

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