Overview

The MAS-100 NT® and MAS-100 NT® Ex portable microbial air samplers are the leading instruments for use in critical environments. These compact yet sophisticated devices are the preferred choice for those demanding the highest quality in microbial air monitoring. The MAS-100 NT® systems feature a 300-hole perforated lid for increased collection efficiency and impaction speed. Both systems utilize standard 90-100 mm agar plates or can be adapted to fit 50-60 mm contact plates allowing for a low consumable cost and great flexibility. Sampling at 100 LPM, these systems have the highest airflow accuracy available at ± 2.5 %, compared to others that can be as high as ±10 %. The integrated flow sensor allows the user to freely interchange the perforated lids without affecting the accuracy or the calibration of the unit. Sampling volumes are also easily configurable between 1 and 2,000 liters. The units have a horizontal air flow velocity of 0.45 meters per second and isokinetic flow rate that will not produce turbulence in a laminar flow environment. The SQS function will allow for smaller sampling volumes over longer periods of time.
A programmable start delay of up to 60 minutes allows for personnel to be out of the sampling area when the sampling starts and an audible alarm indicates the interruption of a sampling cycle. The MAS-100 NT® is powered by a Lithium ion rechargeable battery with an intelligent charging program that assures long battery life without routine discharging.
The MAS-100 NT® microbial air sampler also features a USB data communication port. This allows for easy download of software upgrades and easy communication with database programs.
The MAS-100 NT® Ex shares all of the same functions of the MAS-100 NT® system but is specially designed for use in explosion proof areas. The MAS-100 NT® Ex has received ATEx Conformity and can be used in zone 2 and gas groups 11A,11B, and 11C in temperature classes T1 to T4.

Advantages

- Compact design
- Improved security features and enhanced connection possibilities
- Very easy to handle
- Hardware and software developed according to GAMP 4
- Fully validated system using ICR plates
- Improved communication (including RS-232 and USB ports)
- Alarm and sample log records of the last 100 events can be exported or printed at any time
- Mass flow is measured and ensures a flow of 100 LPM
- Validated according to the EN ISO 14698 standard
- Fully meets the d50 requirements using the 300 x 0.6 mm sampling head

Related Services

• Validation Protocols

Save precious time with our comprehensive and regulations compliant validation protocols from validation master plan to final report.

• IQ/OQ Services

Simplify the execution of your IQ/OQ. Our highly trained validation engineers will execute the air sampler validation protocol for you, in your lab.

• Service agreements

Stay compliant and ensure reliability of your air sampler over time with our service agreements. Our service agreements include a yearly preventative maintenance, a new calibration certificate, and a performance report as well as extended warranty options. Our highly trained service engineers service your air sampler in our closest repair center or come into your lab to service your air sampler within a day.

Please contact your local sales representative for more information or a quotation.

To Place an Order or Receive Technical Assistance

Find contact information for your country at:
www.emdmillipore.com/offices

For Technical Service, please visit:
www.emdmillipore.com/techservice

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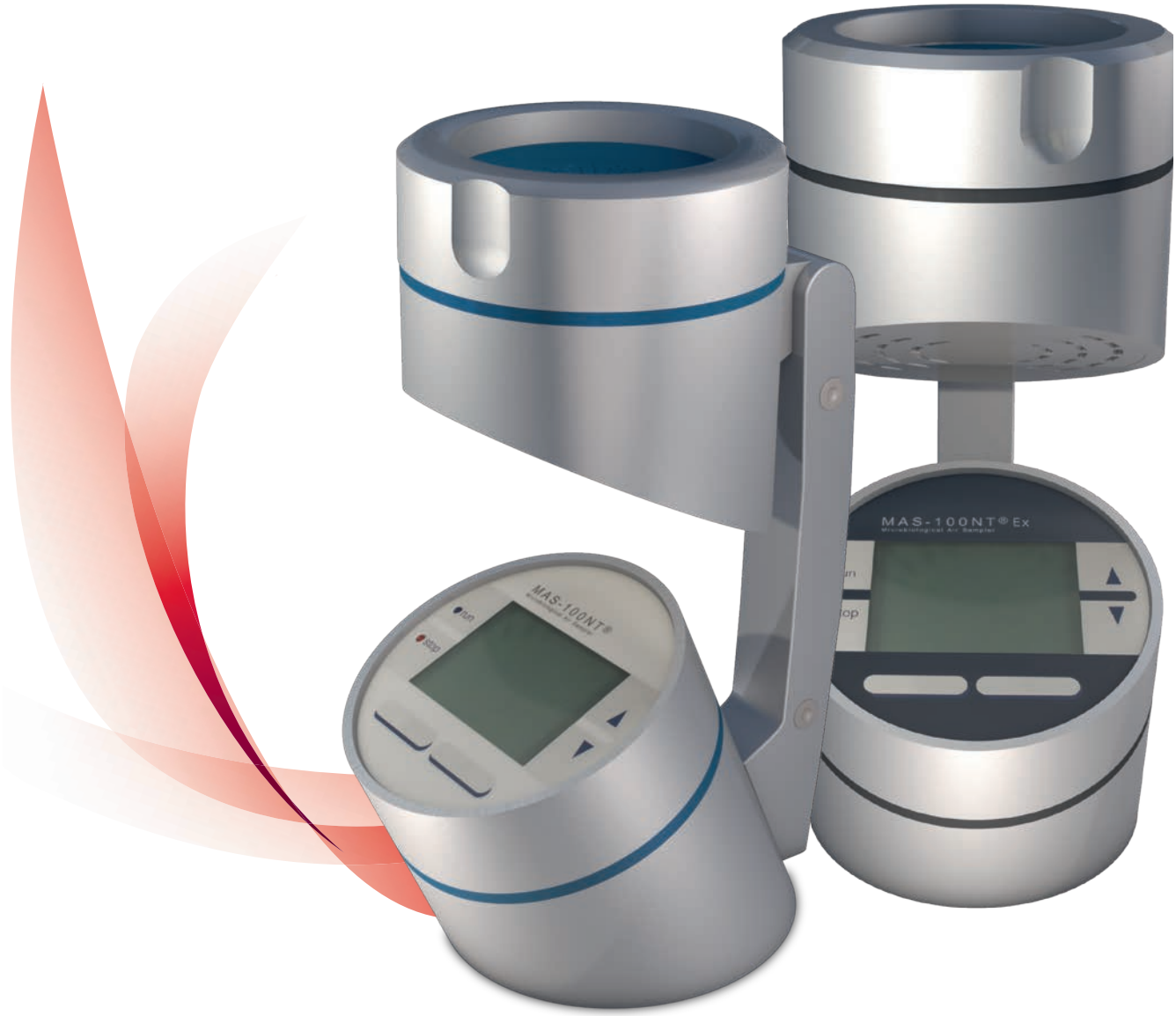
There is more to clean environments than meets the eye.
Leading solutions for air monitoring.

The MAS-100 NT® & MAS-100 NT® Ex



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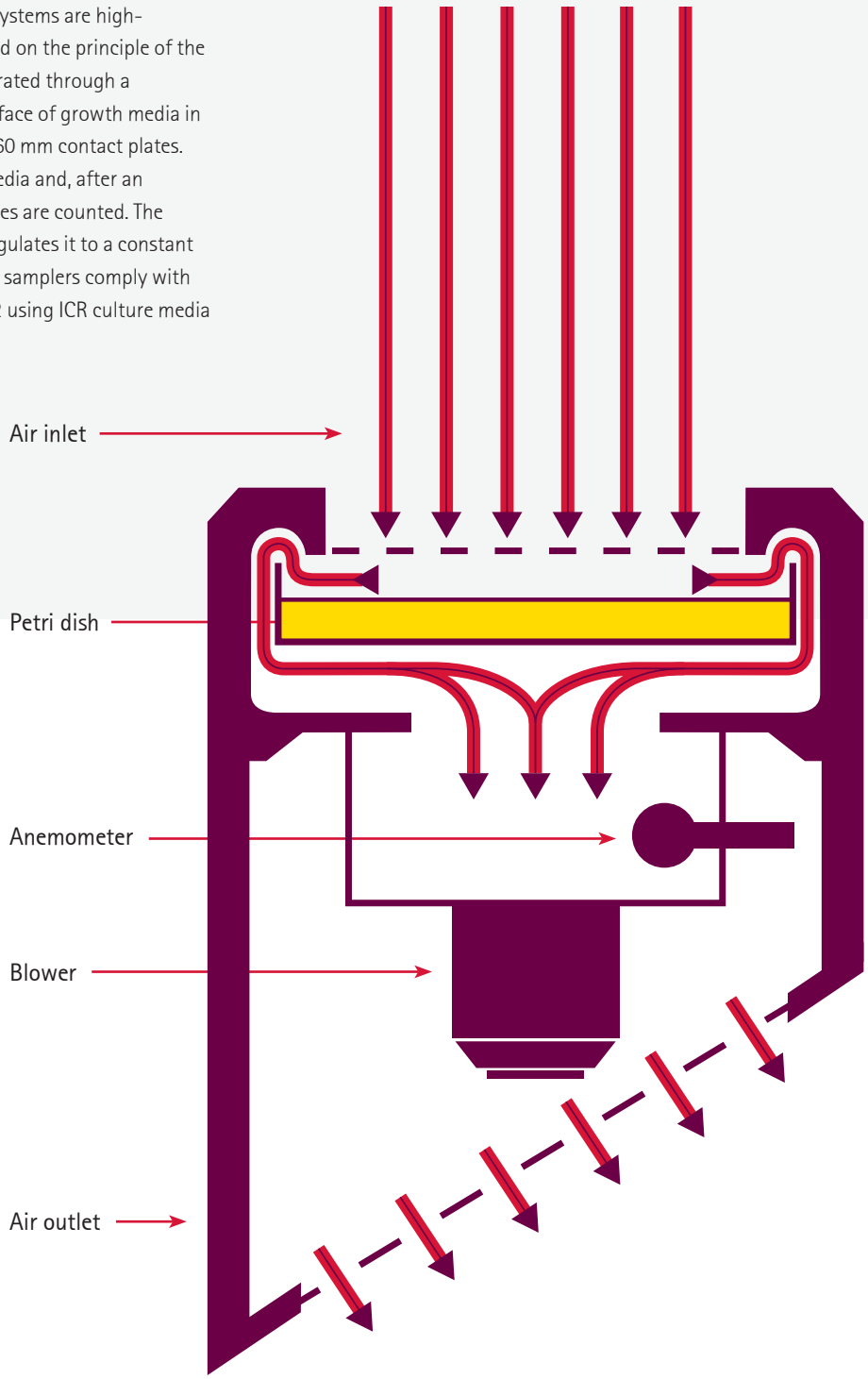
Basic Principle

The MAS-100® microbial air monitoring systems are high-performance instruments which are based on the principle of the Andersen air sampler. Ambient air is aspirated through a perforated lid and impacted onto the surface of growth media in standard 90-100 mm Petri dishes or 55-60 mm contact plates. Microorganisms adhere to the culture media and, after an appropriate incubation period, the colonies are counted. The system measures the inflow of air and regulates it to a constant value of 100 liters/min. All MAS-100® air samplers comply with the guidelines of ISO 14698 parts 1 and 2 using ICR culture media and fully meet the d50 requirements.



Technical Specification

Feature	Specification
Height	25 cm
Diameter	11 cm
Weight	2.38 kg
Material	Anodized aluminum
Nominal airflow	100 SLPM ±2.5 % (standard litres per minute)
Pre-set sampling volumes	50, 100, 250, 500 and 1,000 litres
User defined sampling volume range	1 to 2,000 litres, in increments of 1 liter
Battery pack	Li-ion, rechargable battery pack
Charging time	Full recharge time approx. 3.5 hours
Running time	Total running time up to 7 hours
Total aspiration volume	Approx. 42,000 liters
Motor	6 V
Display	Backlit liquid crystal display
Battery	RTC (Real Time Clock) battery; lifetime of approx. 10 years
Driving motor	PWM (Pulse Width Modulation) frequency for driving motor
Airflow regulation	Hot wire anemometer, numerical control, temperature and pressure sensors
CE approval	Emission: EN 61326-1:2006, EN 55011:1998+A1:99 Immunity: EN 61326-1:2006, EN 61000-4-2:1995 + A1:98 +A2:01, EN 61000-4-3:2002, EN 61000-4-4:1995 + A1:01 +A2:01, EN 61000-4-5:1995 + A1:01, EN 61000-4-6:1996 + A1:01, EN 61000-4-8:1993 + A1:0
Power unit / battery charger	110-240 V, 50-60 KHz
Data exchange	USB interface

Note: Specifications for the MAS-100 NT® Ex are similar to the above.

Ordering Information

Description	Catalog No.
MAS-100 NT®	1.09191.0001
MAS-100 NT® Ex Air Sampler Explosion Proof	1.09194.0001

Accessories

Description	Catalog No.
MAS-100® Extra Dust Cover	1.09084.0001
Perforated lid for MAS-100 NT® (300 x 0,6 mm)	1.09195.0001
MAS-100 NT® Perforated Lid, Aluminum, 400-hole	1.09088.0001
MAS-100® Tripod	1.09326.0001
MAS-100® Tripod Adapter – Quick Connect	1.09223.0001
MAS-100® Tube Adapter	1.09224.0001
MAS-100® Contact Plate Holder	1.09214.0001
MAS-100® Perforated Lid for Contact Plates	1.09213.0001
MAS-100 Ex® Extra Dust Cover	1.09123.0001
Main Charger for MAS-100 NT®	1.09200.0001
Battery pack Li-Ion for MAS-100 NT®	1.09208.0001

Related Products

ICR Settle Plates (triple-bagged, gamma-irradiated, non-lockable)	Package size	Ord. No.
Sabouraud Dextrose Agar – ICR	20 120	1.46577.0020 1.46577.0120
Sabouraud Dextrose Agar + LT – ICR (SDA with lecithin and (Tween®) 80)	20 120	1.46081.0020 1.46081.0120
Sabouraud Dextrose Agar + LTHTh – ICR 30ml (SDA with lecithin, (Tween®) 80, histidine and thiosulfate)	20 120	1.46005.0020 1.46005.0120
Sabouraud Dextrose Agar selective + LTHTh – ICR (SDA with lecithin, (Tween®) 80, histidine and thiosulfate and irradiation-resistant antibiotics for growth inhibition of accompanying bacterial flora)	20 120	1.46016.0020 1.46016.0120
Tryptic Soy Agar – ICR	20 120	1.46001.0020 1.46001.0120
Tryptic Soy Agar + LT – ICR (TSA with lecithin and (Tween®) 80)	20 120	1.46050.0020 1.46050.0120
Tryptic Soy Agar + LTHTh – ICR (TSA with lecithin, (Tween®) 80, histidine and thiosulfate)	20 120	1.46069.0020 1.46069.0120
Tryptic Soy Agar + LT + Cephase – ICR (TSA with lecithin and (Tween®) 80 and specific beta-lactamase mixture for inactivation of a broad spectrum of penicillins, cephalosporins and carbapenems)	20 120	1.46076.0020 1.46076.0120
Tryptic Soy Agar + LTHTh + Penase – ICR (TSA with lecithin, (Tween®) 80, histidine, thiosulfate and beta-lactamase for inactivation of penicillins)	20 120	1.46013.0020 1.46013.0120
Vegetable Peptone Agar + LTHTh – ICR (PSA (caseine peptone replaced by vegetable peptone) with lecithin, (Tween®) 80, histidine and thiosulfate)	20 120	1.46658.0020 1.46658.0120

ICRplus Settle Plates (triple-bagged, gamma-irradiated, lockable)	Package size	Ord. No.
TSA + LTHTh – ICR+ (Tryptic Soy Agar with neutralizers lecithin, (Tween®) 80, histidine and sodium thiosulfate)	20 120	1.46683.0020 1.46683.0120
TSA + LT – ICR+ (Tryptic Soy Agar with neutralizers lecithin and (Tween®) 80)	20 120	1.46684.0020 1.46684.0120
TSA – ICR+ (Tryptic Soy Agar)	20 120	1.46685.0020 1.46685.0120
Chocolate Agar + LTH – ICR+ (Chocolate Agar with neutralizers lecithin, (Tween®) 80 and histidine)	20	1.46686.0020