

# LumiCult Horizontal Incubator Shaker



## *Introduction*

Discover next-level control and precision with our equipment's intuitive touchscreen interface. Easily set temperature, speed, and timing functions while observing critical data all on one screen. You can even change the rocker's rotation direction and manage the forced convection fan without the hassle of switching screens. With customizable culture times and efficient, quiet three-wheel drive, this equipment is built for flexibility and reliable operation. Safety is a top priority, with over-temperature alarms, automatic power-off, and data recovery. Plus, its sleek design, clear observation, hygienic materials, and UV sterilization functions make it a comprehensive lab solution.

## *Product Features*

- 1. Intuitive Touchscreen Control:** The LCD touch screen allows you to effortlessly configure temperature, speed, and time settings. Critical information like actual temperature, speed, and remaining time is conveniently displayed on the same interface. Switching between functions is seamless, making observations more intuitive. You have the flexibility to set the rotation of the rocker in either forward or reverse motion. Additionally, the touch screen provides real-time updates on the time accumulation and timing functions, allowing you to easily control the forced convection fan, whether it's set to run continuously, automatically, or turned off.
- 2. Customizable Culture Time:** Benefit from a timing function that lets you set culture durations anywhere between 0 to 999.9 hours, providing you with the flexibility to tailor your experiments to precise timeframes.
- 3. Efficient and Quiet Operation:** The equipment utilizes a three-dimensional partial three-wheel drive system, ensuring smooth, stable, and durable performance. Importantly, it operates quietly, creating a conducive environment for your experiments.
- 4. Safety and Data Protection:** Equipped with an over-temperature alarm function and an automatic power-off feature in abnormal situations, this equipment prioritizes safety. Its power-off recovery function safeguards against data loss caused by unexpected power outages and crashes.

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

5. **Observation Made Easy:** The inclusion of a hollow tempered glass door enables clear observation of the chamber's interior from all angles without the need to open the door.
6. **Hygienic Design:** Its elegant arc-shaped exterior is complemented by a robust interior lining made from 304 brushed anti-corrosion stainless steel. The arc corner design not only simplifies cleaning but also inhibits the growth of bacteria. Meanwhile, the outer shell is constructed from electrostatic spray plastic, enhancing both durability and aesthetics.
7. **Convenient Oxygen Access:** A thoughtful debugging hole on the side of the equipment caters to the oxygen requirements of your samples without necessitating the opening of the main door. This feature is designed with ease of use and technical certification in mind.
8. **Enhanced Functionality:** The equipment is equipped with both lighting and ultraviolet sterilization functions, providing comprehensive support for your experimental needs.

## ***Unique Advantages***

1. **Versatile Dual-Functionality:** This innovative unit seamlessly combines a full-temperature oscillating incubator and a light incubator, catering to both static and dynamic cultures. Enjoy the convenience of two functions in a single machine.
2. **Customizable Light Settings:** Tailor your experiments precisely to your needs by programming lighting conditions. With the ability to create up to 24 segments, each segment can feature unique settings such as temperature, light intensity, rotation speed, and duration. This capability allows you to mimic natural variations in sunlight and temperature, replicating the effects of sunrise and sunset.
3. **Efficient LED Lighting:** Designed with a special LED cold light source, this equipment boasts high efficiency and energy savings. Its light intensity can reach an impressive 30,000LX, with the flexibility to adjust brightness from 1% to 100% in precise increments. The extended service life ensures consistent performance over time.
4. **User-Centric Safety:** A user-friendly feature includes an instant-stop or slow-stop function when the lid is opened. This not only enhances safety but also minimizes the shearing force on delicate cells, resulting in greater stability during experiments.
5. **Uniform Temperature Distribution:** Employing a fan-shaped circulation system, the equipment guarantees temperature uniformity throughout the entire chamber, ensuring optimal experimental conditions.

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

6. **Comprehensive Data Management:** Benefit from a data memory function that records temperature and rotational speed data on a per-minute basis. This historical data is visualized in real-time curve graphs, simplifying the observation and analysis of temperature and rotational speed's impact on your experiments. Data is stored securely for 12 months and can be effortlessly imported or exported via the built-in USB interface.

7. **Intelligent Control:** Utilizing PLC microcomputer intelligence, you can effortlessly add and customize programs to meet your specific requirements. This user-centric approach allows for a more flexible and intuitive programming operation.

8. **Effortless Maintenance:** Featuring a patented built-in diversion waterproof system, cleaning this equipment is hassle-free. The internal cavity can be waterproofed and rinsed without any inaccessible areas, eliminating the need for specialized tools.

9. **Robust Motor and Interference Shielding:** Equipped with a high-quality servo motor, this unit offers precise control over speed, minimizes post-use faults, and maintains exceptional stability. Its built-in filter magnetic ring effectively shields the machine from external interference, bolstering overall stability.

10. **Reliable Cooling:** The selection of high-quality compressors and nitrogen-free, environmentally friendly refrigerants ensures low noise and exceptional cooling performance. This guarantees prolonged, stable operation even at low temperatures.



## Technical Specifications

Model	UMSI-349-1TI	
Number of overlays	1 layer	
Type	Horizontal	
Display	LCD touchscreen	
Rotation speed	10-300rpm	
Speed control accuracy	1rpm	
Shaking throw	26mm	
Maximum load	50KG	
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	±0.8 °C @37 °C	
Ambient temperature	5-35 °C	
Heating power	800W	
Cooling power	350W	
Volumn	349	
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	0-16000LUX(Standard)	0-30000LUX(Optional)
Power supply	AC220V±10%, 50-60Hz	
Timing function	0-999.9hours	
Weight	178KG	
Dimension(W×D×H)	1331×755×710mm	
Package siza(W×D×H)	1450×950-×950mm	
Gross weight	252KG	