021			
Warranty	24 months (calculated from the date of product activation or six months after the date of manufacture, whichever comes first)			

Ordering Information

Name	Model	Order No.	Flow Rate
Airborne Particle Counter - mini I mini APC	A230	MACHA230	28.3L/min±5%
Airborne Particle Counter - mini I mini APC	A220	MACHA220	50L/min±5%
Airborne Particle Counter - mini I mini APC	A210	MACHA210	100L/min±5%
Airborne Particle Counter-mini, Dual-Flow | mini APC-DF	A240	MACHA240	28.3L/min&100L/min±5%

MicronView

Tel: 1-520-528-1882 Email: mv@micronview.com Website: www.micronview.com

Address: 2300 Highway 365 Suite 110, Nederland TX 77627, USA

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