

# CellPro Incubator Shaker



# CellPro Vertical Incubator Shaker



## *Introduction*

CellPro Vertical Incubator Shaker offers versatility across various cell culture types, encompassing CHO, hybridoma, mammalian cells, insect cells, and more. It emerges as the ultimate comprehensive solution for biological cultivation, acting as an essential precursor to fermenter culture. Leveraging innovative bearing technology, CellPro Vertical Incubator Shaker guarantees a smooth and nearly silent initiation, ensuring a disturbance-free environment. Its compact design, tailored for low throughput multiple culture scenarios, proves exceptionally advantageous. The minimal footprint ensures seamless integration even within constrained laboratory settings. Moreover, its modular design facilitates stacking up to 2 layers, enabling maximal space optimization for your laboratory needs.

## *Product Features*

- 1. Optimized Space Usage:** Configure one or two levels to maximize space efficiency, providing a generous working area in a compact design.
- 360° Observation:** The hollow tempered glass door offers easy viewing from multiple angles without opening it. It includes a defogging and condensation prevention feature.
- 2. Smooth Three-Wheel Drive:** Our equipment employs a three-dimensional integrated three-wheel drive system, ensuring continuous, stable, and reliable operation.
- 3. Advanced Safety:** Equipped with over-temperature alarms and automatic power-off functions in unusual situations, it also includes power-off recovery to protect data integrity during power disruptions and system crashes.
- 4. Hygienic Design:** The streamlined exterior conceals a 304 brushed anti-corrosion stainless steel interior, complete with easy-to-clean, bacteria-resistant curved angles. The outer shell uses electrostatic spray technology.

## ***Product Features - Continued***

5. **Enhanced Security:** The operational interface incorporates encryption and locking features to prevent unintended or duplicate actions, enhancing the user experience.
6. **Precise Servo Motors:** High-quality servo motors provide accurate speed control and exceptional stability. The integrated filter magnetic ring shields the machine from external interference, further improving stability.
7. **Efficient Cooling:** Utilizing top-tier imported compressors and eco-friendly, fluorine-free refrigerants ensures minimal noise and efficient cooling. This design guarantees continuous, frost-free operation at low temperatures.
8. **Comprehensive Functionality:** With added features like lighting and scheduled UV sterilization, our equipment offers an all-inclusive solution for a variety of needs.

## ***Unique Advantages***

1. **Precision CO2 Control:** Our system employs an imported infrared CO2 sensor, ensuring precise and sensitive automatic control of CO2 concentration. A dedicated controller and solenoid valve, coupled with a CO2 gas source, make it incredibly easy to operate.
2. **Cleaner CO2 Intake:** The CO2 intake pass device effectively filters out particulate impurities, microorganisms, and pollutants, ensuring the purity of the incoming CO2 gas.
3. **User-Friendly Interface:** With an LCD touch screen, users can effortlessly set CO2 concentration, temperature, speed, and time parameters. It provides real-time information on CO2 concentration, temperature, speed, and remaining time, eliminating the need for interface switching. You can even adjust the rocking plate's rotation and control the forced convection fan.
4. **Data Management:** Our equipment offers a data memory function that records minute-by-minute temperature and speed data, creating historical records and real-time graphs for detailed experimentation analysis. With up to 12 months of storage and a user-friendly USB interface, data management is a breeze.
5. **Smart Control:** Utilizing PLC microcomputer intelligent control, our system accommodates custom programs at any time, enhancing its versatility and programmable operations.
6. **Consistent Temperature:** A patented precision three-channel gas cold and hot mixing circulation air duct design ensures even temperature distribution throughout the cabinet.

## Unique Advantages - Continued

7. **Enhanced Stability:** Our patented self-balancing system design effectively boosts the device's stability, extending its operational lifespan.
8. **Easy Cleaning:** With our patented built-in diversion-type waterproof system, you can thoroughly clean the unit without inaccessible areas, ensuring hygiene and tool-free maintenance.
9. **User-Centric Safety:** The system halts or slows down upon lid opening, enhancing safety, minimizing cell stress, improving stability, and preserving cell integrity.
10. **Ambient Temperature Control:** Equipped with an external ambient temperature sensor, the system displays real-time ambient temperature on the panel, enabling precise cabinet temperature control.
11. **Flexible User Access:** Optionally, our multi-level management authority configuration allows distinct user access levels, each with a unique username and password for secure parameter modification and screen data utilization.
12. **Additional Option:** We offer an efficient built-in active humidity control module, paired with an external water replenishment bucket for automatic refilling. With a high-precision humidity probe, the module achieves up to 95% humidity during standard 37°C culture, effectively inhibiting sample volatilization. Real-time humidity display is included for your convenience.



UMSI-163-1TC



UMSI-163-2TC

## Technical Specifications

Model	UMSI-163-1TC	UMSI-163-2TC
Number of overlays	1 layer	2 layers
Control interface	LCD touchscreen	LCD touchscreen
Rotation speed	10-300rpm	10-300rpm
Speed control accuracy	1rpm	1rpm
Shaking throw	50mm Standard/26mm Optional	50mm Standard/26mm Optional
Internal usable height	406mm	406mm
Maximum load	50kg	50kg
Chamber capacity	163L	163L×2
Temperature control mode	PLC control mode	PLC control mode
Temperature control range	4-60℃	4-60℃
Temperature display resolution	0.1℃	0.1℃
Temperature fluctuation	±0.1℃	±0.1℃
Temperature field uniformity	±0.5℃@37℃	±0.5℃@37℃
Working environment temperature	5-35℃	5-35℃
CO2 measurement principle	IR sensor detection	IR sensor detection
CO2 control range	0-20%	0-20%
CO2 display resolution	0.001	0.001
CO2 supply	0.05-0.1MPa is recommended	0.05-0.1MPa is recommended
Sterilization method	UV sterilization	UV sterilization
Tray size	504×392mm	504×392mm×2
Tray capacity of shake flask	250ml×20 500ml×16 1000ml×9 2000ml×6	(250ml×20)×2 (500ml×16)×2 (1000ml×9)×2 (2000ml×6)×2
Illumination	FI tube, 30W	FI tube, 30W
Heating power	400W	400W
Cooling power	132W	132W
Power supply	AC220V±10%, 50-60Hz	AC220V±10%, 50-60Hz
Timing function	0-999.9hours	0-999.9hours
Data export interface	USB interface	USB interface
Historical data storage	Three months	Three months
Push-pull blackout curtain	Optional	Optional
Dimension(W×D×H)	688×771×900mm(1 layer)	688×771×1718mm
Net weight	165KG(1 layer)	330KG
Package size(W×D×H)	960×820×1060mm(1 layer)	(960×820×1060mm)×2
Gross weight	199kg(1 layer)	199kg(1 layer)×2

# CellPro

## Compact Stackable Incubator Shaker



### ***Introduction***

The CellPro Compact Stackable Incubator Shaker offers versatility for various cell culture needs, accommodating CHO, hybridoma, mammalian cells, insect cells, and more, making it the go-to solution for comprehensive biological cultures before the fermenter stage. With advanced bearing technology, it ensures a stable and impressively quiet startup, even when multiple units are stacked, eliminating disruptive vibrations. Its innovative air circulation system guarantees precise temperature field uniformity. Furthermore, its stackable design allows for up to 2 or 3 layers, optimizing laboratory space.

### ***Product Features***

- 1. Versatile Layered Design:** Choose from one, two, or three layers, providing users with maximum storage space while occupying minimal floor space. Each layer offers independent temperature and rotation speed control, allowing users to set customized conditions as needed.
- 2. Clear Observation:** The hollow tempered glass door ensures easy, uninterrupted viewing of the interior from all angles without the need to open the door.
- 3. Efficient Three-Wheel Drive:** Utilizes a three-dimensional integrated partial three-wheel drive system for smooth, stable, and dependable operation.
- 4. Safety Features:** Equipped with an over-temperature alarm and automatic power-off function to respond to abnormal situations. It also offers power-off recovery functionality to prevent data loss due to power interruptions or crashes.
- 5. Sleek and Hygienic Design:** The streamlined exterior features a 304 mirror stainless steel interior, while the arc corner design simplifies cleaning and prevents bacterial growth. The outer shell is constructed with electrostatic spray plastic for added durability.

## ***Product Features - Continued***

- 6. Secure and Convenient Interface:** The operation interface is encrypted and locked to prevent unintended actions and human errors. It also supports time accumulation and timing functions for added convenience.
- 7. Oxygen Supply:** A dedicated oxygen hole on the side eliminates the need to open the door to meet the oxygen requirements of the samples.
- 8. Enhanced Functionality:** This unit includes built-in lighting and UV sterilization functions for added versatility and convenience.

## ***Unique Advantages***

- 1. Precise CO2 Control:** Utilizes an imported infrared CO2 sensor for automatic CO2 concentration control, delivering exceptional sensitivity and precision. Equipped with a controller and solenoid valve, users simply require a CO2 gas source for immediate use.
- 2. CO2 Gas Purity:** Features a CO2 air inlet filtration system, effectively eliminating particulate impurities, microorganisms, and other contaminants from external CO2 gas sources.
- 3. Intuitive LCD Interface:** Boasts an LCD touch screen interface for seamless control of CO2 concentration, temperature, speed, and time. Real-time feedback on CO2 concentration, temperature, speed, and remaining time is displayed on the same interface, enhancing user-friendliness. The touch screen offers options for rocker rotation direction, real-time time accumulation, timing functions, and control of the convection fan.
- 4. Data Recording and Storage:** Employs a data memory function to record minute-by-minute temperature and rotational speed data in real-time, generating historical data and real-time curve graphs. This aids in monitoring and analyzing temperature and speed effects during experiments. Data can be stored for up to 3 months and easily imported/exported via the USB interface.
- 5. Flexible Programmability:** Utilizes PLC microcomputer intelligent control, allowing users to add or modify programs at any time to meet specific requirements.
- 6. Uniform Temperature Distribution:** Features a patented precision three-channel hot and cold gas mixing circulation air duct design to ensure consistent temperature distribution throughout the chamber.
- 7. Enhanced Stability:** Incorporates a patented self-balancing system design to enhance machine stability and extend its service life.

## ***Unique Advantages - Continued***

8. **Effortless Cleaning:** Equipped with a built-in diversion waterproof system that enables thorough, tool-free cleaning of the internal cavity without any dead ends. This feature is also patented.

9. **Safety and Convenience:** Includes an instant-stop or slow-stop function when the lid is opened, ensuring safer and more stable operation by reducing shear forces on cells.

10. **Ambient Temperature Display:** Features a real-time display of the ambient temperature on the panel, facilitating precise temperature control within the chamber.

11. **User Management:** Allows for the setting of three or more levels of management permissions, each with independent usernames and passwords for login, security permission configuration, parameter adjustment, and data access.

12. **Optional Humidity Control:** Offers an optional built-in active humidity control module, minimizing space requirements. An external water replenishing bucket enables automatic water replenishment. High-precision humidity probes maintain humidity levels of up to 95% at 37°C during normal culture, effectively inhibiting sample volatilization. Real-time humidity monitoring is also provided.



UMSI-166-2TC



UMSI-166-3TC



## Technical Specifications

Model	UMSI-166-1TC	UMSI-166-2TC	UMSI-166-3TC
Number of overlays	1 layer	2 layers	3 layers
Control interface	LCD touchscreen		
Rotation speed	10-250rpm		
Speed control accuracy	1rpm		
Shaking throw	50mm Standard/26mm Optional		
Maximum load	50kg		
Volumn	166L		
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		
Working environment temperature	5-35 °C		
CO2 measurement principle	IR sensor detection		
CO2 control range	0-20%		
CO2 display resolution	0.1%		
CO2 supply	0.05-0.1MPa is recommended		
Sterilization method	UV sterilization		
Tray size	581×520mm		
Tray capacity of shake flask	250ml×42 2000ml×9	500ml×25 3000ml×7	1000ml×17
Illumination	FI tube, 30W		
Heating power	600W		
Cooling power	278W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Data export interface	USB interface		
Historical data storage	Three months		
Push-pull blackout curtain	Optional		
Dimension(W×D×H)	999×795×661mm		
Net weight	153KG		
Package size(W×D×H)	1130×935×830mm		
Gross weight	183kg		

# CellPro

## Medium Capacity Stackable Incubator Shaker



### ***Introduction***

CellPro Medium Capacity Stackable Incubator Shaker caters to diverse cell cultures, encompassing CHO, hybridoma, mammalian cells, insect cells, and more. As the ultimate solution for biological culture preceding fermenter cultivation, CellPro Stackable Incubator Shaker reigns as a comprehensive culture apparatus. Leveraging cutting-edge bearing technology, it boasts not only stable initiation but also impressively noise-free functionality. Remarkably, even when multiple layers are artfully stacked, abnormal vibrations are expertly mitigated. The hallmark air circulation system guarantees an unparalleled level of temperature field uniformity. With the flexibility to stack up to 2 or 3 layers, CellPro Stackable Incubator Shaker optimizes lab space utilization, culminating in a truly indispensable laboratory asset.

### ***Product Features***

1. Experience expansive utility within a minimal footprint with the option of one, two, or three-tier stacked configurations, optimizing available space.
2. Designed with your convenience in mind, the lower two tiers feature swing-down doors, while the third tier boasts flip-up doors. Each tier grants autonomous control over temperature, speed, and concentration, enabling tailored adjustments to suit your unique requirements.
3. Benefit from an ingenious hollow tempered glass door that offers unhindered observation of the internal chamber from various angles without the need for door opening. Additionally, the door incorporates a heating function to prevent condensation and ensure a clear view.
4. Seamlessly integrated three-dimensional tri-wheel propulsion ensures impeccable stability, durability, and smooth operation.
5. Safeguard against anomalies with an over-temperature alarm mechanism and automated power-off function. The power-off recovery feature prevents data loss due to power disruptions or system crashes.
6. An elegant streamlined exterior envelops a corrosion-resistant 304 brushed stainless steel interior. The curvature-enhanced design prevents bacterial growth, ensuring easy cleaning, while the electrostatically sprayed outer shell enhances durability.

## ***Product Features - Continued***

7. Elevate your operational security with encrypted and locked interface functions, mitigating the risk of inadvertent operations or misuse.
8. Precision is paramount with a high-quality servo motor, offering meticulous control over speed and unwavering stability. The integrated filter magnetic ring shields against external interference, bolstering machine stability.
9. Embrace sustainable performance with meticulously selected imported compressors and eco-friendly fluorine-free refrigerants. Experience prolonged stability even at low temperatures, devoid of frost or freezing concerns.
10. Illuminate and sanitize simultaneously with the integrated lighting and ultraviolet timing sterilization functionality. Your work environment remains well-lit, while microbial contamination is curbed.

## ***Unique Advantages***

1. Employing an imported infrared CO<sub>2</sub> sensor, our system ensures automatic control of CO<sub>2</sub> concentration with heightened sensitivity and exceptional precision. Enhanced by a controller and solenoid valve setup, this technology simplifies usage, requiring only a CO<sub>2</sub> gas source for direct operation.
2. Featuring a CO<sub>2</sub> air inlet filter mechanism, our design adeptly eliminates particulate impurities, microorganisms, and other potential pollutants present in the incoming CO<sub>2</sub> gas, further optimizing performance.
3. Empower your control with an intuitive LCD touch screen. This interface seamlessly displays CO<sub>2</sub> concentration, temperature, speed, time, actual CO<sub>2</sub> concentration, temperature, speed, and remaining time, all within a single view. The option for forward or reverse rotation of the rocking plate is customizable, as is the real-time display of time accumulation and timing functions. The ability to set the forced convection fan for automatic or manual operation enhances convenience.
4. Unlock insightful analysis through our data memory function. Capturing temperature and speed data per minute in real time, this system forms a repository of historical data and real-time graphs. This invaluable resource aids in observing and understanding the impact of temperature and speed during experiments. With a data storage capacity of 12 months and a USB interface for seamless information exchange, your insights are readily accessible.
5. Utilizing PLC microcomputer intelligent control, our system remains adaptable to evolving needs. This flexibility allows for the addition of programs as required, promoting a user-centric experience and enabling programming upgrades.

## Unique Advantages - Continued

6. Our proprietary precision three-channel gas cold and hot mixing circulation air duct design guarantees uniform temperature distribution across the entire cabinet, a pioneering innovation protected by a patent.
7. The adoption of a self-balancing system design contributes to overall stability, effectively extending the operational life of the machine. This innovation, too, is safeguarded by a patent.
8. Experience the convenience of our built-in diversion type waterproof system. With its capacity for thorough, dead-angle-free waterproof flushing, cleaning is effortless without the need for specialized tools, all covered by a patent.
9. Discover unprecedented efficiency with our fast fixing device. The innovative feature permits rapid fixation or release of the rocking plate within just 5 seconds. Enhanced by an elegant, lightweight aluminum rocking plate that can be effortlessly operated with a single hand, this advancement optimizes work processes and maximizes productivity, secured by a patent.
10. Embrace enhanced safety and ease-of-use with our user-friendly lid opening mechanism, designed to either halt operations or initiate a slow-stop function. This not only promotes the well-being of your cell cultures but also elevates overall operational stability.
11. For precise temperature management, our system is equipped with an external ambient temperature probe, delivering real-time ambient temperature readings on the panel interface, ensuring meticulous control within the cabinet.
12. Tailor your system with optional three-level or higher management authority settings. Each level boasts an independent user name and password, facilitating secure logins, parameter adjustments, and screen data access—a management tool designed with convenience in mind.
13. Optimize your environment with the optional built-in active humidity control module. This space-efficient feature, coupled with an external water replenishment mechanism, ensures automatic hydration. Utilizing a high-precision humidity probe, our system maintains humidity levels of up to 95% during normal culture at 37°C, effectively curbing sample volatilization. Real-time humidity display adds to the convenience and insights this module offers.



UMSI-215-2TC



UMSI-215-3TC

## Technical Specifications

Model	UMSI-215-1TC	UMSI-215-2TC	UMSI-215-3TC
Number of overlays	1 layer	2 layers	3 layers
Control interface	LCD touchscreen		
Rotation speed	10-300rpm		
Speed control accuracy	1rpm		
Shaking throw	50mm Standard/26mm Optional		
Internal usable height	338mm		
Maximum load	50kg		
Volumn	215L		
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℃		
Working environment temperature	5-35℃		
CO2 measurement principle	IR sensor detection		
CO2 control range	0-20%		
CO2 display resolution	0.001		
CO2 supply	0.05-0.1MPa is recommended		
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		
Data export interface	USB interface		
Historical data storage	Three months		
Push-pull blackout curtain	Optional		
Dimension(W×D×H)	1119×910×621mm	1119×910×1165mm	1119×910×1711mm
Net weight	213KG	400KG	580KG
Package size(W×D×H)	1250×1050×790mm(1 layer)		
Gross weight	273kg(1 layer)		

# CellPro

## Large Capacity Stackable Incubator Shaker



### *Introduction*

The Large Capacity Stackable CO<sub>2</sub> Incubator Shaker is a versatile solution for a wide range of cell cultures, from CHO and hybridoma to mammalian and insect cells. Serving as the ideal precursor to fermenter cultures, it boasts exceptional bearing technology, ensuring a stable and impressively quiet startup, even when multiple layers are stacked, eliminating disruptive vibrations. Its innovative air circulation system guarantees precise temperature field uniformity. Additionally, its stackable design accommodates up to 2 or 3 layers, optimizing laboratory space for more efficient use.

### *Product Features*

- 1. Space Optimization:** The one-, two-, or three-story stackable design offers users maximum usable space within a minimal footprint.
- 2. Versatile Control:** Designed for user convenience, lower two floors feature downward flip-up doors, while the third floor has upward flip-up doors. Each layer offers independent control over temperature, speed, and concentration. Users can easily customize settings to meet specific requirements.
- 3. Clear Observation:** The hollow tempered glass door provides unobstructed views of the interior from all angles, eliminating the need to open the door. Additionally, the door includes a heating function to prevent fogging and condensation.
- 4. Efficient Mobility:** Equipped with a three-dimensional partial three-wheel drive system, ensuring smooth, stable, durable, and reliable operation.
- 5. Safety Features:** Incorporates an over-temperature alarm function and automatic power-off feature in case of abnormal situations. Power-off recovery prevents data loss due to power outages and crashes.
- 6. Sleek Design:** Boasts a streamlined appearance with a 304 brushed anti-corrosion stainless steel interior lining, featuring arc corners for easy cleaning and prevention of bacterial growth. The outer shell is constructed from electrostatic spray plastic.
- 7. Secured Operation:** The operation interface is encrypted and locked to prevent repetitive actions and human errors.

## ***Product Features - Continued***

8. **Precise Motor Control:** Utilizes a high-quality servo motor for precise speed control and exceptional stability. It includes a built-in filter magnetic ring that shields the machine from external interference, enhancing its overall stability.
9. **Efficient Cooling:** Employs imported high-quality compressors and nitrogen-free, environmentally friendly refrigerants. This combination ensures low noise levels, efficient cooling, and extended equipment longevity, even at low temperatures, without frost or icing.
10. **Enhanced Functionality:** Features integrated lighting and UV timed sterilization functions for added versatility and utility.

## ***Unique Advantages***

1. **Precise CO2 Control:** Utilizes an imported infrared CO2 sensor for automatic CO2 concentration control, ensuring sensitive and highly accurate responses. Equipped with a controller and solenoid valve, it simplifies usage, requiring only a CO2 gas source.
2. **Clean CO2 Inlet:** Features a CO2 air inlet filtration device to effectively eliminate particulate impurities, microorganisms, and other external CO2 gas contaminants.
3. **Intuitive Interface:** Equipped with an LCD touchscreen that displays CO2 concentration, temperature, speed, time, actual CO2 levels, temperature, speed, and remaining time all on one interface. This eliminates the need for interface switching, enhancing intuitive observation. Users can freely configure forward or reverse rocker rotation. The touchscreen provides real-time display of time accumulation and timing functions, with options for forced convection fan settings—continuous, automatic, or off.
4. **Data Memory:** Includes a data memory function that records temperature and rotational speed data per minute in real-time, creating historical data and real-time curves. This simplifies observation and analysis of temperature and rotational speed effects during experiments. Data can be stored for up to 12 months and conveniently imported and exported via the USB interface.
5. **Intelligent Control:** Employs PLC microcomputer intelligent control, allowing users to add programs at any time to meet specific requirements. This enhances user-friendliness and enables future programming upgrades.
6. **Precision Air Duct Design:** Features a unique precision three-channel hot and cold gas mixing circulation air duct design, ensuring uniform temperature distribution throughout the entire chamber (patented).

## Unique Advantages - Continued

7. **Stability Enhancement:** Incorporates a self-balancing system design to improve machine stability and prolong service life (patented).
8. **Effortless Cleaning:** Built-in diversion waterproof system allows easy, thorough cleaning of the internal cavity without any dead ends or special tools required (patented).
9. **Quick Fixing:** Designed with a quick-fixing device for the rocking plate, enabling rapid fixation or unlocking in just 5 seconds. The built-in aluminum rocking plate combines beauty, elegance, and lightweight functionality. It can be easily operated with one hand, saving time and effort, and significantly boosting work efficiency (patented).
10. **Safety and Convenience:** User-friendly design includes an instant-stop or slow-stop function when the lid is opened, enhancing safety and convenience while minimizing shear force on cells and ensuring greater stability.
11. **Ambient Temperature Control:** Specially equipped with an external ambient temperature probe for real-time display of ambient temperature on the panel, facilitating precise control of the chamber's temperature.
12. **Access Management:** Offers optional three or more levels of management permissions. Each permission tier includes an independent username and password for login, security settings, parameter adjustments, and data access, simplifying management.
13. **Humidity Control:** Optional built-in active humidity control module, which doesn't occupy extra space, and an external water replenishing bucket for automatic water replenishment. Utilizes a high-precision humidity probe to maintain humidity levels of up to 95% during normal cultivation at 37°C, effectively preventing sample volatilization. Real-time humidity display is available.



UMSI-325-2TC



UMSI-325-3TC



## Technical Specifications

Model	UMSI-325-1TC	UMSI-325-2TC	UMSI-325-3TC
Number of overlays	1 layer	2 layers	3 layers
Control interface	LCD touchscreen		
Rotation speed	10-300rpm		
Speed control accuracy	1rpm		
Shaking throw	50mm Standard/26mm Optional		
Internal usable height	378mm		
Maximum load	50kg		
Volumn	325L		
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		
Working environment temperature	5-35 °C		
CO2 measurement principle	IR sensor detection		
CO2 control range	0-20%		
CO2 display resolution	0.001		
CO2 supply	0.05-0.1MPa is recommended		
Sterilization method	UV sterilization		
Tray size	963×540mm		
Tray capacity of shake flask	250ml×66 2000ml×18	500ml×45 3000ml×14	1000ml×28
Illumination	FI tube, 30W		
Heating power	800W		
Cooling power	350W		
Power supply	AC220V±10%, 50-60Hz		
Timing function	0-999.9hours		
Data export interface	USB interface		
Historical data storage	Three months		
Push-pull blackout curtain	Optional		
Dimension(W×D×H)	1430×847×648mm		
Package size(W×D×H)	1538×980×810mm		
Net weight/Gross weight	245kg/275kg		

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