

BioGrowth Compact Stackable Incubator Shaker



Introduction

Elevate your lab work with our versatile equipment. Choose from one, two, or three layers, each with independent temperature and speed controls. The unit's hollow tempered glass door offers 360-degree observation. Its three-wheel drive system ensures reliable, efficient, and smooth operation. Safety features include over-temperature alarms, automatic power-off, and data recovery after power interruptions. A sleek design combines durability with aesthetics. The user-friendly interface includes an encryption lock and a timing function for flexible culture times. Side-mounted debugging holes enhance oxygen supply without opening the door. Additional features include lighting and UV sterilization functions. Enjoy precise humidity control with an optional humidity module. Experience the future of lab equipment.

Product Features

- 1. Space-Saving Versatility:** Whether in a single, double, or triple-layer configuration, this equipment maximizes utility within a compact footprint. Each layer boasts independent control over temperature and speed, empowering users to tailor settings to their specific requirements.
- 2. 360-Degree Visibility:** Featuring a hollow tempered glass door, this system enables effortless observation from any angle without the need to open the door.
- 3. Robust and Efficient Operation:** Powered by a three-dimensional integrated partial three-wheel drive, this equipment delivers consistently smooth, stable, and dependable performance over the long term.
- 4. Safety and Data Protection:** Equipped with an over-temperature alarm and automatic power-off function during irregular conditions, it ensures experiments remain secure. The power-off recovery feature prevents data loss caused by unexpected power interruptions and crashes.

Product Features - Continued

6. **User-Centric Interface:** The operation interface incorporates an encryption lock feature to prevent unintended operations and human errors. Moreover, it offers a convenient timing function, allowing users to set culture times flexibly within the range of 0-999.9 hours.

7. **Optimized Oxygen Supply:** Equipped with side-mounted debugging holes, this equipment efficiently meets oxygen requirements for samples without necessitating door openings. This design greatly facilitates future technical certifications by users.

8. **Enhanced Functionality:** In addition to its core features, this system includes built-in lighting and UV sterilization functions, providing a comprehensive environment for your experiments.

Unique Advantages

1. **Intuitive Touchscreen Control:** The LCD touchscreen consolidates key parameters like temperature, speed, time, actual temperature, speed, and remaining time onto a single, user-friendly interface. Switching between settings is seamless, enhancing overall user experience. Moreover, it offers the flexibility to freely adjust the rocker's rotation direction and configure the forced convection fan settings, either as continuously on or in automatic mode.

2. **Effortless Data Management:** This system features a data memory function that records minute-by-minute temperature and rotational speed data in real time. The stored data is organized into historical records and real-time curves, simplifying the analysis of temperature and rotational speed dynamics during experiments. With a 12-month data storage capacity and a convenient USB interface, importing and exporting information is a breeze.

3. **Smart PLC Control:** Employing advanced PLC microcomputer intelligent control, users can effortlessly integrate new programs to meet evolving research needs. This intuitive interface offers a high degree of flexibility and can be upgraded to accommodate future requirements.

4. **Precise Temperature Uniformity:** Patented precision three-channel hot and cold gas mixing circulation air duct design ensures consistent temperature distribution throughout the chamber, guaranteeing reliable experimental conditions.

5. **Stability at High Speeds:** The system incorporates a self-balancing mechanism, a patented feature, to enhance stability when operating at high speeds. This design not only ensures reliable performance but also extends the equipment's operational lifespan.

6. **Effortless Cleaning:** With a built-in diversion waterproof system, the internal cavity of the machine is easily water-sealed and flushable, eliminating dead-end areas. This patented design simplifies cleaning procedures and eliminates the need for specialized tools.

Unique Advantages - Continued

7. **Robust Motor Control:** Equipped with a high-quality servo motor known for its precision in controlling speed and overall stability. The motor is fortified with an integrated filter magnetic ring to effectively shield the equipment from external interference, further enhancing operational stability.

8. **Efficient Refrigeration:** The system utilizes imported high-quality compressors and nitrogen-free environmentally friendly refrigerants. This combination delivers low noise and exceptional refrigeration performance, ensuring stable, frost, and ice-free operation at low temperatures.

9. **Enhanced Safety and Convenience:** A user-centric feature includes instant-stop or slow-stop functionality upon opening the lid. This design enhances user safety and convenience while minimizing shear forces on sensitive cell cultures, contributing to overall stability.

10. **Humidity Control and Display:** An optional built-in active humidity control module, which occupies minimal space, and an external water replenishing bucket offer hassle-free automatic water replenishment. Utilizing a high-precision humidity probe, the system can maintain humidity levels of up to 95% during standard 37°C cultivation, effectively preventing sample volatilization. Real-time humidity display ensures precise environmental control.



UMSI-166-2T



UMSI-166-3T

Technical Specifications

Model	UMSI-166-1T	UMSI-166-2T	UMSI-166-3T
Number of overlays	1 layer	2 layers	3 layers
Type	Stacked		
Display	LCD touchscreen		
Rotation speed	10-350rpm		
Speed control accuracy	1rpm		
Shaking throw	26mm		
Maximum load	50kg		
Volumn	166L/Layer		
Temperature control mode	PLC control mode		
Temperature control range	4-60℃		
Temperature display resolution	0.1℃		
Temperature fluctuation	±0.1℃		
Temperature field uniformity	±0.5℃@37℃		
Ambient temperature	5-35℃		
Sterilization method	UV sterilization		
Tray size	544×520mm		
Tray capacity of shake flask	250ml×36 2000ml×9	500ml×25 3000ml×7	1000ml×16
Illumination	FI tube, 30W		
Heating power	600W		
Cooling power	278W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Net weight	137kg/layer		
Dimension(W×D×H)	920×795×657mm		
Package size(W×D×H)	1060×950×850mm		
Gross weight	194kg/layer		
Optional	Embedded printer, lighting, 90℃ high temperature module customization		