

BioGrowth

Large 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. Flexible Stacking Options:** Choose between one, two, or three-layer stacking combinations to maximize available space while minimizing the equipment's footprint.
- 2. User-Centric Design:** The design is centered around user convenience. The lower two floors feature downward flip-up door openings, while the third floor has upward flip-up doors. This configuration allows for independent control of temperature and speed on each layer, accommodating various experimental requirements.
- 3. Clear Observation:** A hollow tempered glass door provides unobstructed views of the chamber's interior from all angles without the need to open the door. Furthermore, the door incorporates a heating function to prevent fogging and condensation.
- 4. Smooth and Durable Operation:** The equipment employs a three-dimensional-body partial three-wheel drive mechanism, ensuring smooth, stable, and long-lasting operation.
- 5. Enhanced Safety Features:** This equipment is equipped with an over-temperature alarm function and an automatic power-off feature for abnormal situations. Additionally, it offers power-off recovery functionality to prevent data loss resulting from power outages or crashes.
- 6. Hygienic and Aesthetic:** The streamlined design features a 304 brushed anti-corrosion stainless steel interior lining. Its fixed arc corner design simplifies cleaning and prevents bacterial growth. The outer shell is constructed of electrostatically sprayed plastic for added durability.

Product Features - Continued

- 7. Secure and Error-Preventing Interface:** The operation interface is encrypted and locked, reducing the risk of accidental or repeated operations, thus minimizing human errors.
- 8. Convenient Debugging Holes:** Debugging holes on the side of the equipment facilitate oxygen supply to samples without the need to open the door. This feature also simplifies future technical certifications for customers.
- 9. Sterilization and Lighting:** The equipment is equipped with lighting and UV timed sterilization functions to support a clean and controlled experimental environment.

Unique Advantages

- 1. User-Friendly Interface:** The LCD touch screen allows you to set temperature, speed, and time effortlessly. It conveniently displays real-time data like actual temperature, speed, and remaining time all on one intuitive interface. You have the freedom to set the rocker to rotate forward or reverse, and the touch screen also showcases the real-time time accumulation and timing functions. You can even control the forced convection fan, choosing to keep it on, set it to automatic mode, or turn it off.
- 2. Data Management:** Our system includes a data memory function that records temperature and rotational speed data per minute. This data is used to create historical records and real-time curve graphs, simplifying your analysis of how temperature and speed impact your experiments. You can store this valuable data for up to 12 months and easily transfer it with the equipped USB interface.
- 3. Intelligent Control:** Our equipment utilizes PLC microcomputer intelligent control. This means you can modify and add programs whenever you need to, providing flexibility and a more user-centric experience. Our programming operation is also upgradable for enhanced usability.
- 4. Precise Temperature Control:** A patented precision three-channel hot and cold gas mixing circulation air duct system guarantees consistent temperature uniformity throughout the entire chamber.
- 5. Stability at High Speeds:** Our equipment features a built-in self-balancing system that significantly enhances stability, especially at high speeds. This innovative design extends the machine's lifespan.
- 6. Effortless Cleaning:** With a patented built-in diversion waterproof system, the internal cavity of the machine can be thoroughly cleaned without any inaccessible areas. This system ensures easy maintenance without the need for specialized tools.

Unique Advantages - Continued

7. **Quick Fixing Mechanism:** Thanks to a quick fixing device, you can secure or release the rocking plate in just 5 seconds. The built-in aluminum rocking plate is not only functional but aesthetically pleasing. Its one-handed operation saves time and effort, greatly boosting efficiency.
8. **Precise and Stable Motor:** Equipped with a high-quality servo motor, our equipment offers precise speed control and unwavering stability. It also features a built-in filter magnetic ring, effectively shielding the machine from external interference.
9. **Efficient Cooling:** We use imported high-quality compressors and nitrogen-free, eco-friendly refrigerants. This ensures low noise and efficient cooling, allowing the equipment to operate stably for extended periods at low temperatures without frost or icing.
10. **Enhanced Safety:** The user-friendly design includes an instant-stop or slow-stop function when the lid is opened, enhancing safety. This feature reduces the shearing force on cells and provides added stability.
11. **Ambient Temperature Monitoring:** We've included an external ambient temperature probe that displays real-time ambient temperature on the panel. This feature enables precise temperature control within the chamber.
12. **Security and Permissions:** For added security and management, you can choose to set up three or more levels of management permissions. Each level comes with independent user names and passwords, allowing you to control who can access and modify parameters and use screen data.
13. **Humidity Control:** Optionally, our equipment can be equipped with a built-in active humidity control module. It doesn't occupy extra space, and an external water replenishing bucket ensures automatic water replenishment. Using a high-precision humidity probe, the chamber's humidity can reach up to 95% at 37°C during normal cultivation, effectively preventing sample volatilization. Humidity levels are continuously displayed in real-time.



UMSI-325-2T



UMSI-325-3T

Technical Specifications

Model	UMSI-325-1T	UMSI-325-2T	UMSI-325-3T
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	325L/Layer		
Temperature control mode	PLC control mode		
Temperature control range	4-60 °C		
Temperature display resolution	0.1 °C		
Temperature fluctuation	±0.1 °C		
Temperature field uniformity	±0.5 °C @37 °C		
Ambient temperature	5-35 °C		
Sterilization method	UV sterilization		
Tray size	957×535mm		
Tray capacity of shake flask	250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15 or 3000ml×14	(250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15 or 3000ml×14)× 2 layers	(250ml×66 or 500ml×45 or 1000ml×28 or 2000ml ×15 or 3000ml×14)× 3 layers
Illumination	FI tube, 30W		
Heating power	800W		
Cooling power	350W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Net weight	245kg/Layer		
Dimension(W×D×H)	1400×847×648mm		
Package size(W×D×H)	1538×980×810mm		
Gross weight	275kg/Layer		
Optional	Shading device, wireless WIFI remote control function, 90 °C high temperature module, embedded printer		