

MD8 airscan Air Sampler

Quantification and differentiation of airborne microorganisms



Description

The MD8 airscan Air Sampler together with gelatin membrane filter disposables constitute an airborne microorganism sampling system for accurate, reproducible and quantitative detection of airborne microorganisms in clean rooms and isolators, whether conventionally ventilated or under laminar flow.

Applications

The MD8 airscan is an air sampler which works according to the filtration principle. It draws a defined volume of air through a gelatin filter. The microorganisms and viruses contained in the sampled air are retained by the filter, where they are available for processing by microbiological or virological methods.

When the microorganism content of the sampled air is to be quantitatively determined, the usual method is to subsequently plate the filter directly on an appropriate culture medium, incubate and count the resulting number of colony forming units (cfu). This number is related to the volume sampled to give cfu/m³.

When the virus concentration is to be determined, the gelatin filter must be dissolved after sampling, so that retained viruses can be cultivated in the solution and analyzed by virological or molecular biological methods.

Performance

The MD8 airscan together with the gelatin membrane filter provides:

- Absolute retention of organisms since the

filters captures all bacteria laden particles in the sample regardless of particle size.

- The filters prevent desiccation of the retained organisms due to the filters residual moisture content.
- Very low bacteria counts can be measured because the high flow rates allow sampling of large volumes in short time, 1 m³ in less than 8 minutes. This makes the method ideal for validating and monitoring the most critical sterile areas.
- Isokinetic sampling is possible in laminar flow areas.
- The system is suitable for clean rooms because the disposables may be mounted inside the clean room with the sampling device mounted outside the room.
- The system can be calibrated by an accessory calibration unit.

Versatility

Users of the MD8 airscan now have the possibility of operating this air sampler from a distance using either of two remote control configurations: A PC and connecting cable, order no. 1ZE---0004; the accessories required include a PC or laptop (Microsoft Windows 95/98 software or higher) and a printer. A PLC interface unit, order no. 1Z---0003; this version requires only a separate interface port for the PLC unit.

The system is supplied complete with the MD8 airscan Air Sampler, filter holder, line cord, instructions for use, and a calibration certificate.

Specifications

Materials

Air throughput:	2.0 m ³ /h to 8.0 m ³ /h, in increments of 0.1 m ³ /h
Max. deviation of	±5% within the temperature air throughput range of 15°C to 35°C
Correction of	When the air throughput the air setting cannot be attained, throughput the display shows the setting maximum attainable throughput for a corresponding new setting below this value
Timer	1–99 minutes, adjustable in steps of 1 minute
Operating elements	Covered keypad with six keys LCD with 2x16 characters
Error messages displayed	Clogged filter or filter defect (press Enter)
Power	700 W
Safety fuses	6.3 Amp. 115 V; 3.15 Amp. 230 V
Noise level	Max. 62 dB(A) with gelatin membrane filters; Max. 70 dB(A) with 0.8 µm pore size membrane filters
Weight	Approx. 6.5 kg
Dimensions	375 x 242 x 228 mm (L x W x H)
Length with filter holder	407 mm
Air inlet connector	Bayonet-type quick connect
Voltage	100/115/230-volt version (50/60 Hz)

Air Monitoring

Ordering Guide



Product Type
164 = Sterisart

Product
40 = Calibration unit
46 = Airscan (230V)
47 = Airscan (115V)
48 = Airscan (100V)
57 = Airport

Ordering information

Accessories Name	Description	Quantity	Order number
Set of connectors	Accessory to the MD8 series	1	17657
Flexible PVC Hose (2M)	Accessory to the MD8 series	1	17085
Carrying case	Accessory for the MD8 airscan	1	17208
Calibration Unit	Portable calibration unit for the MD8 series of air samplers.	1	16740
Adapter	Adapter for the MD8 series. To be used with the gelatin disposables.	1	17801
Gelatin Disposables	Gelatin filter disposables, individually packaged and sterilized, ready-to-connect units, consisting of membrane filter and holder, single packaged.	10	175-28-080-ACD
Gelatin Disposables	Gelatin filter disposables, individually packaged and sterilized, ready-to-connect units, consisting of membrane filter and holder triple packaged.	10	175-28-080-BZD
Gelatin Disc Filters	Gelatin disc filters for filter holder 17655	50	12602-080-ALK

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