BioGrowth
Medium Capacity Stackable Incubator Shaker

Introduction

Maximize your lab space with our adaptable equipment, available in single, double, or triple-layer configurations. Each layer offers independent temperature and speed control, catering to your unique needs. The hollow tempered glass doors provide 360-degree visibility and are equipped with a heating function to prevent fogging. Its three-wheel drive system ensures smooth and long-lasting operation. Safety features include over-temperature alarms and automatic power-off functions, with data protection. The sleek design features 304 brushed stainless steel for easy cleaning and an attractive outer shell. The user-friendly interface offers secure, encrypted operation, and it includes advanced functions like lighting and UV sterilization.

Product Features

1. **Space-Efficient Configuration:** Whether in single, double, or triple-layer combinations, this equipment maximizes usable space within a minimal footprint, catering to diverse user needs.
2. **User-Centric Design:** Offering a thoughtful design, the lower two tiers feature flip-up doors that open downward, while the top tier has upward flip-up doors. Each layer grants users independent control over temperature and speed, allowing for customized settings as per their specific requirements.
3. **Enhanced Visibility and Clarity:** The incorporation of hollow tempered glass doors facilitates clear observation of the chamber's interior from any angle, eliminating the need to open the door. Additionally, these doors are equipped with a heating function to prevent fogging and condensation, ensuring uninterrupted visibility.
4. **Robust Three-Wheel Drive:** The system's three-dimensional partial three-wheel drive system guarantees a dependable, stable, and smooth operational experience, enhancing the equipment's longevity.
5. **Advanced Safety Features:** With over-temperature alarm functionality and automatic power-off capabilities during abnormal situations, this equipment prioritizes user safety and data integrity. The power-off recovery function further ensures that valuable data is preserved in the event of a power outage or system crash.

Product Features - Continued

6. **Hygienic and Aesthetic:** The equipment boasts a streamlined, visually appealing design. Internally, the lining is crafted from 304 brushed anti-corrosion stainless steel, featuring an arc corner design that simplifies cleaning while inhibiting bacterial growth. Externally, an electrostatically sprayed plastic shell adds a layer of durability and aesthetic appeal.
7. **Secure Operation:** To prevent inadvertent errors and repeated operations, the equipment's operation interface is equipped with encryption and locking mechanisms, providing a secure and reliable user experience.
8. **Enhanced Functionality:** Offering more than just a controlled environment, this equipment comes equipped with integrated lighting and UV timed sterilization functions, catering to a range of laboratory needs.

Unique Advantages

1. **Intuitive Touchscreen Interface:** The LCD touch screen consolidates temperature, speed, time, actual temperature, speed, and remaining time on a single interface, eliminating the need for interface switching. Users have the flexibility to set the rocker's rotation direction and configure real-time time accumulation and timing functions. Additionally, the forced convection fan can be easily toggled between normal, automatic, or off modes.
2. **Robust Data Management:** This equipment boasts a data memory function that captures temperature and rotational speed data every minute. This data is then utilized to generate historical records and real-time curve graphs. These features greatly aid in understanding the impact of temperature and rotational speed on experiments. The data storage capacity extends for 12 months, and users can efficiently import and export information via the USB interface.
3. **Advanced PLC Control:** With PLC microcomputer intelligent control, users can conveniently incorporate new programs at any time. This flexibility ensures that the equipment adapts to evolving user requirements while allowing for seamless upgrades in programming operations.
4. **Precise Temperature Control:** A patented precision three-channel hot and cold gas mixing circulation air duct design ensures uniform temperature distribution throughout the entire chamber, guaranteeing consistent experimental conditions.
5. **Stability Enhancement:** The built-in self-balancing system, a patented feature, enhances the equipment’s stability even at high speeds, ultimately extending its service life.
6. **Effortless Cleaning:** The equipment incorporates a patented built-in diversion waterproof system that facilitates thorough cleaning without leaving any inaccessible areas. No special tools are required for this task.

Unique Advantages - Continued

7. **Quick Fixing for Efficiency:** Utilizing a quick fixing device, the rocking plate can be secured or released within just 5 seconds. The built-in aluminum rocking plate is not only aesthetically pleasing but also lightweight, making it easy to handle with one hand. This feature significantly boosts work efficiency and is patented for its innovative design.
8. **Precise and Stable Operation:** The high-quality servo motor ensures precise speed control and stability. Additionally, a built-in filter magnetic ring shields the equipment from external interference, further enhancing its operational stability.
9. **Efficient Cooling:** This equipment relies on imported high-quality compressors and nitrogen-free, environmentally friendly refrigerants. These components work together to maintain stable, low-temperature operation without concerns of frost or icing, while still maintaining low noise levels.
10. **Safety and Convenience:** The user-friendly design includes instant-stop or slow-stop functionality when the lid is opened. This feature not only enhances user safety but also reduces stress on cells, promoting greater experimental stability.
11. **Ambient Temperature Monitoring:** An external ambient temperature probe is specially integrated, displaying real-time ambient temperature on the panel. This precise feature allows for fine-tuned temperature control within the chamber.
12. **Customized User Management:** Optionally, a hierarchical user management system can be implemented with three or more permission levels. Each level is equipped with independent user names and passwords, offering controlled access for logging in, configuring security permissions, modifying parameters, and accessing screen data. This streamlines equipment management.
13. **Humidity Control for Sample Protection:** An optional built-in active humidity control module, with no space consumption, can be paired with an external water replenishing bucket for automatic humidity management. Equipped with a high-precision humidity probe, it achieves humidity levels of up to 95% during normal cultivation at 37°C. Real-time humidity monitoring is also provided, effectively preventing sample volatilization.

UMSI-215-2T

UMSI-215-3T

Technical Specifications

Model	UMSI-215-1T	UMSI-215-2T	UMSI-215-3T
Number of overlays	1 layer	2 layers	3 layers
Type	Stacked		
Display	LCD touchscreen		
Rotation speed	10-300rpm		
Speed control accuracy	1rpm		
Shaking throw	26mm		
Maximum load	50kg		
Volumn	215L/Layer		
Temperature control mode	PLC control mode		
Temperature control range	4-60℃		
Temperature display resolution	0.1℃		
Temperature fluctuation	±0.1℃		
Temperature field uniformity	±0.3℃@37℃		
Ambient temperature	5-35℃		
Sterilization method	UV sterilization		
Tray size	830×450mm		
Tray capacity of shake flask	250ml×45	500ml×28	1000ml×18	2000ml×11
Illumination	FI tube, 30W		
Heating power	600W		
Cooling power	278W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Net weight	213kg/Layer	395kg/Layer	567kg/Layer
Dimension(W×D×H)	1119×910×621mm/Layer	1119×910×1165mm/Layer	1119×910×1711mm/Layer
Package size(W×D×H)	1250×1050×790mm		
Gross weight	273kg/layer		
Optional	Shading device,wireless WIFI remote control function, 90℃ high temperature module, embedded printer		