

Benchttop Incubator Shaker with Water Bath

ISBW Series



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The ISBW incubator shaker with water bath is designed to mix, agitate, and culture samples submerged in water at a specific, controlled temperature. It offers a wide temperature ranging from room temperature to 100 C. Available in three sizes to fit different lab spaces, it can accommodate vessels up to 1 liter in capacity. It can shake samples steadily while maintaining a constant temperature. It is ideal for applications requiring higher temperatures and faster incubation times. Whether you're working on delicate biochemical assays or robust microbial cultures, this instrument ensures consistent results, making it an essential asset for scientific research.



Key Benefits

- Linear shaking motion and 25mm shaking diameters
- Providing homogenous, stable and quiet shaking
- 1 year warranty, life time support
- Affordable price, fast lead time and reliable shipment
- Professional sales and engineers to assist you with all the pre- and after sale problems

Applications



Cell Culture

Incubator shaker provides a ideal environment for the growth of mammalian cells, hybridoma cells, insect cells and plant cells. These cells requires a high density of CO₂ and humidity control when growing up.



Microbial Culture

In the growth and development of of bacteria, fungi and other microorganisms, cultivation in incubator shaker is an essential process. It explores the best manufacturing technique for the mass production in the future.

Features

Structure

- Features an intuitive and clear LCD display
- Built with the unique five-dimensional counter-balanced drive technology, smooth, durable and quiet.
- A mirror-finish stainless steel working chamber with an arch design for easy and fast cleaning.



ISBW46



ISBW82

Control

- Precise and accurate P.I.D Microprocessor.
- Temperature control: accuracy: $\pm 0.1\text{ }^{\circ}\text{C}$, uniformity: $\pm 0.2\text{ }^{\circ}\text{C}$ [at $37\text{ }^{\circ}\text{C}$]; Speed accuracy: $\pm 1\text{ rpm}$.
- Equipped with sequential, timed, or step-by-step execution (up to 8 steps); can store a maximum of 1 programs.

Performance

- Linear shaking mode with 25mm shaking throw
- Shaking speed: 2 to 200rpm
- Temperature range: 5°C above ambient to 100°C
- Holding vessels up to 21 units of 1000mL elenmeyer flask
- Operation can be resumed at set values when the power is restored in case of power outage.
- Electric leakage protection, over-speed protection, overheat protection and more



ISBW170

Options

LAB1ST provides multiple of options to suit your specific needs

Qualification and process validation

The IQ, OQ and PQ (installation qualification, operational qualification, and performance qualification) are important steps to prove that the devices meet requirements and regulatory standards. These documents are available in LAB1ST.

Remote control via computer

The remote control via computer can largely facilitate your operation of the whole cultivation process, and you can monitor all the parameter easily

Microprinter

The microprinter can be embedded in the incubator shaker, making it convenient to print data, curves, etc.

RS485 communication interface

The RS485 communication interface is ideal for serial data communication, achieving reliable data transmission

LCD color touch screen

This options includes an intuitive and clear LCD color touch display. It makes it easy to set, control and view all the parameters

USB export interface

The USB export interface is for exporting historical records and real-time curves to help you better analyze the cultivation process.

Three-level authority management

Three levels of authority can enhance organizational efficiency, clarity, and security by clearly defining roles and responsibilities.

Choose the Right Model for You



Model	ISBW46	ISBW82	ISBW170
Capacity			
Maximum Expansion	Not Stackable	Not Stackable	Not Stackable
Max. Vessel Volume [ml]	1000	1000	1000ml
Tray Size [cm/in]	43 × 32cm [17 × 13in]	59 × 39cm [23×15in]	78×59cm [31×23in]
Tray QTY [pcs]	1	1	1
Performance			
Lighting UV Lamp	—	—	—
White Light [0-12000 lx]	—	—	—
Red and Blue Light [0-12000 lx]	—	—	—
Humidity Control	—	—	—
Darkening Window Shade	—	—	—
Embedded Microprinter	○	○	○
Temp. Range [Ambient Temp. 5-35 °C]	Incubated: 5 °C above ambient to 60 °C Refrigerated: —	Incubated: 5 °C above ambient to 60 °C Refrigerated: —	Incubated: 5 °C above ambient to 100 °C Refrigerated: —
Shaking Motion	Linear	Linear	Linear
Shaking Throw [Orbital]	—	—	—
Shaking Throw [Linear]	25 mm	25 mm	25 mm
Shaking Frequency [25mm Shaking Throw]	20-200 rpm [±1rpm]	20-200 rpm [±1rpm]	20-200 rpm [±1rpm]
Ergonomics, Program			
Door Opening	Top opening hood	Top opening hood	Top opening hood
Platform Type	Fixed	Fixed	Fixed
Programming Steps Storable Programs	8 1 30 5 [Upgrade to touch screen] ○	8 1 30 5 [Upgrade to touch screen] ○	8 1 30 5 [Upgrade to touch screen] ○
Parameter Control	Basic LCD-display	Basic LCD-display	Basic LCD-display
Additional Information			
External Dimensions [single unit] [cm]	76×39×51	94 × 41 × 58	124 × 83 × 70
[W×H×D] ["]	30×15×20	37 × 16 × 23	49 × 33 × 28
Weight [Kg]	56	68	133

● = Standard ○ = Optional — = N/A

Parameter

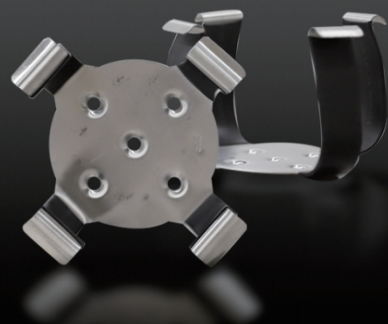
Model	ISBW46	ISBW82	ISBW170
Specification			
Parameter Control	P.I.D Microprocessor	P.I.D Microprocessor	P.I.D Microprocessor
Operation Menu, MMI[Language]	CH, EN	CH, EN	CH, EN
Display	Basic LCD-display	Basic LCD-display	Basic LCD-display
Max. Expansion	Non-Stackable	Non-Stackable	Non-Stackable
Air Circulation	—	—	—
Max. Vessel Volume	1000ml	1000ml	1000ml
External Dimensions[single unit] [mm]	760 × 388 × 508	942 × 405 × 580	1240 × 830 × 700
[W×H×D] ["]	29.92 × 15.28 × 20.00	37.09 × 15.94 × 22.83	48.82 × 32.68 × 27.56
Weight [Approx.] [Kg]	56	68	133
Incubation Chamber			
Material	Mirror SUS316	Mirror SUS316	Mirror SUS316
Inner Dimension [mm]	510 × 240 × 380	700 × 260 × 455	940 × 275 × 660
[W×H×D] ["]	20.08 × 9.45 × 14.96	27.56 × 10.24 × 17.91	37.01 × 10.83 × 25.98
Tray Size [mm]	430 × 320	590 × 390	780 × 590
[W×D] ["]	16.93 × 12.60	23.23 × 15.35	30.71 × 23.23
Tray QTY [pcs]	1	1	1
Tray Max. Capacity	250ml × 14, 500ml × 9, 1000ml × 6	250ml × 28, 500ml × 16, 1000ml × 9	250ml × 50, 500ml × 30, 1000ml × 21
Lighting UV Lamp	— —	— —	— —
Temperature			
Temp. Range [Ambient Temp. 5-35°C]	Incubated: 5°C above ambient to 100°C Refrigerated: —	Incubated: 5°C above ambient to 100°C Refrigerated: —	Incubated: 5°C above ambient to 100°C Refrigerated: —
Temp. Accuracy	0.1°C	0.1°C	0.1°C
Temp. Uniformity	±0.2°C [37°C]	±0.2°C [37°C]	±0.2°C [37°C]
Heating / Cooling Power	1500W —	2000W —	4000W —
Temp. Sensor	PT100	PT100	PT100
Shaking Control			
Shaking Motion	Linear	Linear	Linear
Shaking Throw [Orbital]	—	—	—
Shaking Throw [Linear]	25mm	25mm	25mm
Shaking Frequency [25mm Shaking Throw]	20-200rpm [±1rpm]	20-200rpm [±1rpm]	20-200rpm [±1rpm]
Stirring Power	80W	80W	80W

Parameter

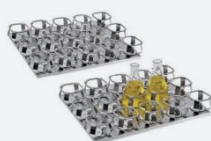
Model	ISBW46	ISBW82	ISBW170
Ergonomics			
Door Opening	Top opening hood	Top opening hood	Top opening hood
Platform Type	Fixed	Fixed	Fixed
Electrical, Packing and Shipping			
Total Power	1900W	2300W	4500W
Power Source	AC200-240V, 1Phase, 50-60HZ; AC108-120V, 1Phase, 60HZ [Option]		
Packing Dimensions [One unit]	[mm]		
	910 × 550 × 650	1100 × 570 × 710	1370 × 1020 × 850
[W×H×D]	["]		
	35.83 × 21.65 × 25.59	43.31 × 22.44 × 27.95	53.94 × 40.16 × 33.46
Packing Weight	[Kg]		
	79	80	160
Standard Function			
Programming Steps Storable Programs	● [8 1]	● [8 1]	● [8 1]
Power Outage Recovery: Restore After Power On	●	●	●
Timer [0-999h/Unlimited]	●	●	●
Temperature and Speed Calibration	●	●	●
Safety Protection			
Visually Alarm Auditory Alarm	●	●	●
Overspeed Alarm	●	●	●
Sensor Fault Detection	●	●	●
Overheat Protection	●	●	●
Electric Leakage Protection	●	●	●
Compressor High Pressure Protection	●	●	●
Options			
LCD Color Touch Screen	○	○	○
Embedded Microprinter	○	○	○
RS485 Communication Interface [Modbus RTU Communication Protocols]	○	○	○
IQ, OQ and PQ Documents	○	○	○
Remote Control Via Computer	○ [upgrade to touch screen]	○ [upgrade to touch screen]	○ [upgrade to touch screen]
Three-level Authority and Operation Record	○ [upgrade to touch screen]	○ [upgrade to touch screen]	○ [upgrade to touch screen]
Historical Records and Real-time Curves [USB Export]	○ [upgrade to touch screen]	○ [upgrade to touch screen]	○ [upgrade to touch screen]
Programming Steps Storable Programs [30 5]	○ [upgrade to touch screen]	○ [upgrade to touch screen]	○ [upgrade to touch screen]

● = Standard ○ = Optional — = N/A

Accessories



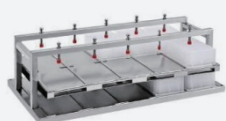
Stainless steel flask clamp



Stainless steel tray



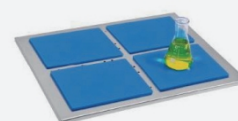
Universal tray with spring



ELISA plate rack



Test tube rack



Sticky board



tray with support bars



Enzyme plate clamp

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