



STACKABLE CO₂ INCUBATED AND REFRIGERATED SHAKERS LIRS-B1 SERIES

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B1 Series

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B10

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B10 is a single stack designed, microcomputer-controlled unit, comprised with 6-sided heating method, UV sterilization and 90°C high temperature moist sterilization system. It offers orbital movement with timer and continuous operation, speed range of 40 to 300 rpm and 4°C to 65°C of temperature range along with 0 to 20% of CO₂ control range and ≤ 3 min of restoration time. With low heat rejection brushless DC motor, triple eccentric shaft balance drive, and CO₂ monitoring and control system, it features IR sensor, microbial filter gas inlet, temperature and humidity control system, and door temperature heating and monitoring system. Fluorine-free structure design with SS304 working chamber, high-quality aluminum made withdrawable shaking platform, and large observation window, is provided with top and bottom door opening and internal power-off protection function. Incorporated with 7-inch touch screen, switchable door, speed control circuit, auto fan circulation, and independent temperature limit alarm system, also supports USB interface and an optional RS485 interface.

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B11

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B11 is a 2-stack designed, microcomputer-controlled unit, comprised with 6-sided heating method, UV sterilization and 90°C high temperature moist sterilization system. It offers orbital movement with timer and continuous operation, speed range of 40 to 300 rpm and 4°C to 65°C of temperature range along with 0 to 20% of CO₂ control range and ≤ 3 min of restoration time. With low heat rejection brushless DC motor, triple eccentric shaft balance drive, and CO₂ monitoring and control system, it features IR sensor, microbial filter gas inlet, temperature and humidity control system, and door temperature heating and monitoring system. Fluorine-free structure design with SS304 working chamber, high-quality aluminum made withdrawable shaking platform, and large observation window, is provided with top and bottom door opening and internal power-off protection function. Incorporated with 7-inch touch screen, switchable door, speed control circuit, auto fan circulation, and independent temperature limit alarm system, also supports USB interface and an optional RS485 interface.

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B12

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B12 is a 3-stack designed, microcomputer-controlled unit, comprised with 6-sided heating method, UV sterilization and 90°C high temperature moist sterilization system. It offers orbital movement with timer and

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B1 Series

continuous operation, speed range of 40 to 300 rpm and 4°C to 65°C of temperature range along with 0 to 20% of CO₂ control range and ≤ 3 min of restoration time. With low heat rejection brushless DC motor, triple eccentric shaft balance drive, and CO₂ monitoring and control system, it features IR sensor, microbial filter gas inlet, temperature and humidity control system, and door temperature heating and monitoring system. Fluorine-free structure design with SS304 working chamber, high-quality aluminum made withdrawable shaking platform, and large observation window, is provided with top and bottom door opening and internal power-off protection function. Incorporated with 7-inch touch screen, switchable door, speed control circuit, auto fan circulation, and independent temperature limit alarm system, also supports USB interface and an optional RS485 interface.

Features

- ❑ Different stack designed microcomputer-controlled unit with 6-sided heating method
- ❑ UV sterilization and 90°C high temperature moist sterilization system
- ❑ Orbital shaking movement with timer and continuous operation
- ❑ Shaking speed range of 40 to 300 rpm and 4°C to 65°C of temperature range
- ❑ 0 to 20% of CO₂ control range and ≤ 3 min of restoration time
- ❑ Low heat rejection brushless DC motor, ensures long continuous operation
- ❑ Triple eccentric shaft balance drive, provide constant shaking
- ❑ CO₂ monitoring and control system, uniform CO₂ distribution
- ❑ IR sensor, enable accurate monitoring of CO₂ at fast speed without any interference
- ❑ Microbial filter gas inlet, effective elimination of microbial contamination
- ❑ Temperature and humidity control system, short time restoration
- ❑ Door temperature heating and monitoring system, prevent condensation on door
- ❑ Fluorine-free structure design with SS304 working chamber and internal power-off protection function
- ❑ High-quality aluminum made withdrawable shaking platform
- ❑ Top and bottom door opening and large observation window
- ❑ 7-inch touch screen, for real-time monitoring of different parameters
- ❑ Switchable door, speed control circuit and auto fan circulation, provide gentle air flow

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B1 Series

- ❑ Independent temperature limit alarm system, enable safe operation
- ❑ Supports USB interface and an optional RS485 interface

Application

Stackable CO₂ Incubated and Refrigerated Shaker is ideally used for static and dynamic culture of microbial cells , bacteria etc. across cell culture, fermentation, hybridization, biochemistry, cytology, microbiology, biotechnology etc.

Specifications

Model	LIRS-B10	LIRS-B11	LIRS-B12
Design	Single stack	2-stack	3-stack
Shaking mode	Orbital		
Shaking orbit (Amplitude)	26 mm		
Shaking speed range	40 to 300 rpm		
Temperature range	4 to 65°C		
Temperature uniformity	±0.4 (test point @ 37°C; Ambient @ 25°C)		
Display resolution	0.1°C		
Time range	0 to 5999 min		
CO ₂ control range	0 to 20%		
CO ₂ restoration time	≤ 3 min (30 s door opening, recovery to 5%)		
CO ₂ accuracy	± 0.1%		
CO ₂ stability	± 0.1% @ 5% CO ₂		
Humidity control range	50 to 95% RH		
Humidity accuracy	85 to 95% @ 37°C		
Humidity deviation	± 3%		
Heating method	6-sided heating		
CO ₂ Sensor	IR sensor		
Sterilization	UV sterilization + 90°C high temperature moist sterilization system		
Operation mode	Timer and continuous		

Stackable CO₂ Incubated and Refrigerated Shakers LIRS-B1 Series

Platform dimension (LxB)	500×460 mm 1 pc	500×460 mm 2 pcs	500×460 mm 3 pcs
Display	7-inch color touch screen		
Controller	Microcomputer		
Interface	USB		
Maximum shaking weight	10 kg		
Motor	Low heat rejection brushless DC motor		
Balance drive	Triple eccentric shaft balance drive		
Working chamber material	Grade 304 Stainless steel		
Platform material	High-quality Aluminum		
Power supply	220 V 50 Hz		
Power	1200 W		
Dimension (WxD×H)	1000×920×670 mm	1000×920×1270 mm	1000×920×1870 mm

Monolayer Platform Configuration for Flask Clamp

Items	Quantity
250 ml flask	27 pcs
500 ml flask	16 pcs
1000 ml flask	9 pcs
2000 ml flask	5 pcs
Rubber mat (140×140 mm)	9 pcs
Universal platform (350×350 mm)	1 pc