

BioGrowth Horizontal Incubator Shaker



Introduction

Elevate your laboratory work with our advanced equipment. The integrated LCD touch screen simplifies parameter configuration and monitoring, making it intuitive for users. You can precisely set culture durations using the built-in timing function, granting flexibility for experiments. The robust three-wheel drive system guarantees smooth, quiet, and reliable operation while incorporating essential safety features like over-temperature alarms and automatic power-off recovery. The hollow tempered glass door allows 360° observation without opening it. The sleek design offers easy cleaning with a stainless steel interior and an exterior that's corrosion-resistant. Security is enhanced with encryption, and side-mounted debugging holes facilitate oxygen supply without opening the main door. Plus, the equipment includes lighting and UV sterilization functions for added convenience. Welcome to a new era of laboratory equipment.

Product Features

- 1. Integrated LCD Touch Screen:** All essential parameters, including temperature, speed, time, actual temperature, speed, and remaining time, are seamlessly displayed on a single user-friendly interface. This eliminates the need for switching between screens, enhancing the intuitive nature of the device. Additionally, users can easily configure the rocker's rotation direction and the forced convection fan settings, choosing between continuous operation or automatic control.
- 2. Precise Timing Capability:** The equipment features a built-in timing function, allowing users to set precise culture times anywhere between 0 and 999.9 hours.
- 3. Robust Three-Wheel Drive:** The device utilizes a three-wheel drive system with a three-dimensional design. This ensures smooth, stable, durable, and reliable operation. Importantly, it operates quietly, minimizing disruptions.
- 4. Advanced Safety Features:** Equipped with an over-temperature alarm function and automatic power-off capabilities for abnormal situations, this equipment also boasts a power-off recovery feature. This feature safeguards against data loss due to power interruptions and system crashes.

Product Features - Continued

5. **360° Observation without Door Opening:** The equipment incorporates a hollow tempered glass door, facilitating clear and unrestricted observation from all angles without the need to open the door.
6. **Sleek and Hygienic Design:** The equipment sports an aesthetically pleasing arc-shaped exterior. Inside, it's lined with easy-to-clean 304 brushed anti-corrosion stainless steel featuring smoothly curved corners that prevent bacterial build-up. The exterior shell is electrostatically sprayed to prevent corrosion, ensuring durability.
7. **Enhanced User Security:** The operation interface includes encryption and locking mechanisms to prevent repetitive operations and human errors.
8. **Side-Mounted Debugging Holes:** The side of the equipment is equipped with debugging holes that meet the oxygen requirements of samples without necessitating door openings. This design adds convenience for future technical certifications.
9. **Illumination and UV Sterilization:** The equipment comes equipped with both lighting and UV sterilization functions to maintain a sterile and well-illuminated interior environment.

Unique Advantages

1. **Safe and Convenient Lid Operation:** This equipment is designed with a user-friendly instant-stop or slow-stop function that activates when the lid is opened. This feature enhances safety by reducing the shearing force on cells and ensuring greater stability during operation.
2. **Data Memory and Analysis:** The equipment is equipped with a data memory function, capable of recording temperature and rotational speed data on a per-minute basis. It stores this data, allowing users to create historical records and real-time curve graphs for comprehensive observation and analysis of the temperature and rotational speed's impact on experiments during operation. This data can be preserved for 12 months and easily imported or exported through the included USB interface.
3. **Flexible and Upgradable Control:** Intelligent control is achieved through PLC microcomputers, permitting users to add custom programs at any time. This human-centric feature ensures the device can be adapted to meet evolving user needs, with the ability to upgrade programming operations.
4. **Efficient Diversion Waterproof System:** The equipment boasts a patented built-in diversion waterproof system, which effectively waterproofs and flushes the internal cavity without leaving any dead ends. This design simplifies the cleaning process and ensures thorough cleanliness.

Unique Advantages - Continued

5. High-Quality and Stable Servo Motors: High-quality servo motors are integrated into the device, offering precise speed control and exceptional stability. These motors also incorporate built-in filter magnetic rings, which effectively shield the equipment from external interference, further enhancing its operational stability.

6. Environmentally Friendly Cooling System: The equipment is powered by imported, high-quality compressors and nitrogen-free, eco-friendly refrigerants. These components operate with minimal noise and deliver efficient cooling, guaranteeing stable performance even at low temperatures, without the risk of frost or icing.

7. Temperature Uniformity Through Silent Fan Design: Silent fan design, combined with a forced convection method, ensures consistent temperature uniformity within the equipment's cavity. This feature is essential for reliable and reproducible experimental results.

Technical Specifications

Model	UMSI-HZ-1T	UMSI-HZ-1TR
Number of overlays	1 layer	1 layer
Type	Horizontal	
Display	LCD touchscreen	
Rotation speed	10-400rpm	
Speed control accuracy	1rpm	
Shaking throw	26mm	
Temperature control mode	PLC control mode	
Temperature control range	RT + 5-60 °C	4-60 °C
Temperature display resolution	0.1 °C	
Temperature fluctuation	±0.1 °C	
Temperature field uniformity	±0.8 °C @37 °C	
Ambient temperature	5-35 °C	
Sterilization method	UV sterilization	
Tray size	518×424mm	
Tray capacity of shake flask	250ml×30 or 500ml×20 or 1000ml×12 or 2000ml×6	
Illumination	FI tube, 30W	
Power supply	AC220V±10%, 50-60Hz	
Timing function	0-999.9hours	
Net weight	82KGS	89KGS
Dimension(W×D×H)	848×657×559mm	
Optional	Shading device, 90 °C high temperature module, embedded printer	