

BioGrowth Vertical Incubator Shaker



Introduction

Experience laboratory excellence with our cutting-edge equipment. The intuitive LCD touch-screen simplifies operation, letting you customize temperature, speed, and time settings at a glance. No need to switch screens. A built-in timer offers flexibility, allowing culture times from 0 to 999.9 hours. A state-of-the-art three-wheel drive system ensures smooth, stable, and quiet performance. Safety is paramount with over-temperature alarms and automatic power-off, including data recovery. The sleek design combines functionality with style, featuring a stainless steel interior, rounded corners for easy cleaning, and an electrostatic plastic shell. Observing your experiments is effortless with a 360° view through the tempered glass door. Error-proof operation with encryption and locking mechanisms is at your fingertips. Convenient debugging holes provide oxygen access without main door opening. Lighting and UV sterilization functions enhance versatility. Welcome to the future of laboratory equipment.

Product Features

- 1. Intuitive Touchscreen Interface:** The LCD touch screen offers a user-friendly interface where you can seamlessly set and monitor temperature, speed, time, actual temperature, speed, and remaining time. There's no need to switch between multiple screens, making observation more intuitive. You have the freedom to configure the rocker's rotation direction and the forced convection fan settings, whether it's set to always run, automatic, or off.
- 2. Customizable Timing:** This equipment features a built-in timing function that allows you to set culture times as needed, ranging from 0 to 999.9 hours.
- 3. Efficient Three-Wheel Drive:** The equipment utilizes an advanced three-dimensional integrated three-wheel drive system, ensuring a smooth, stable, durable, reliable, and notably quiet operation.
- 4. Safety Features:** It includes essential safety features such as an over-temperature alarm function and an automatic power-off function in case of abnormal situations. Additionally, it boasts a power-off recovery function that prevents data loss resulting from power outages and crashes.
- 5. 360° Observation:** Thanks to its hollow tempered glass door, you can easily observe the contents inside the chamber from any angle, eliminating the need to open the door.

Product Features - Continued

6. **Sleek Design:** The equipment is not just functional but also stylish. Its streamlined appearance includes a 304 brushed anti-corrosion stainless steel lining with rounded corners, making it easy to clean and preventing bacterial growth. The outer shell is constructed from electrostatic spray plastic.

8. **Secure and Error-Proof Operation:** The operation interface is equipped with encryption and locking mechanisms, minimizing the risk of repeated operations and human errors.

9. **Sample Oxygen Access:** Conveniently, there's a debugging hole on the side, allowing samples to access the required oxygen without opening the main door. This feature also simplifies the process for future customers seeking technical certification.

10. **Enhanced Functionality:** The equipment comes with integrated lighting and UV sterilization functions, adding versatility to its already impressive range of capabilities.

Unique Advantages

1. **Double-Layer Rocking Plate:** The innovative double-layer rocking plate design not only provides an expansive usage space but also features a vertical layout, effectively conserving valuable floor space.

2. **Advanced Temperature Control:** Our equipment incorporates a patented three-channel hot and cold gas mixing circulation air duct system, ensuring consistent and uniform temperatures throughout the chamber.

3. **Data Recording and Analysis:** With a data memory function, it diligently records temperature and rotational speed data in real time. This comprehensive dataset is then used to generate historical data and real-time curves, simplifying the observation and analysis of the experiment's response to temperature and rotational speed variations. These records can be securely stored for up to 12 months, and an integrated USB interface allows for straightforward data import and export.

4. **Intelligent Programming:** Featuring state-of-the-art PLC microcomputer intelligent control, you have the flexibility to add or modify programs at any time. This user-centric approach ensures that the equipment can be tailored to meet the unique requirements of your experiments while also allowing for upgrades in the programming operation.

5. **Waterproof and Easy Maintenance:** Our machine incorporates a patented built-in diversion waterproof system. This system enables efficient waterproofing and flushing of the internal cavity, leaving no dead ends. Moreover, it's designed for easy cleaning and maintenance, eliminating the need for special tools.

6. **High-Quality Motor and Stability:** To guarantee precise speed control and enduring stability, we've equipped this equipment with a top-tier servo motor. It includes a built-in filter

Unique Advantages - Continued

magnetic ring, effectively shielding the machine from external interference and further enhancing its overall stability.

7. Environmentally Friendly Refrigeration: We prioritize the environment with imported high-quality compressors and nitrogen-free, environmentally friendly refrigerants. This choice not only maintains low noise levels but also ensures optimal cooling efficiency. As a result, our equipment can stably operate at low temperatures over extended periods without the risk of frost or icing.

8. Uniform Temperature Distribution: Our silent fan design combined with a forced convection method guarantees uniform temperature distribution within the cavity, essential for consistent and reliable experimental conditions.

Technical Specifications

Model	UMSI-VT-1T	UMSI-VT-1TR
Number of overlays	1 layer	1 layer
Type	Vertical	
Display	LCD touchscreen	
Rotation speed	10-300rpm	
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	509×485mm	
Tray capacity of shake flask	250ml×25 or 500ml×16 or 1000ml×9	
Illumination	FI tube, 30W	
Power supply	AC220V±10%, 50-60Hz	
Timing function	0-999.9hours	
Net weight	174KGS	185KGS
Dimension(W×D×H)	687×733×1229mm	
Optional	Shading device, 90 °C high temperature module, embedded printer	