

# AZ-1000-PM Dust concentration detector

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## 1. Product description

AZ-1000-PM Dust concentration detector, suitable for all kinds of dust-free workshops, clean rooms, The monitoring of dust particle concentration in public environment and other places is biopharmaceutical, medical equipment, and beverage Material packaging, food hygiene, fine chemical industry, atmospheric research, air purification and treatment And the preferred instrument of scientific research units, the use of imported semiconductor laser diodes and domestic ultra-high precision Degree optical sensor, combined with microcontroller technology, has fast response speed and high measurement accuracy With good stability and repeatability, the instrument can measure a variety of particle sizes at the same time Number of dust particles. Built-in 4000mA large capacity polymer rechargeable battery, long standby; 3.5-inch full-viewing Angle IPS industrial color screen, perfect display of technical indicators can be View historical data on the screen, including storage, data printing, data export, temperature and humidity detection, etc.



## 2. Functional instrument features

- ① The latest semiconductor nano process ultra-low power 32-bit microprocessor, 24-bit ADC Data acquisition chip with the highest measurement accuracy in the industry
  - ② Adopt 3.5 inch full-view IPS industrial color screen, resolution is 320x480, perfect display Show the technical indicators of the instrument
  - ③ Four particle sizes can be detected at the same time: (0.3um, 0.5um, 1.0um) two of three options, 2.5um, 10um
  - ④ Can detect 1-5 kinds of gas at the same time, any combination of sensors, support temperature and humidity sensors
  - ⑤ A variety of detection modes can be freely switched: quantity detection mode, quality detection mode, purification efficiency detection mode
  - 6 With data storage function, single channel can store data 30800 groups, can visually view historical data on the screen, can export data
  - 7 with data printing function, can be equipped with a micro printer to print data
  - ⑧ With overvoltage protection, overcharge protection, short circuit protection, anti-static interference, anti-magnetic field interference and other functions
  - ⑨ All Chinese/English operation menu, simple and practical
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### 3. Technical specification

Laser light source	Semiconductor laser diode, life > 100,000 hours		
Sensor	Ultra-high sensitivity optical sensor		
Measuring particle size	Up to 4-6 particle sizes can be detected simultaneously:PM0.3 、 PM0.5 、 PM1.0 、 PM2.5 、 PM5.0 、 PM10		
Overlap error	Less than 5% when there are 2,000 particles per cubic foot		
Gas detection	Can detect gas concentration at the same time, support 1-5 various types of gas sensors		
Temperature/humidity	Standard Temperature and humidity sensor. Temperature range: -40 °C to 120 °C. Humidity range: 0-100% RH Non-condensing		
Verification standard	The counting report conforms to GB/ T16292-1996 and ISO14644-1 standards		
Detection mode:	Mode can be switched: quantity mode PC/L, quality mode ug/m3		
Detection mode	Timing detection and real-time detection can be set		
type of alarm	Custom quantity alarm value, quality alarm value		
communication interface	RS232-USB , 9600Baud rate		
storage mode	Real-time storage, timing storage can be set; 100,000 sets of data can be stored and historical data can be viewed on the screen		
print mode	Optional micro printer printing data, can be set: print cycle, automatic printing, manual printing		
Explosion-proof mark	ExiaII CT4 (intrinsic safety type)	shell material	ABS+ PC
protection grade	IP66	operating temperature	-20 ~ 50°C
power supply	4000mA Rechargeable polymer battery	operating humidity	≤95%RH, Non-condensing
Size/Weight	220*85*55 mm (L×W × H) , 0.5 Kg (Net weight of instrument)		
Standard Accessories	Instrument case, manual, certificate, USB charger + data cable, calibration cover		
optional accessory	Micro printer, Bluetooth printer, memory card		
executive standard	GB3836. 1-2010, GB3836.4-2010		

#### 4、Supply list

No.	Name	Specifications and models	Amount
1	Dust concentration detector	AZ-1000-PM	1
1.1	Instrument main board		1
1.2	signal plate		1
1.3	display panel		1
1.4	gas sensor (PM)		1
1.5	Instrument shell		1
1.6	Instrument chamber		1
1.7	temperature and humidity sensor		1
2	certificate		1
3	specification		1
4	warranty card		1
5	USB cable		1
6	Calibration hood		1
7	Dust filter		1