

MAS-100 ISO®

Precise and reliable microbial airsampler with modular concept for stationary use in sterility test or production Isolators, to count the microbes in a defined volume of air acc. to ISO, GMP, HACCP, FDA, USP etc. requirements.

The microbial airsampler system

The MAS-100 ISO® is based on 1 to 4 airsamplers (built-up from moduls SH + VU + AU), controlled by 1 Control unit (CU). This modular concept avoids pumps, filters, vacuum or other inconvenient features, and is in fact a highly secure and precise system, perfectly dedicated for use in Isolators.

Features and benefits

- Based on MAS-100® concept
- Reliable and robust modular system
- Special Valve unit for secure hydrogenperoxide sterilization
- Airflow compensation for highest precision
- Low running costs by using Standard Petridishes
- 100 l/min acc. to ISO 14698, only 2.5 % deviation
- Isokinetic: no turbulence in laminar flow
- Sample volume programmable up to 2000 liters
- Built-in Memory, PC-port, Printer, Calibration reminder

Experimental procedure

The MAS-100® has a built-in dialog software. The Sampling head is within the Isolator, all other parts outside. Automatic driven security valves ensure convenient and proper hydrogen-peroxide sterilization of the modules SH and VU together with the Isolator.

Specification

Dimensions	CU and VU: 23.5 x 17 x 12 cm, AU: 23.5 x 25.4 cm, SH: 8.6 x 11 cm
Application	Microbial air monitoring in Isolators and other cleanrooms.
Display	Alphanumeric liquid crystal display, 32 characters.
Working range	Free selection of volume of 1 - 2000 liters. Predefined Volume selectable.
Sampling head	Perforated aluminium (SH-SA) or stainless stell (SH-SS) lid with 400 holes, for standard 90/100 mm Petridishes.
Tube connection	Standard ¾" Tri-clamp.
Sensor	Hot-wire anemometer, numerical control.
Nominal airflow	100 liters / min. ± 2.5%.
Menu modes	User menu, Setup menu, Service menu
Remote start	At the rear of the aspiration unit is a 4-pole connector for remote control of the unit.
Valves	Rigid PVC / Viton / SS.
Ambient conditions	Temperature 0 to 40°C; Maximum relative humidity 80 percent for temperatures up to 31°C decreasing linearly to 50 percent relative humidity at 40°C.
Power consumption	AU + VU = 0.25A (58V) when active, or 0.06A (12V) on standby
Mains operation	Connected to the mains with the power supply unit: 110-240 Volt.
Printer	Integrated matrix printer Citizen MD-911.
Approvals	CE (EN 61326-1: 1997 + A1:1998, EN 55022, Class A, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11)
Techn. revisions	Technical modifications in compliance with technical progress reserved.

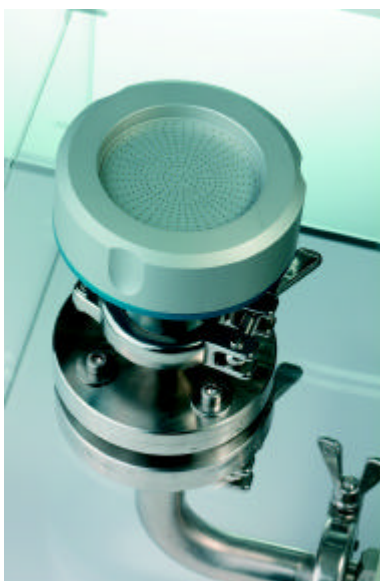
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Literature

MEIER, R. and ZINGRE, H.: Qualification of airsampler systems: The MAS-100®, Swiss Pharma 22 No. 1-2: page 15-21, 2000

RIETH, M.: Bedienung, Monitoring und Wartung eines Sterilitätstest-Isolators, Swiss Pharma 24 No 12: page 7-10, 2002

FELLER, W.: An introduction to the probability theory and its application, John Wiley and sons Inc. New York, page 175, 1950



Ordering Information

Product	Merck Cat. No.	Pack contents
MAS-100 ISO® CU	1.09812.0001	Control unit with built-in printer
MAS-100 ISO® SH-SA	1.09816.0001	Sampling head, aluminium
MAS-100 ISO® SH-SS	1.09817.0001	Sampling head, stainless steel
MAS-100 ISO® VU	1.09814.0001	Valve unit
MAS-100 ISO® AU	1.09813.0001	Aspiration unit
Software pack	1.09819.0001	Special cable for PC-connection
Pressure test kit	1.09326.0001	Test kit, to ensure pressure tight connections
DA-100 anemometer	1.09228.0001	Digital anemometer for calibration of MAS-100®