

MAS-100 Eco®

Microbial airsampler based on the wellknown MAS-100® principle, for portable use in food & drink production or other cleanrooms, to count the microbes in a defined volume of air acc. to ISO or HACCP requirements.

The microbial airsampler system

The MAS-100 Eco® microbial airsampler is supplied with Mains power supply unit, Standard rechargeable NiMH batteries, Operator manual (Different language versions available), Feller table, QC and Calibration-Certificate.

Features and benefits

- Robust and easy to handle airsampler
- Convenient 2-buttons operation
- Low running costs by using Standard Petridishes
- 100 l/min acc. to ISO 14698
- Isokinetic: no turbulence in laminar flow areas
- Sample volume programmable up to 1000 liters
- Runs 7.5 hours with built-in NiMH battery
- Automatic calibration reminder

Experimental procedure

Open the sampling head and insert a standard Petridish.

The MAS-100 Eco® has built-in dialog software. Press "Yes" to switch on or to accept a parameter or command. To ignore it, press the "No" button. The program works its way automatically through all the required parameters.

Once you have set the aspirated volume and delay, the program goes to the "Start ?" prompt. When you press "yes", the MAS-100 Eco® starts to sample the pre-set volume of air.

After the collection the total volume collected will be displayed. Remove the Petridish and count the colonies after incubation.



Specification

Dimensions	18 x 11 cm, silver aluminium housing with blue handle.
Application	Microbial air monitoring in food & drink and all other cleanrooms.
Display	Alphanumeric liquid crystal display, 16characters.
Working range	Free selection of volume of 10 - 1000 liters. Predefined Volume selectable.
Sampling head	Perforated aluminium lid with 400 holes, for standard 90/100 mm Petridishes.
Nominal airflow	100 liters / min. ± 4 %.
Menu modes	Measurement: User menu. Settings: Setup menu.
Control buttons	1 YES-button and 1 NO-button for easy operation.
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.
Connections	Low-voltage socket for the MAS-100® power supply unit.
Mains operation	Can be connected to the mains with the power supply unit: 110-240 Volt, 47-63 kHz. 4 plug adapters for worldwide use.
Portable operation	2 standard NiMH rechargeable batteries, for 3.5 hours operation. Recharge cycle 9 hours.
Approvals	CE (EN 50081-1:1992 + EN 50082-1:1997, EN 50081-2:1993 + EN 50082-2:1995 + prEN 50082-2:1996)
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

ANDERSEN, A.: New Sampler for the Collection, Sizing, and Enumeration of Viable Airborne Particles, U.S. Army Chemical Corps Proving Ground, Dugway, Utah, 1958

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 Eco® System	1.09227.0001	MAS-100 Eco® airsampler
Shoulder bag	1.09126.0001	Blue shoulder bag for MAS-100 Eco®
Tripod screw	1.09127.0001	Special screw adapter, allows usage with standard camera tripod