MD8 Airport

The Portable Air Sampler

SARTORIUS

MD8 Airport –
Portable, Reliable, Fast

MD8 Airport is the air sampler for the pharmaceutical industry, biotechnology, food and beverage industry, for hospitals, and for measurements within the scope of environmental protection and occupational safety.

Benefits offered by Sartorius MD8 Airport:
- Battery operated and portable – so it can be used everywhere
- Battery power level clearly indicated so constant performance during sampling is guaranteed
- Ergonomically designed and easy to clean
- User friendly prompting with the option of four languages: English, French, German and Spanish
- Flexible options for customized use including adjustable air throughput and air flow rate
- Parameters last used are stored even after automatic shut-off
- Can be calibrated on-site
- Utilizes Gelatin Membrane Filter Method, allowing for reliable and accurate results

The Gelatin Membrane Filter Method offers:
- High retention rate for microorganisms and viruses
- Protection of microorganisms sampled from drying out for a relevant and meaningful sampling time
- Use of a variety of nutrient media
- The solubility of the gelatin membrane filter allows further applications (e.g. rapid microbiology, virus sampling and sampling of high bacterial concentrations).

MD8 Airport can also be used with BACTair™ culture media plates.

Sartorius
AirPort MD8

Technical Specifications

MD8 Airport

Air flow control	by an integrated impeller wheel
Air flow rate adjustable in five steps	10 l/min., 20 l/min., 30 l/min., 50 l/min. 125 l/min. (only when BACTair™ culture media plates are used)
Pre-set sample volumes	25, 50, 100, 250, 500, 750 and 1000 liters

Table of correlation of sampling volumes | sampling times at the given air flow rates

Sampling volume in liters (l) Sampling time in seconds (s)	25 l	50 l	100 l	250 l	500 l	750 l	1000 l
at 10 l/min. flow rate	150 s	300 s	600 s	1500 s	3000 s	4500 s	6000 s
at 20 l/min. flow rate	75 s	150 s	300 s	750 s	1500 s	2250 s	3000 s
at 30 l/min. flow rate	50 s	100 s	200 s	500 s	1000 s	1500 s	2000 s
at 50 l/min. flow rate	30 s	60 s	120 s	300 s	600 s	900 s	1200 s
at 125 l/min. flow rate	12 s	24 s	48 s	120 s	240 s	360 s	480 s

Additionally user-definable sampling volumes	from 10 to 2000 liters in 5-liter increments
Total sampling time with one battery charge	approx. 4.5 hours at 50 l/min., 4 hours at 125 l/min.
Power consumption	5 – 14 Watt depending of filter pressure drop
Weight	approx. 2.5 kg
Dimensions (L × W × H)	300 × 135 × 165 mm
Certified for compliance with the CE requirements	

Specifications of BACTair™ Culture Media Plates

Material	Polystyrene
Dimensions	116 × 24 mm
Number of impaction holes	400 holes, each Ø 0.47 mm
High particle retention for particles	> 0.65 μm

Specifications of Gelatin Filter Disposables

Materials	gelatin (water soluble) Cyrolite (if with single-use holder)
Nominal pore size	3 μm
Filter diameter	25 mm, 37 mm, 47 mm, 50 mm, 80 mm (for standard 90 mm agar plates)
Limiting operating conditions	max. 30°C at 85% relative humidity
Retention of bacteria and viruses	99.9995% for Bac. sub. niger spores at 0.25 m/s inlet velocity 99.94% for phage T3 (coli phage) at 80% relative humidity and 0.3 m/s inlet velocity

Battery

Rechargeable battery	NiMH 16.8 volts/3800 mAh
Battery charger	input 100 – 240 V 47 – 63 Hz/600 mA; output 24 V/1000 mA
Charging time of battery	approx. 4.5 hours when completely discharged
Battery charger	with changeable plugs for worldwide use

MD8 Airport can be used during recharging.

Ordering Information

Description	Order No.
Air sampler MD8 Airport and battery charger (69898525)	16757
Accessories for MD8 Airport (further accessories on request)	
Adapter for gelatin filter disposables	17801
Adapter for BACTair™ culture media plates	17803
Filter holder for 80 mm	17655
Filter stack (10 filter holders)	17656
Adapter for 47 mm gelatin filter	1ZAD--0026
Battery charger	69898525
80 mm Gelatin filter disposables (sterile and individually packed)	
Pack of 10 disposables (single packed)	17528--80----ACD
Gelatin disc filters	
Gelatin filter 25 mm (50 per box)	12602--25----ALK
Gelatin filter 37 mm (50 per box)	12602--37----ALK
Gelatin filter 47 mm (50 per box)	12602--47----ALK
Gelatin filter 47 mm (100 per box)	12602--47----ALN
Gelatin filter 50 mm (50 per box)	12602--50----ALK
Gelatin filter 50 mm (100 per box)	12602--50----ALN
Gelatin filter 80 mm (50 per box)	12602--80----ALK
Culture media plates	
BACTair™ culture media plate with TSA, 110 mm, sterile and individually packaged, 10 pcs.	14320-110----ACD
BACTair™ culture media plate with Sabouraud Agar, 110 mm, sterile and individually packaged, 10 pcs.	14321-110----ACD
Covers for BACTair™ culture media plates, 10 × 2 units individually, sterile packaged	1ZPX-D0002
Dissolve the gelatine filter for subsequent PCR analysis	
Microsart@solve (camber to dissolve 47 mm gelatin filter)	1Z----0006
Adapter MD8 Bayonet to Tri-Clamp	1ZAD--0025
Clamp for Tri-Clamp connection	SB-18-00-0194
Sealing for Tri-Clamp connection	7EDSCV0003