

BioGrowth

Large Capacity Vertical Incubator Shaker



Introduction

Experience scientific excellence with our advanced equipment. The integrated LCD touch screen simplifies configuration and monitoring, offering an intuitive user experience. A precision timing function enables you to precisely set culture durations for various experiments. The robust three-wheel drive ensures quiet, reliable, and precise performance. Safety features include over-temperature alarms and automatic power-off with data recovery. A hollow tempered glass door provides uninterrupted observation, enhancing user experience. The hygienic design features stainless steel interiors with rounded corners and an electrostatic plastic shell. Security is enhanced with encryption and locking. The debugging hole aids oxygen access and certifications. Additional lighting and UV sterilization functions improve visibility and safety. Welcome to the future of experimentation

Product Features

- 1. Integrated LCD Touch Screen:** Allowing users to seamlessly configure temperature, speed, time, and monitor real-time temperature, speed, and remaining time on a single interface, eliminating the need for interface switching. This enhances the user experience and offers an intuitive observation. Users can freely toggle between forward and reverse rotations of the rocker and control the forced convection fans as desired - whether for continuous operation or automatic activation.
- 2. Precision Timing Function:** The built-in timing feature allows users to precisely set the culture duration, accommodating times from 0 to 999.9 hours. This function provides flexibility and convenience for various experiments and applications.
- 3. Robust Three-Wheel Drive:** Our cutting-edge equipment employs a three-wheel drive system that operates seamlessly in three dimensions. This design results in a smooth, stable, durable, reliable, and notably quiet performance, reducing disturbances and ensuring precise experimental conditions.

Product Features - Continued

4. **Comprehensive Safety Features:** The system incorporates advanced safety mechanisms including an over-temperature alarm and an automatic power-off function in case of abnormal circumstances. Additionally, it offers a power-off recovery function to prevent data loss due to power outages or system crashes, ensuring the continuity and integrity of your experiments.
5. **Hollow Tempered Glass Door:** This equipment features a hollow tempered glass door that facilitates observation from all angles without the need to open it. This design improves the user experience by offering uninterrupted visibility into the internal chamber.
6. **Sleek and Hygienic Design:** With a streamlined exterior and a 304 brushed anti-corrosion stainless steel interior featuring rounded corners, this equipment not only looks modern but is also easy to clean. The design prevents bacterial growth, ensuring the highest levels of cleanliness. The outer shell is constructed from electrostatic spray plastic, enhancing durability and corrosion resistance.
7. **Enhanced Security and Usability:** The operation interface is fortified with encryption and a locking mechanism to prevent repetitive or erroneous commands, offering a heightened level of security and usability.
8. **Convenient Debugging Hole:** This side-mounted debugging hole serves a dual purpose. It efficiently meets the oxygen requirements of samples without necessitating the door to be opened. Simultaneously, it simplifies the process for future customers seeking technical certifications or equipment adjustments.
9. **Enhanced Visibility and Sterilization:** Our equipment is equipped with built-in lighting and UV sterilization functions. These features not only improve visibility but also provide an additional layer of hygiene and safety for your experiments.

Unique Advantages

1. **Double-Decker Design Maximizing Space Efficiency:** The innovative double-layer rocking plate system offers an expansive utilization area while maintaining a vertical configuration, optimizing floor space usage without sacrificing capacity.
2. **Advanced Temperature Uniformity:** Our proprietary three-channel hot and cold gas mixing circulation air duct system, featuring patented technology, guarantees consistent temperature distribution across the entire chamber, ensuring reliable and accurate experimental conditions.

Unique Advantages - Continued

3. **Data Memory and Real-Time Analysis:** With a built-in data memory function, this equipment captures temperature and rotational speed data per minute in real time, compiling it into historical records and real-time curve graphs. This facilitates in-depth observation and analysis of how temperature and speed impact experiments. Data is securely stored for 12 months, and an integrated USB interface simplifies data import and export.
4. **Intelligent PLC Control:** Employing advanced PLC microcomputer intelligent control, users can seamlessly add or customize programs to accommodate their unique requirements. This user-centric design elevates programming capabilities to meet diverse research needs.
5. **Efficient Diversion Waterproof System:** Our device features a patented built-in diversion waterproof system that enables comprehensive waterproofing and easy flushing of the internal cavity without leaving any dead zones. This innovative system simplifies cleaning, ensuring maintenance is hassle-free.
6. **High-Precision Servo Motor:** Equipped with a high-quality servo motor, our equipment provides precise speed control and exceptional stability. To bolster its performance, it incorporates a built-in filter magnetic ring to effectively shield against external interference, further enhancing the machine's overall stability.
7. **Environmentally Friendly Refrigeration:** Our device is fitted with top-tier imported compressors and nitrogen-free, eco-friendly refrigerants. This combination ensures low noise levels and efficient cooling, permitting prolonged stable operation at low temperatures without the risk of frost or icing.
8. **Silent Fan and Forced Convection:** We've thoughtfully incorporated a silent fan design paired with a forced convection method to guarantee uniform temperature distribution within the chamber. This results in an environment conducive to your experiments, while maintaining minimal noise levels for a peaceful workspace.

Technical Specifications

Model	UMSI-LVT-1T	UMSI-LVT-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℃	4-60℃
Temperature display resolution	0.1℃	
Temperature fluctuation	±0.1℃	
Temperature field uniformity	±0.8℃@37℃	
Ambient temperature	5-35℃	
Sterilization method	UV sterilization	
Tray size	881×455mm	
Tray capacity of shake flask	250ml×50 or 500ml×32 or 1000ml×18 or 2000ml×11	
Illumination	FI tube, 30W	
Power supply	AC220V±10%, 50-60Hz	
Timing function	0-999.9hours	
Net weight	255KGS	269KGS
Dimension(W×D×H)	1067×755×1428mm	
Optional	Shading device, 90℃ high temperature module, embedded printer	