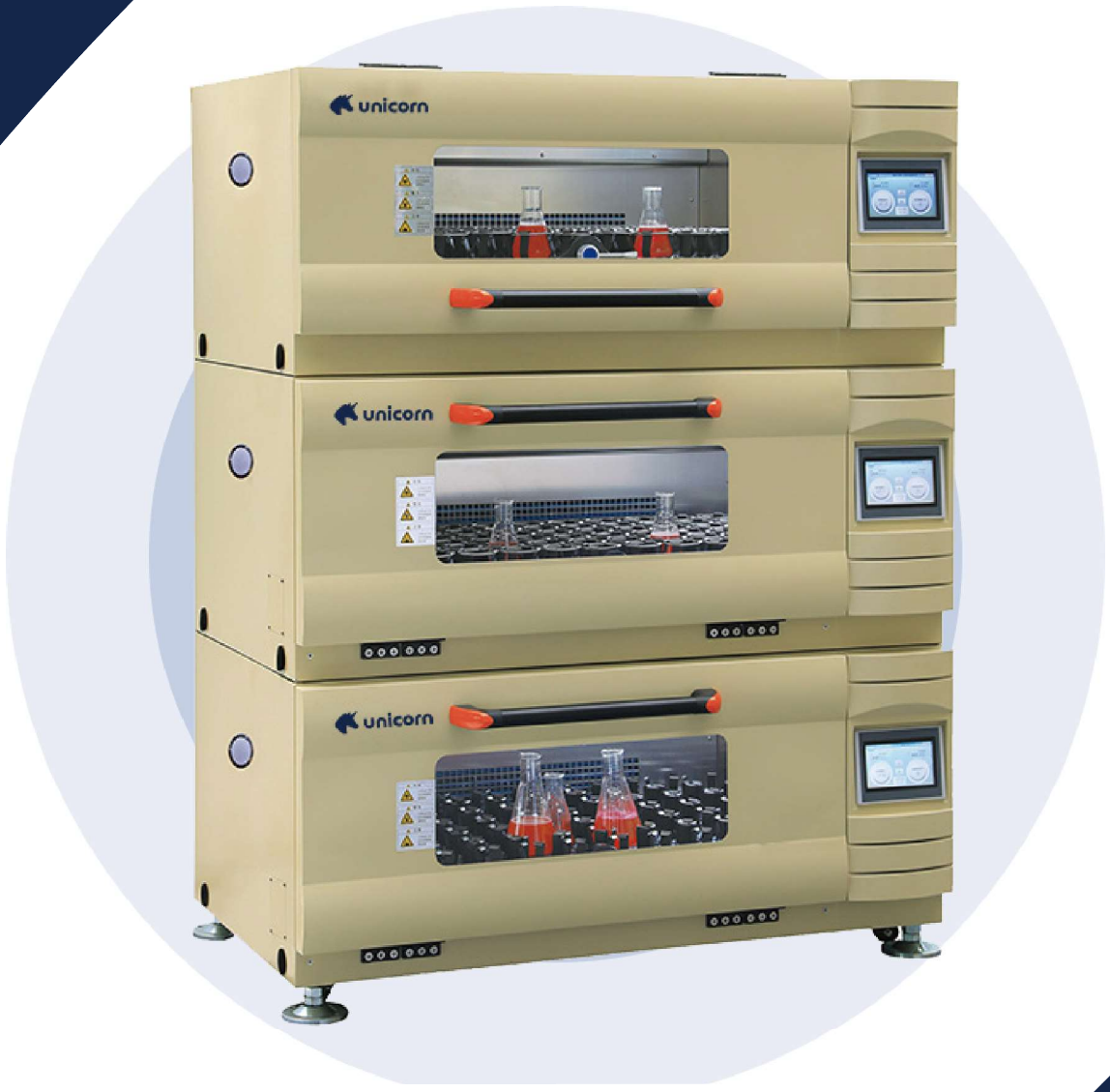
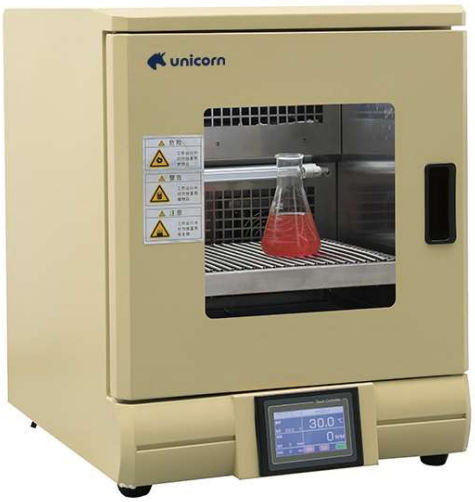
Laboratory Equipment

BioGrowth
Incubator Shaker



BioGrowth
Benchtop Incubator Shaker



Introduction

The BioGrowth Benchtop Incubator Shaker's compact and space-efficient design maximizes the utility of limited laboratory space. It's versatile, fitting neatly under a laboratory table or on the tabletop. Despite its small footprint, it incorporates a refrigeration system that delivers an impressively wide temperature control range, catering to both culture and reaction requirements. This makes it an ideal choice for small-scale culture needs in the laboratory.

Product Features

1. **User-Friendly Touch Screen:** The LCD touch screen consolidates essential settings - temperature, speed, time, actual temperature, speed, and remaining time - on a single interface. This design simplifies the user experience, eliminating the need to toggle between different screens. Furthermore, you have the flexibility to freely control the rocker's rotation direction and the forced convection fan's mode, whether it's continuously on, set to automatic, or switched off.
2. **Precise Timing Capabilities:** This equipment includes a convenient timing function that allows users to set the culture time within a broad range, spanning from 0 to 999.9 hours.
3. **Efficient and Silent Operation:** With its three-dimensional integrated partial three-wheel drive system, this equipment offers a smooth, stable, durable, reliable, and remarkably quiet operation.
4. **Safety Features:** It's equipped with essential safety features, including over-temperature alarms and an automatic power-off function in case of abnormal situations. Importantly, it features a power-off recovery function to safeguard against data loss caused by power outages or crashes.
5. **Clear Observation:** The chamber is designed with a hollow tempered glass door, providing a clear view of the interior from all angles without needing to open the door.

Product Features - Continued

6. **Hygienic and Corrosion-Resistant Construction:** The equipment boasts an elegant arc-shaped design. The interior is constructed from 304 brushed anti-corrosion stainless steel, complete with arc corners. This thoughtful design not only enhances cleanliness but also inhibits bacteria growth. On the exterior, an electrostatic spray finish prevents corrosion.
7. **Secure Interface Operation:** The operation interface features an encryption and locking mechanism to prevent unintended or repeated actions, minimizing the possibility of human error.
8. **Enhanced Functionality:** The equipment is equipped with both lighting and UV sterilization functions, further elevating its utility and ensuring a sterile and well-lit environment.

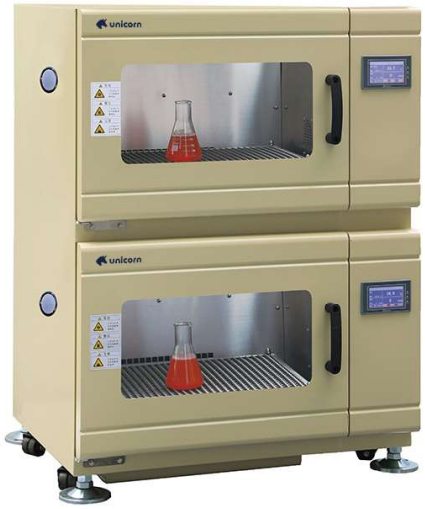
Unique Advantages

1. **Flexible Side Door Design:** This equipment's side door design offers a higher degree of flexibility for placement. It can be conveniently situated on an experimental table or neatly tucked beneath it for streamlined operation.
2. **Enhanced Safety and Stability:** The user-friendly features include instant lid-stop and slow-lid-stop functions. These innovations ensure safer and more convenient use, substantially reducing shear forces on cells and enhancing overall stability.
3. **Robust Data Management:** The equipment incorporates a data memory function that records temperature and rotational speed data every minute. This data is then utilized to generate historical records and real-time curve graphs. This functionality simplifies the process of observing and analyzing how temperature and rotational speed affect ongoing experiments. Furthermore, this data can be securely stored for up to 12 months and effortlessly imported or exported through the integrated USB interface.
4. **Efficient Semiconductor Refrigeration:** The equipment employs cutting-edge semiconductor refrigeration technology, characterized by instant startup without delay, minimal vibration, and high energy efficiency.
5. **High-Quality Servo Motor:** For precise speed control and unwavering stability, the equipment is outfitted with a top-tier servo motor. This motor includes a built-in filter magnetic ring that effectively shields the equipment from external interference, bolstering overall reliability.
6. **Silent Fan and Convection Method:** The equipment integrates a silent fan design in conjunction with a forced convection approach. These elements work in tandem to ensure the uniform distribution of temperature throughout the chamber.

Technical Specifications

Model	UMSI-BT-1T	UMSI-BT-1TR
Number of overlays	1 layer	2 layers
Type	Benchtop	
Display	LCD touchscreen	
Rotation speed	10-300rpm	
Speed control accuracy	1rpm	
Standard configuration	Universal clamp	
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	±0.5℃@37℃	
Ambient temperature	5-35℃	
Sterilization method	UV sterilization	
Tray size	344×307mm	
Tray capacity of shake flask	250ml×12 or 500ml×9 or 1000ml×4	
Illumination	FI tube, 30W	
Power supply	AC220V±10%，50-60Hz	
Timing function	0-999.9hours	
Net weight	65kg	75kg
Dimension(W×D×H)	480×638×591mm	

BioGrowth
Small Capacity Stackable Incubator Shaker



Introduction

Revolutionize your lab work with our versatile equipment. Optimize your workspace with one, two, or three-floor configurations, each offering independent temperature and speed controls. The hollow tempered glass door allows 360° observations without disruption. Enjoy smooth and reliable operation thanks to the three-dimensional three-wheel drive system. Safety and data protection are paramount, with over-temperature alarms and automatic power-off features. The sleek, hygienic design ensures durability and easy maintenance. The user-friendly interface with encryption lock, timing features, and a side debugging hole for oxygen access makes your work hassle-free. Plus, efficient lighting and UV sterilization functions are at your fingertips.

Product Features

1. **Flexible Space Optimization:** Choose between one, two, or three-floor configurations to maximize your workspace while minimizing the equipment's footprint. Each layer is equipped with independent temperature and speed controls, allowing users to set and adjust different parameters as needed.
2. **360° Observation Convenience:** The unit's hollow tempered glass door offers unobstructed views from all angles, eliminating the need to open the door for observations.
3. **Smooth and Reliable Operation:** Experience reliable and hassle-free operation with the three-dimensional integrated partial three-wheel drive system. It ensures stability, durability, and consistent performance.
4. **Safety and Data Protection:** The equipment comes with an over-temperature alarm function and an automatic power-off feature in case of abnormal conditions. Additionally, it boasts a power-off recovery function, safeguarding against data loss due to power outages or crashes.

Product Features - Continued

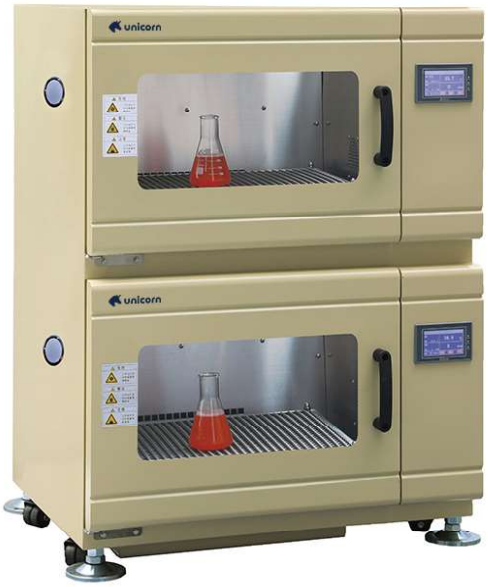
5. **Sleek and Hygienic Design:** With its streamlined exterior, the equipment not only looks modern but is also easy to maintain. The interior is crafted from 304 brushed anti-corrosion stainless steel, featuring an arc corner design that prevents bacterial growth. The outer shell, made of electrostatic spray plastic, adds to its durability.
6. **Intuitive Interface with Enhanced Security:** The user-friendly interface incorporates an encryption lock function to prevent unintended operations and human errors. It also includes a timing feature, allowing for customizable culture times ranging from 0 to 999.9 hours.
7. **Oxygen Access Without Door Opening:** A strategically placed debugging hole on the side of the unit caters to the oxygen requirements of your samples without the need to open the main door. This feature enhances convenience for subsequent technical certifications.
8. **Efficient Illumination and Sterilization:** The equipment is equipped with lighting and UV sterilization functions, providing well-lit conditions and enhanced sterilization capabilities as needed.

Unique Advantages

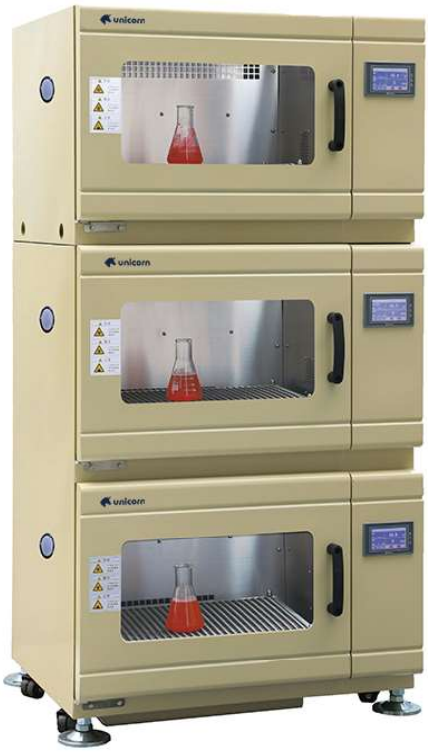
1. **Effortless Touchscreen Control:** The LCD touch screen streamlines your interaction with the equipment. It conveniently displays temperature, speed, time, actual temperature, speed, and remaining time all on one interface. No need to toggle between screens, enhancing the intuitive user experience. You have the freedom to adjust the rocking plate's rotation direction and set the forced convection fan to operate continuously, automatically, or as needed.
2. **Intelligent Data Management:** Benefit from the built-in data memory function, which records temperature and rotational speed data per minute in real-time. This data is then used to generate historical records and real-time curve graphs, simplifying the analysis of temperature and rotational speed impacts during experiments. With a data retention period of up to 12 months and the convenience of a USB interface, importing and exporting information is a breeze.
3. **Adaptive PLC Control:** The equipment employs PLC microcomputer intelligent control, allowing you to add custom programs at any time. This adaptive feature enhances user-friendliness and ensures your programming needs are met efficiently.
4. **Uniform Temperature Distribution:** Its patented three-channel hot and cold gas mixing circulation air duct design ensures consistent temperature distribution throughout the chamber.

Unique Advantages - Continued

5. **Enhanced Stability:** Featuring a patented self-balancing system, this design enhances the machine's stability, especially at higher speeds, effectively extending its operational lifespan.
6. **Effortless Cleaning:** The equipment comes equipped with a patented diversion waterproof system. This design allows thorough internal cavity waterproofing and flushing without leaving any inaccessible areas, simplifying cleaning tasks without requiring specialized tools.
7. **Precise and Stable Performance:** Equipped with a high-quality servo motor, the equipment delivers precise speed control and unwavering stability. A built-in filter magnetic ring effectively shields external interference, further enhancing machine stability.
8. **Efficient Cooling and Low Noise:** Imported high-quality compressors and nitrogen-free, eco-friendly refrigerants ensure efficient cooling with minimal noise. This setup guarantees stable, frost-free, and ice-free operation even at low temperatures over extended periods.
9. **Enhanced Safety and Stability:** A user-friendly feature includes instant-stop or slow-stop functionality when the lid is opened. This not only enhances safety but also reduces shear forces on sensitive cell samples, ensuring greater stability during experimentation.
10. **Humidity Control for Optimal Conditions:** The optional built-in active humidity control module occupies minimal space. Additionally, an external water replenishing bucket facilitates automatic water replenishment. This system, paired with a high-precision humidity probe, maintains humidity levels of up to 95% under standard conditions at 37°C. Real-time humidity display ensures sample integrity by minimizing volatilization.



UMSI-149-2T

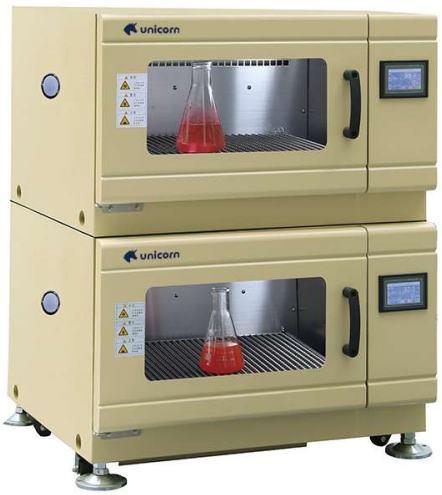


UMSI-149-3T

Technical Specifications

Model	UMSI-149-1T	UMSI-149-2T	UMSI-149-3T
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	149L		
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	524×412mm		
Tray capacity of shake flask	250ml×30 2000ml×6	500ml×20 3000ml×5	1000ml×12
Illumination	FI tube, 30W		
Heating power	400W		
Cooling power	132W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Net weight	128kg/layer		
Dimension(W×D×H)	899×712×657mm		
Package size(W×D×H)	1030×860×760mm		
Gross weight	157kg/layer		
Optional	Shading device, 90℃ high temperature module, embedded printer		

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.

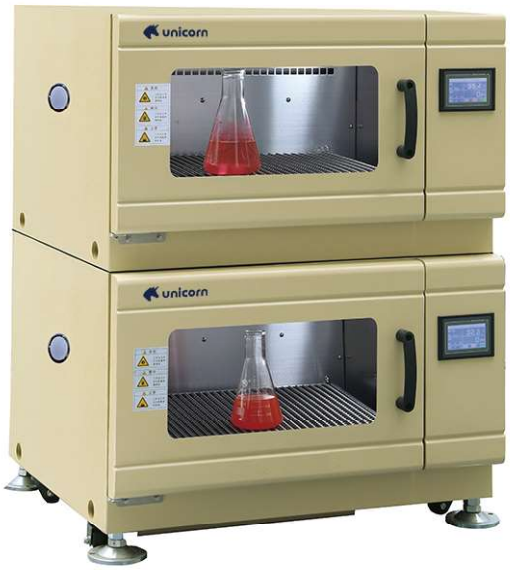
Unique Advantages - Continued

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.

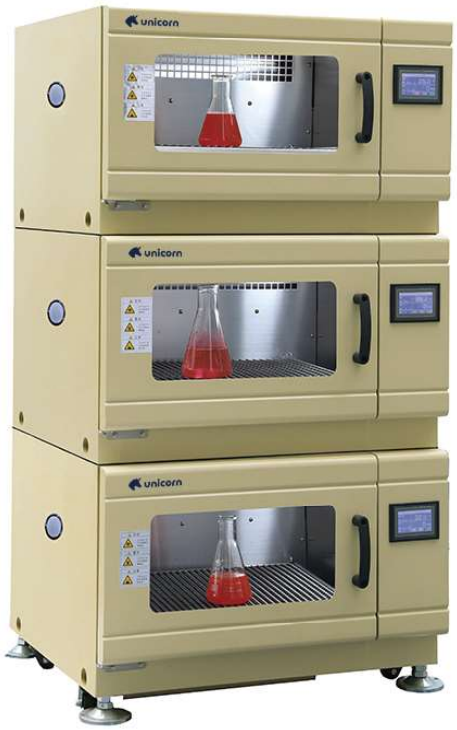
8. **Efficient Refrigeration:** The system utilizes imported high-quality compressors and nitrogen-free environmentally friendly refrigerants. This combination delivers low noise and exceptional refrigeration performance, ensuring stable, frost, and ice-free operation at low temperatures.

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

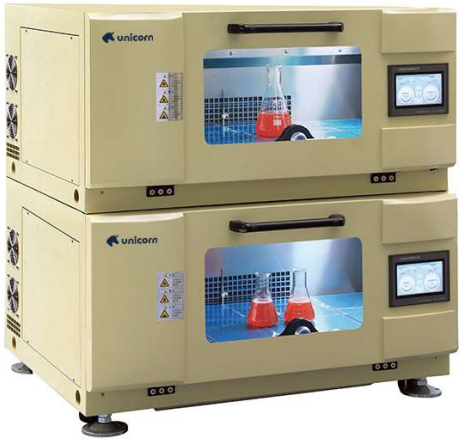


UMSI-166-3T

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		

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

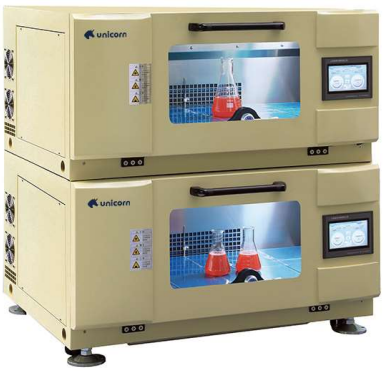
6. **Hygienic and Aesthetic:** The equipment boasts a streamlined, visually appealing design. Internally, the lining is crafted from 304 brushed anti-corrosion stainless steel, featuring an arc corner design that simplifies cleaning while inhibiting bacterial growth. Externally, an electrostatically 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

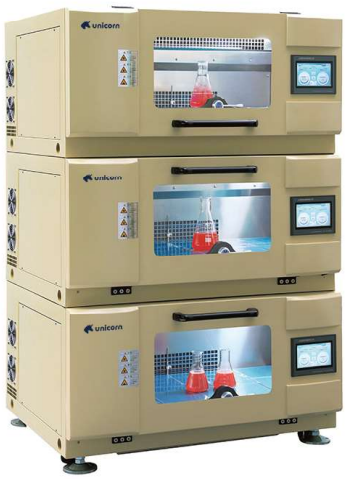
1. **Intuitive Touchscreen Interface:** The LCD touch screen consolidates temperature, speed, time, actual temperature, speed, and remaining time on a single interface, eliminating the need for interface switching. Users have the flexibility to set the rocker's rotation direction and configure real-time 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

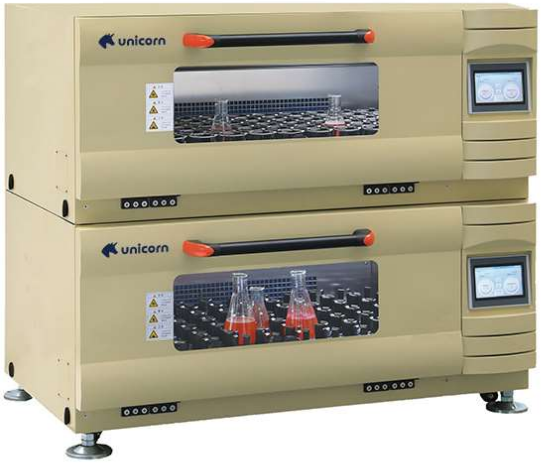


UMSI-215-3T

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		

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

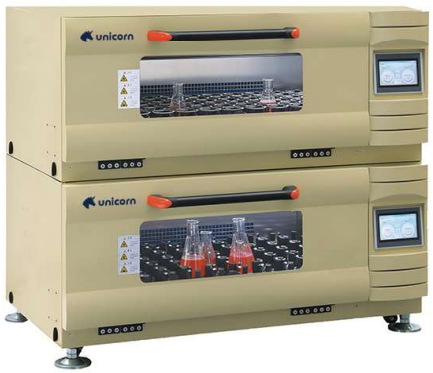
7. **Secure and Error-Preventing Interface:** The operation interface is encrypted and locked, reducing the risk of accidental or repeated operations, thus minimizing human errors.
8. **Convenient Debugging Holes:** Debugging holes on the side of the equipment facilitate oxygen supply to samples without 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

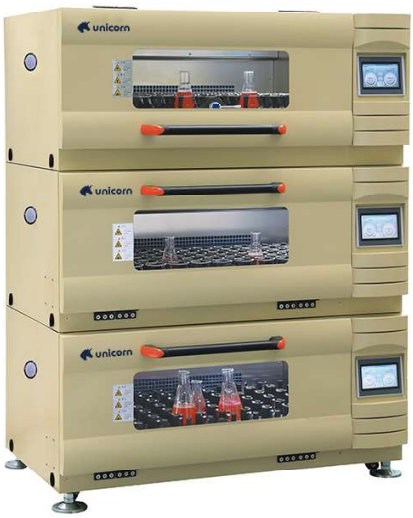
1. **User-Friendly Interface:** The LCD touch screen allows you to set temperature, speed, and time effortlessly. It conveniently displays real-time data like actual temperature, speed, and remaining time all on one intuitive interface. You have the freedom to set the rocker to rotate forward or reverse, 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

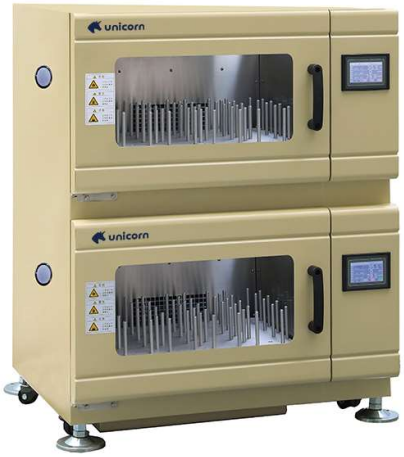


UMSI-325-3T

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℃		
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	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℃ high temperature module, embedded printer		

BioGrowth
High Troughput Stackable Incubator Shaker



Introduction

Maximize your lab's efficiency with our versatile equipment, available in single, double, or triple-layer configurations. Each layer operates independently, providing custom temperature and speed settings. The tempered glass door offers 360-degree visibility without opening the chamber. The three-wheel drive system guarantees smooth, stable, and durable operation. Safety features include over-temperature alarms and automatic power-off, with data recovery. The sleek, hygienic design features stainless steel interiors, an encrypted interface, and a timing function. Convenient side debugging holes facilitate oxygen regulation without opening the door. Compact and equipped with lighting and UV sterilization functions, it's the ultimate lab companion.

Product Features

1. **Space-Saving Stacking:** Our equipment offers flexible stacking options, allowing users to maximize their workspace while minimizing the footprint. Each layer operates independently, enabling customization of both temperature and speed settings to suit your specific needs.
2. **360-Degree Visibility:** The unit features a hollow tempered glass door that provides uninterrupted visibility into the chamber from all angles without the need to open the door.
3. **Smooth and Reliable Mobility:** The partial three-wheel drive system ensures three-dimensional body movement that's smooth, stable, and exceptionally durable, guaranteeing reliable operation over time.
4. **Advanced Safety Features:** Our equipment comes equipped with crucial safety functions. It includes an over-temperature alarm feature and an automatic power-off function in case of irregularities. Additionally, it boasts a power-off recovery mechanism to prevent data loss due to power outages or system crashes.
5. **Hygienic and Durable Design:** The equipment's exterior features a sleek, electrostatically sprayed plastic shell. Internally, it incorporates a 304 brushed anti-corrosion stainless steel universal platform measuring 524mm by 412mm. The inner cavity is also made of 304 brushed anti-corrosion stainless steel, with an arc corner design that not only enhances hygiene by preventing bacterial growth but also makes cleaning a breeze.

Product Features - Continued

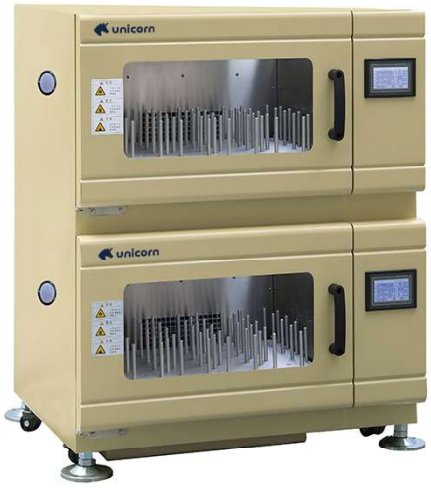
6. **Intuitive and Secure Operation:** The user interface is both intuitive and secure. It's encrypted and locked to prevent repetitive operations and human errors. The system also includes a timing function, allowing users to set custom culture times within a range of 0-999.9 hours.
7. **Enhanced Oxygen Management:** The equipment is designed with a convenient debugging hole on the side. This feature allows for the regulation of oxygen levels for samples without needing to open the main door, greatly facilitating future technical certifications.
8. **Efficient Design:** The side door is designed for easy operation and covers a minimal area, taking up less than 0.65 square meters of space, ideal for limited spaces.
9. **Advanced Features:** The equipment is equipped with both lighting and UV sterilization functions for added convenience and enhanced sterilization capabilities.

Unique Advantages

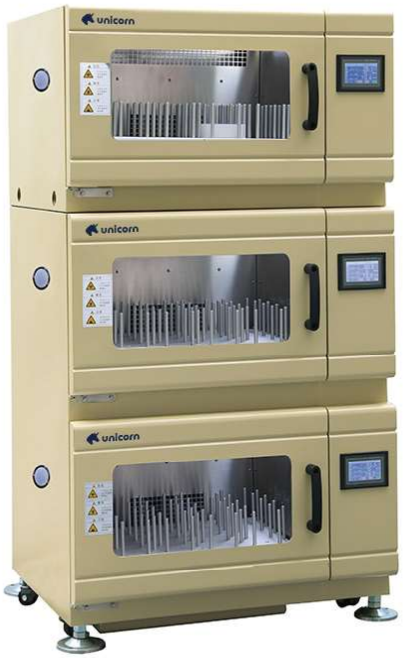
1. **Intuitive Touchscreen Control:** The LCD touch screen consolidates temperature, speed, time, actual temperature, speed, and remaining time on a single interface. This simplifies operation, eliminating the need to toggle between screens. Additionally, you have the flexibility to easily set the rocker's rotation direction and control the forced convection fan's mode - be it continuous, automatic, or off.
2. **Comprehensive Data Management:** The equipment features a robust data memory function, continuously recording temperature and rotational speed data per minute. This data is compiled into historical records and real-time curve graphs. These tools prove invaluable for observing and analyzing how temperature and rotational speed influence experiments. Data can be securely stored for 12 months and effortlessly imported and exported through the USB interface.
3. **Adaptive Programming:** Thanks to PLC microcomputer intelligent control, this system can be tailored to suit your evolving requirements. Users can incorporate new programs at any time, enhancing user-friendliness and enabling program upgrades.
4. **Patented Air Circulation Design:** Our precision three-channel hot and cold gas mixing circulation air duct guarantees uniform temperatures throughout the chamber. This patented feature assures consistent and reliable temperature control.
5. **Built-in Stabilization:** The system boasts a built-in self-balancing mechanism that significantly boosts machine stability at high speeds. This innovation prolongs the equipment's lifespan and ensures consistent performance.

Unique Advantages - Continued

6. **Efficient Waterproof System:** The internal chamber includes a patented diversion water-proof system, facilitating thorough flushing without leaving inaccessible areas. This design simplifies cleaning, eliminating the need for special tools.
7. **High-Performance Motor:** It's equipped with a high-quality servo motor renowned for precise speed control, excellent high-speed performance, and robust stability. The integrated filter magnetic ring effectively shields the equipment from external interference, enhancing its intrinsic stability. The motor's specific amplitude ensures thorough mixing of micro-liquids within the chamber.
8. **Eco-Friendly Refrigeration:** The unit employs imported, high-quality compressors and nitrogen-free, environmentally friendly refrigerants. These components work quietly while deliv-ering effective refrigeration, ensuring reliable long-term operation at low temperatures without frost or icing.
9. **Safety and Convenience:** A user-friendly feature halts or slows equipment operation when the lid is opened, enhancing safety and reducing stress on sensitive samples.
10. **Humidity Control:** An optional built-in humidity control module requires minimal space and can be paired with an external water replenishing bucket for automatic hydration. A high-preci-sion humidity probe enables the chamber's humidity to reach 95% under standard cultivation conditions, effectively preventing sample volatilization. Real-time humidity monitoring is also available.



UMSI-HT-2T

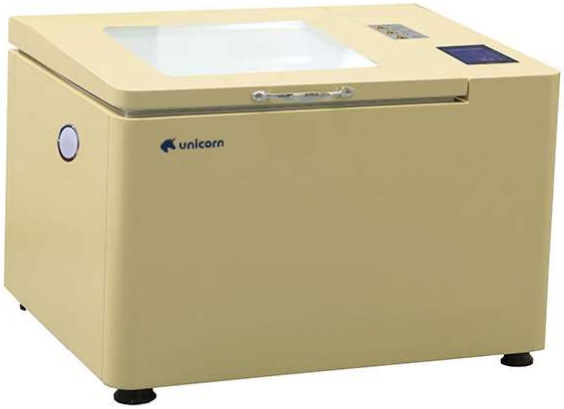


UMSI-HT-3T

Technical Specifications

Model	UMSI-HT-1T	UMSI-HT-2T	UMSI-HT-3T
Number of overlays	1 layer	2 layers	3 layers
Type	Stacked		
Display	LCD touchscreen		
Rotation speed	60-1200rpm		
Speed control accuracy	1rpm		
Shaking throw	26mm		
Maximum load	50kg		
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	522×377mm		
Tray capacity of shake flask	96-well microplate×16pcs	(96-well microplate×16pcs)×2	(96-well microplate×16pcs)×3
Illumination	FI tube, 30W		
Heating power	400W		
Cooling power	132W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Net weight	128kg/Layer	239kg/Layer	349kg/Layer
Dimension(W×D×H)	899×712×740mm	899×712×1168mm	899×712×1717mm
Package size(W×D×H)	1030×860×760mm		
Gross weight	157kg/Layer		
Optional	Shading device, 90℃ high temperature module, embedded printer		

BioGrowth
Horizontal Incubator Shaker



Introduction

Elevate your laboratory work with our advanced equipment. The integrated LCD touch screen simplifies parameter configuration and monitoring, making it intuitive for users. You can precisely set culture durations using the built-in timing function, granting flexibility for experiments. The robust three-wheel drive system guarantees smooth, quiet, and reliable operation while incorporating essential safety features like over-temperature alarms and automatic power-off recovery. The hollow tempered glass door allows 360° observation without opening it. The sleek design offers easy cleaning with a stainless steel interior and an exterior that's corrosion-resistant. Security is enhanced with encryption, and side-mounted debugging holes facilitate oxygen supply without opening the main door. Plus, the equipment includes lighting and UV sterilization functions for added convenience. Welcome to a new era of laboratory equipment.

Product Features

1. **Integrated LCD Touch Screen:** All essential parameters, including temperature, speed, time, actual temperature, speed, and remaining time, are seamlessly displayed on a single user-friendly interface. This eliminates the need for switching between screens, enhancing the intuitive nature of the device. Additionally, users can easily configure the rocker's rotation direction and the forced convection fan settings, choosing between continuous operation or automatic control.
2. **Precise Timing Capability:** The equipment features a built-in timing function, allowing users to set precise culture times anywhere between 0 and 999.9 hours.
3. **Robust Three-Wheel Drive:** The device utilizes a three-wheel drive system with a three-dimensional design. This ensures smooth, stable, durable, and reliable operation. Importantly, it operates quietly, minimizing disruptions.
4. **Advanced Safety Features:** Equipped with an over-temperature alarm function and automatic power-off capabilities for abnormal situations, this equipment also boasts a power-off recovery feature. This feature safeguards against data loss due to power interruptions and system crashes.

Product Features - Continued

5. **360° Observation without Door Opening:** The equipment incorporates a hollow tempered glass door, facilitating clear and unrestricted observation from all angles without the need to open the door.
6. **Sleek and Hygienic Design:** The equipment sports an aesthetically pleasing arc-shaped exterior. Inside, it's lined with easy-to-clean 304 brushed anti-corrosion stainless steel featuring smoothly curved corners that prevent bacterial build-up. The exterior shell is electrostatically sprayed to prevent corrosion, ensuring durability.
7. **Enhanced User Security:** The operation interface includes encryption and locking mechanisms to prevent repetitive operations and human errors.
8. **Side-Mounted Debugging Holes:** The side of the equipment is equipped with debugging holes that meet the oxygen requirements of samples without necessitating door openings. This design adds convenience for future technical certifications.
9. **Illumination and UV Sterilization:** The equipment comes equipped with both lighting and UV sterilization functions to maintain a sterile and well-illuminated interior environment.

Unique Advantages

1. **Safe and Convenient Lid Operation:** This equipment is designed with a user-friendly instant-stop or slow-stop function that activates when the lid is opened. This feature enhances safety by reducing the shearing force on cells and ensuring greater stability during operation.
2. **Data Memory and Analysis:** The equipment is equipped with a data memory function, capable of recording temperature and rotational speed data on a per-minute basis. It stores this data, allowing users to create historical records and real-time curve graphs for comprehensive observation and analysis of the temperature and rotational speed's impact on experiments during operation. This data can be preserved for 12 months and easily imported or exported through the included USB interface.
3. **Flexible and Upgradable Control:** Intelligent control is achieved through PLC microcomputers, permitting users to add custom programs at any time. This human-centric feature ensures the device can be adapted to meet evolving user needs, with the ability to upgrade programming operations.
4. **Efficient Diversion Waterproof System:** The equipment boasts a patented built-in diversion waterproof system, which effectively waterproofs and flushes the internal cavity without leaving any dead ends. This design simplifies the cleaning process and ensures thorough cleanliness.

Unique Advantages - Continued

5. **High-Quality and Stable Servo Motors:** High-quality servo motors are integrated into the device, offering precise speed control and exceptional stability. These motors also incorporate built-in filter magnetic rings, which effectively shield the equipment from external interference, further enhancing its operational stability.

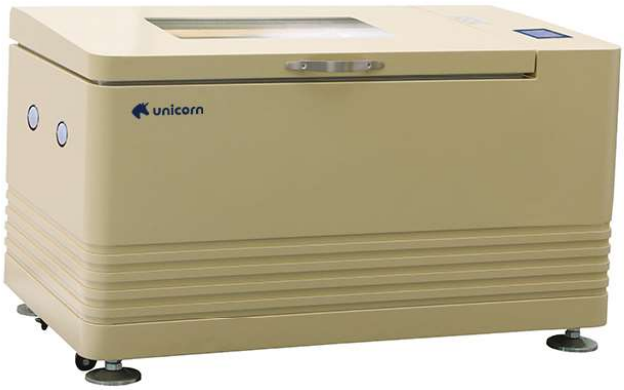
6. **Environmentally Friendly Cooling System:** The equipment is powered by imported, high-quality compressors and nitrogen-free, eco-friendly refrigerants. These components operate with minimal noise and deliver efficient cooling, guaranteeing stable performance even at low temperatures, without the risk of frost or icing.

7. **Temperature Uniformity Through Silent Fan Design:** Silent fan design, combined with a forced convection method, ensures consistent temperature uniformity within the equipment's cavity. This feature is essential for reliable and reproducible experimental results.

Technical Specifications

Model	UMSI-HZ-1T	UMSI-HZ-1TR
Number of overlays	1 layer	1 layer
Type	Horizontal	
Display	LCD touchscreen	
Rotation speed	10-400rpm	
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	518×424mm	
Tray capacity of shake flask	250ml×30 or 500ml×20 or 1000ml×12 or 2000ml×6	
Illumination	FI tube, 30W	
Power supply	AC220V±10%，50-60Hz	
Timing function	0-999.9hours	
Net weight	82KGS	89KGS
Dimension(W×D×H)	848×657×559mm	
Optional	Shading device, 90℃ high temperature module, embedded printer	

BioGrowth
Large Capacity Horizontal Incubator Shaker



Introduction

Elevate your laboratory work with our advanced equipment. The integrated LCD touch screen simplifies parameter configuration and monitoring, making it intuitive for users. You can precisely set culture durations using the built-in timing function, granting flexibility for experiments. The robust three-wheel drive system guarantees smooth, quiet, and reliable operation while incorporating essential safety features like over-temperature alarms and automatic power-off recovery. The hollow tempered glass door allows 360° observation without opening it. The sleek design offers easy cleaning with a stainless steel interior and an exterior that's corrosion-resistant. Security is enhanced with encryption, and side-mounted debugging holes facilitate oxygen supply without opening the main door. Plus, the equipment includes lighting and UV sterilization functions for added convenience. Welcome to a new era of laboratory equipment.

Product Features

1. **Efficient Touch Screen Interface:** The LCD touch screen provides a unified platform to set temperature, speed, time, actual temperature, speed, and remaining time simultaneously. This intuitive design eliminates the need for switching between interfaces. It also allows you to freely configure the rocker's rotation direction and control the forced convection fan, choosing between continuous operation, automatic mode, or deactivation.
2. **Customizable Culture Time:** The equipment comes equipped with a handy timing function, enabling users to set the culture time as needed within the range of 0 to 999.9 hours.
3. **Smooth and Reliable Three-Wheel Drive:** It employs a three-dimensional integrated three-wheel drive system, ensuring a smooth, stable, durable, reliable, and quiet operation.
4. **Safety Features:** The equipment is equipped with an over-temperature alarm function and an automatic power-off feature to respond to abnormal situations. Furthermore, it includes a power-off recovery function to prevent data loss due to power interruptions and crashes.

Product Features - Continued

5. **360° Observation:** A hollow tempered glass door allows you to effortlessly observe the interior of the unit from all angles, eliminating the need to open the door for inspection.
6. **Hygienic Design:** The equipment boasts an appealing arc-shaped exterior. Internally, it features a lining constructed from 304 brushed anti-corrosion stainless steel with rounded corners, which not only simplifies cleaning but also inhibits bacterial growth. The outer shell is coated with electrostatic spray plastic to prevent corrosion.
7. **Secure User Interface:** The operation interface is safeguarded with encryption and locking features to prevent unintended and repeated operations, minimizing the risk of human errors.
8. **Technical Convenience:** The unit is equipped with debugging holes on the side, enabling the adjustment of oxygen levels for samples without the need to open the main door. This feature also simplifies future technical certifications.
9. **Enhanced Functionality:** The equipment comes with built-in lighting and UV sterilization functions to provide comprehensive functionality.

Unique Advantages

1. **Safety and Convenience:** This equipment boasts a user-friendly design that prioritizes safety and ease of use. When you open the lid, it employs an instant stop and a slow stop mechanism, significantly reducing the shearing force on cells and enhancing overall stability.
2. **Optimized Temperature Distribution:** A fan-shaped circulation system is incorporated to ensure a uniform temperature distribution throughout the entire chamber, guaranteeing consistent and reliable experimental conditions.
3. **Data Memory and Export:** The unit is equipped with a data memory function that records temperature and rotational speed data on a per-minute basis. This data is utilized to create historical records and real-time curve graphs, simplifying the observation and analysis of temperature and rotational speed effects during experiments. Users can conveniently store this data for up to 12 months and effortlessly import or export it via a USB interface.
4. **Smart Control:** The equipment utilizes PLC microcomputer intelligent control, offering the flexibility to add programs at any time to meet user-specific requirements. This intelligent system also allows for upgrades to programming operations, ensuring adaptability.
5. **Innovative Waterproof Design:** It features a built-in diversion waterproof system, enabling complete waterproofing and thorough flushing of the internal cavity. This unique design eliminates dead ends, making cleaning a breeze and eliminating the need for specialized tools. This design is patented for its effectiveness.

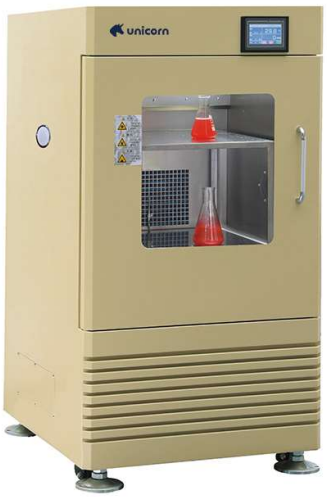
Unique Advantages - Continued

6. **High-Quality Servo Motors:** The equipment is equipped with high-quality servo motors known for their precision in controlling speed and impressive stability. These motors also include a built-in filter magnetic ring, effectively shielding the equipment from external interference and bolstering its internal stability.
7. **Environmentally Friendly Cooling:** It incorporates imported high-quality compressors and nitrogen-free, eco-friendly refrigerants. These components work in harmony, generating low noise and providing efficient refrigeration. This ensures that the equipment operates smoothly at low temperatures for extended periods without frost or icing concerns.

Technical Specifications

Model	UMSI-LHZ-1T	UMSI-LHZ-1TR
Number of overlays	1 layer	1 layer
Type	Horizontal	
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	905×530mm	
Tray capacity of shake flask	250ml×60 or 500ml×40 or 1000ml×24 or 2000ml×15 or 3000ml×11 or 5000ml×8	
Illumination	FI tube, 30W	
Power supply	AC220V±10%, 50-60Hz	
Timing function	0-999.9hours	
Net weight	165KGS	179KGS
Dimension(W×D×H)	1331×755×710mm	
Optional	Shading device, 90℃ high temperature module, embedded printer	

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 stain-less 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 steriliza-tion 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.

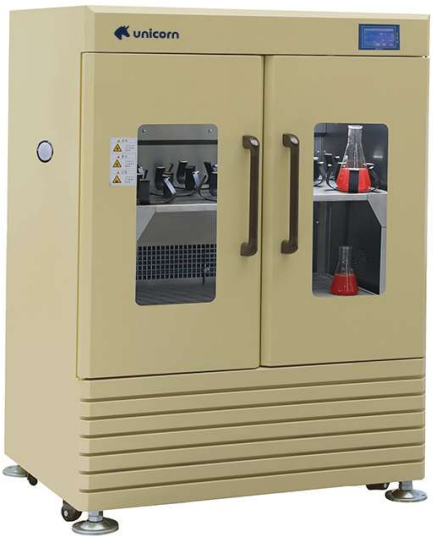
7. **Environmentally Friendly Refrigeration:** We prioritize the environment with imported high-quality compressors and nitrogen-free, environmentally friendly refrigerants. This choice not only maintains low noise levels but also ensures optimal cooling efficiency. As a result, our equipment can stably 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℃	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	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℃ high temperature module, embedded printer	

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	

Shanghai Unicorn Medical Technology Co., Ltd.

Room J, Building 4, B Zone, No. 925 Yecheng Road, Jiading Industrial Area, Shanghai

Tel: +86 (021) 6082 8473 Cel: +86 173 1710 8636 Email: info@unicornlifescience.com

www.unicornlifescience.com