ZR-1630 Airborne Particle Counter (1CFM)

01

Overview

ZR-1630 Airborne Particle Counter is a portable precision particle counter. The instrument uses light scattering method to measure the particle size and quantity in the air which the particle size is 0.3μm~10.0 μm. Mainly used in cleanroom / operating room monitoring and verification, filter testing, IAQ investigation, data center cleaning and other fields.

ZR-1630 Particle Counter is 6 channels, built in HEPA filter and Vacuum pump. The flow stable at 1CFM(28.3L/min).

Std

ISO 14644-9:2022 Cleanrooms and associated controlled environments

ISO 21501-4:2023: Light Scattering Airborne Particle Counter for Clean Spaces

JIS B 9921:2010 Light scattering airborne particle counter for clean spaces

GMP

02

Accessary

Package	1m Silicon Tube	Tripod
Isokinetic sampling head	Gas collection nozzle	Power cord

03

Features

- Built in vacuum pump, the flow is stably controlled at 1CFM (28.3L/min).
- Collect and measure particles with 6 sizes (0.3μm~10.0μm) at the same time.
- Constant speed sampling can measure temperature and humidity.
- Self contained battery≥6h.
- Built in printer. Real time storage of sampling data, export data by USB.
- Automatic alarm when the concentration exceeds the set value.
- Built in HEPA filter to filter exhaust gas, self purification time ≤ 5 minutes.
- 7-inch color screen, clear Visual in sunshine.
- User friendly, can select standard according to requirement. (CN GMP, EU GMP, ISO 14644).
- Calculate UCL (Ultra Cleanliness Level) automatically. (ISO 14644)
- Audit Tracing & assign permissions to users, further guarantee data integrity.
- Preset sampling mode, which can be assigned to clean-rooms in different areas.

04

Technical Parameter

Parameter	Range
Particle size	0.3、 0.5、1.0、 3.0、5.0、 10.0μm
Counting efficiency	0.3μm：50%±20%； >0.5μm：100%±10%
Maximum concentration	≥7.4 X 10^5 pcs/ft³ （2.6 X 10^7pcs/m³） coincidence loss
Light source	laser diode
Sampling flowrate	1CFM(28.3L/min)，Error±2%FS
Sampling volume	0.47 L~28300L
zero count	<1 count / 5min
Sampling mode	● Manual or automatic ● Accumulated count, partition count ● Concentration mode and number mode ● UCL calculation
Sampling time and frequency	● 1s~1000min ● 1-1000 times
Sampling output	Built in HEPA filter （>99.97%@0.3μm）
Sampling mode/area/room/points	Can preset 90 rooms, 1000 locations, and 60 formulas
Alarm prompt	Sound and light alarm: particle count exceeding limit, low battery, equipment abnormality, etc
Data storage	8GB, can store approximately 100000 sets of data
Working condition	(-20~50)℃, ≤85%RH
Communication	USB, WIFI, Bluetooth, RS485
Power Supply	AC(100 ~240)V, (50~60)Hz
Battery working time	≥6 hours
Size	(L240×W265×H265) mm
Weight	About 6.2kg
Power Consumption	80W