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	