

Master Science Heating Incubator: Precision Temperature Control for Laboratory Research



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Laboratory Heating Incubator, ICB Series - Master Science

Experience unmatched reliability and precision with the Master Science ICB Series Heating Incubator, tailored for laboratory researchers and equipment purchasers seeking stable environments for cell cultures, microbial growth, and biochemical assays. Featuring advanced dual temperature control, a large LCD display, and robust safety measures, this series—including the versatile MSICB81SWISS model—ensures consistent performance from RT+5°C to 80°C. With its stainless steel construction and user-friendly design, the ICB Series minimizes downtime and maximizes experimental accuracy, making it an indispensable asset for modern labs focused on reproducibility and efficiency.

Key Benefits for Lab Professionals

- **Exceptional Precision and Stability:** Dual temperature control with auxiliary backup maintains $\pm 0.5^{\circ}\text{C}$ fluctuation and $\pm 1^{\circ}\text{C}$ uniformity, delivering reliable conditions for sensitive applications like enzyme reactions and sample incubation.
- **Intuitive Large LCD Display:** Real-time monitoring of temperature and timing functions simplifies operation, allowing quick adjustments and reducing user error in fast-paced research settings.
- **Enhanced Safety Features:** Built-in leakage protection automatically cuts power during faults, safeguarding personnel and equipment without disrupting other lab operations.
- **Durable and Hygienic Design:** High-quality stainless steel chamber with removable shelves facilitates easy cleaning and maintenance, ensuring long-term hygiene and compliance with lab standards.
- **Uniform Air Circulation:** Unique air duct system promotes even temperature distribution, preventing hotspots and supporting consistent results across the entire chamber.
- **Flexible Capacity Options:** Available in 43L, 81L, 138L, and 252L volumes to suit varying lab scales, with the MSICB81SWISS offering an ideal 81L for mid-sized experiments.
- **Advanced Optional Upgrades:** Integrate multi-segment programmable control, built-in printer, RS485 interface for remote monitoring, or UV sterilizer for enhanced functionality and data management.

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Solving Common Lab Pain Points

In laboratory environments, temperature inconsistencies, equipment failures, and safety risks often lead to compromised data, increased costs, and workflow interruptions. The ICB

Series tackles these issues effectively:

- **Temperature Variability:** The microprocessor-controlled system with 0.1°C resolution and auxiliary temp control eliminates fluctuations, ensuring precise, reproducible conditions that reduce failed experiments and save valuable time.
- **Equipment Downtime from Failures:** Spare temperature control kicks in if the main unit fails, maintaining operations and preventing sample loss during critical incubations.
- **Safety Hazards:** Leakage protection isolates electrical faults, protecting users from shocks and preventing broader lab disruptions, which is crucial for high-stakes research.
- **Cleaning and Maintenance Challenges:** Removable shelves and a seamless stainless steel interior with silicon sealing simplify sterilization, addressing hygiene concerns and extending equipment lifespan.
- **Uneven Heating:** The innovative air duct design guarantees uniform temperature, solving issues with inconsistent sample growth in larger chambers.
- **Scalability Limitations:** Multiple volume options, including the compact yet spacious MSICB81SWISS, allow purchasers to match equipment to specific needs without overinvesting.
- **Data Tracking Gaps:** Optional RS485 interface and printer enable seamless logging and remote control, streamlining compliance and analysis for busy researchers.

By addressing these challenges, the ICB Series enhances lab productivity, reduces operational risks, and supports cost-effective, high-precision research.

Technical Specifications

The ICB Series offers consistent high-performance specs across models, with details for the MSICB81SWISS highlighted below for clarity:

- Model: MSICB81SWISS.

- Interior Volume: 81L
- Temperature Range: RT+5°C to 80°C.
- Temperature Fluctuation: $\pm 0.5^{\circ}\text{C}$.
- Temperature Uniformity: $\pm 1^{\circ}\text{C}$.
- Temperature Resolution: 0.1°C .
- Auxiliary Temperature Control: Yes, for backup stability.
- Leakage Protection: Yes, with automatic power cutoff.
- Display: Large LCD screen with temperature correction and timing functions.
- Chamber Material: High-quality stainless steel.
- Shelves: 2 removable shelves.
- Air Duct Design: Unique system for optimal uniformity.
- Exterior Size (W×D×H): 73×53×69 cm.
- Chamber Size (W×D×H): 45×40×45 cm.
- Package Size (W×D×H): 85×66×86 cm.
- Power Rating: 700W.
- Net/Gross Weight: 50/75 kg.
- Additional Features: Silicon sealing ring, anti-hot handle, microprocessor controller.
- Optional Accessories: Multi-segment programmable control, built-in printer, RS485 interface, UV sterilizer.

This optimized overview positions the ICB Series as a precision powerhouse for lab incubation, combining cutting-edge features with practical design to meet the demands of researchers and purchasers alike. For more information or to purchase, visit the official product page.