



# SHAKING

I N C U B A T O R



COOLED

## Benchtop Shaking Incubator Cooled LBSIOC-100 Series

Labocon Benchtop Shaking Incubator Cooled LBSIOC-100 Series is a compact biological shaker that perfectly fits on your bench. A large clear lid enables easy viewing of your culture media. The unique balance weighting system facilitates uniform motion and dependable operation. Microprocessor controls with digital display enable easy operation and accurate regulation of temperature, speed and running time. A large assortment of platforms, clamps, test tube holders and other accessories allows configuration to meet your exact needs.

### Features

- Stainless steel inner chamber and platform
- Clear large lid provides excellent visibility minimizing the need to open the lid
- Adjustable counterbalance system provides vibration-free operation
- Smooth start and stop system prevents liquid spillage
- Microprocessor controller with timing function
- Large LCD display
- Refrigerant: CFC R134a
- High quality compressor and fan motor
- Interchangeable platforms for shaking-incubating different vessels
- Auto-controller of fan speed prevents damage to samples
- Digital control of time, temperature and shaking speed for accuracy and repeatability
- Open lid cut off switch immediately stops shaking when lid is open
- Optional
  - \* Temperature limit alarm
  - \* Programmable Temperature Controller
  - \* Filter
  - \* RS485 Interface
  - \* Printer

### Application

Labocon Shaking Incubator is suitable for cell culturing, cell aeration, solubility studies, sample preparation, water analysis, BOD measurement, plating and breeding experiments in research institutions, universities and colleges, etc.



## Specification

Model	LBSIOC-101
Capacity	-
Temp. Range	-4 to 50°C (Ambient Temperature-20°C)
Ambient Temp.	5-40°C
Temp. Accuracy	±0.1°C
Temp. Uniformity	±1°C
Temp. Fluctuation	±1°C
Temp. Resolution	0.1°C
Shaking Motion	Orbital
Shaking Speed Range	20-300 rpm
Shaking Speed Accuracy	±1 rpm
Shaking Speed Increment	1 rpm
Shaking Orbit	20 mm
Timer Range	0.1-999.9 h
Platform Dimension	450x450 mm
Max. Vessel Height	>30cm
Inner Dimension (WxDxH)	-
Overall Dimension (WxDxH)	690x740x445 mm
Power	1100W
Power Supply	220 V, 60 Hz
Weight	110 kg
Catalog No.	9172105125

## Platform Accessories:

For Model	Clamp Model	Description (Volume x No. of Flask)
LBSIOC-101	LP-10	50ml x 42
	LP-11	100ml x 28
	LP-12	250ml x 12
	LP-13	500ml x 11
	LP-14	1000ml x 8
	LP-15	2000ml x 4

## Cooled Shaking Incubator LCSIO-200 Series

Labocon Cooled Standing Shaking Incubator LCSIO-200 Series is best suited for low temperature applications. It combines uniform, reliable performance with low energy consumption. It has a unique balance weighting system that accommodates varying capacities of flasks, tubes and other vessels which in turn allows smoother operation. Highly efficient insulation guarantees homogenous temperature dispersion as well as reproducible cultivation results.





## Features

- Stainless steel SUS304 interior and powder coated exterior
  - Built-in cooling system provides optimum environment for cultivation of microbes, cells and special tissues in low temperatures
  - Forced convection system ensures temperature uniformity
  - Transparent glass observation window
  - Refrigerant: CFC R134a
  - Three-point bearing transmission is suitable for heavy loads and continuous function
  - Micro-processing P.I.D environmental scanning controller with automatic audio and visual alarm
  - Touch panel with LED display
  - Installed with Fluorescent lamp 20W for clear observation
  - Brushless DC Motors: Low maintenance, no brush sparking, high operating speed, high efficiency, constant torque, constant speed of rotation
  - Safety switch immediately stops shaking when lid is open
  - Automatic delay in start-up in case of power cut and a defrost timer
  - Over heat and over low protector
- Optional: Fixed shelf (without shaking) (for LCSIO-201, 203 & 204) only

## Application

Labocon Cooled Shaking Incubator is suitable for cell culturing, cell aeration, solubility studies, sample preparation, water analysis, BOD measurement, plating and breeding experiments in research institutions, universities and colleges, etc.

## Specification

Model	LCSIO-201	LCSIO-202	LCSIO-203
Capacity	150 L	205 L	381 L
Temp. Range	0-70°C		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.1°C		
Temp. Fluctuation	±1°C		
Temp. Resolution	0.1°C		
Shaking Motion	Orbital		
Shaking Speed Range	20-200 rpm (Optional: upto 500 rpm)	20-200 rpm (Optional: upto 500 rpm)	
Shaking Speed Accuracy	±1 rpm		
Shaking Speed Increment	1 rpm		
Shaking Orbit	25 mm	50 mm	
Timer Range	999h / 999m/ 999s		
Shelves	1	-	-
Load per Shelf			
Platform Dimension	480x380mm	600x480 mm	960x600 mm
Max. Vessel Height	-		
Inner Dimension	600×500×500 mm	680×560×540 mm	1040x680x 540 mm
Overall Dimension	680x690x860 mm	1010x640x870 mm	1370x760x 870 mm
Power	-	-	-
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	98 kg	200 kg	300 kg
Catalog No.	9172155584	9172156584	9172157584

## Specification

Model	LCSIO-204	LCSIO-205	LCSIO-206
Capacity	560 L	834 L	175X2 L
Temp. Range	0-70°C		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.1°C		
Temp. Fluctuation	±1°C		
Temp. Resolution	0.1°C		
Shaking Motion	Orbital		
Shaking Speed Range	20-200 rpm (Optional: upto 500 rpm)		20-200 rpm (Optional: upto 500 rpm)
Shaking Speed Accuracy	±1 rpm		
Shaking Speed Increment	1 rpm		
Shaking Orbit	50 mm		25 mm
Timer Range	999h / 999m/ 999s		
Shelves	2		1
Load per Shelf	-	-	-
Platform Dimension	600x480mm	960x600mm	640x440 mm
Max. Vessel Height	-		
Inner Dimension	830x580x1000mm	1100x690x1100 mm	700x500x500mm
Overall Dimension	910x785x1920 mm	1160x880x1730mm	780x690x1720 mm
Power	-	-	-
Power Supply	220 V, 60 Hz		
Weight (Net/Gross)	280 kg	300 kg	170 kg
Catalog No.	9172158584	9172159584	9172160584

## Platform Accessories

For Model	Model	Description (Volume x No. of Flasks)
LCSIO-201	LP-193	125mlx30
	LP-194	250mlx20
	LP-195	500mlx12
	LP-196	1000mlx6
	LP-197	2000mlx5
	LP-198	3000mlx4
	LP-199	4000mlx2
	LP-200	5000mlx1
LCSIO-202, LCSIO-204	LP-201	125mlx48
	LP-202	250mlx30
	LP-203	500mlx20
	LP-204	1000mlx12
	LP-205	2000mlx9
	LP-206	3000mlx6
	LP-207	4000mlx6
	LP-208	5000mlx4

## Platform Accessories

For Model	Model	Description (Volume x No. of Flasks)
LCSIO-203	LP-209	125mlx96
	LP-210	250mlx60
	LP-211	500mlx40
	LP-212	1000mlx24
	LP-213	2000mlx15
	LP-214	3000mlx15
	LP-215	4000mlx12
	LP-216	5000mlx8
LCSIO-205	LP-217	125mlx78
	LP-218	250mlx50
	LP-219	500mlx36
	LP-220	1000mlx18
	LP-221	2000mlx10
	LP-222	3000mlx10
	LP-223	4000mlx8
	LP-224	5000mlx8
LCSIO-206	LP-225	125mlx40
	LP-226	500mlx20
	LP-227	500mlx20
	LP-228	1000mlx12
	LP-229	2000mlx6
	LP-230	3000mlx6
	LP-231	4000mlx2
	LP-232	5000mlx2

## Cooled Shaking Incubator LCSIO-300 Series

Labocon Cooled Standing Shaking Incubator LCSIO-300 Series is best suited for low temperature applications. It combines uniform, reliable performance with low energy consumption. It has a unique balance weighting system that accommodates varying capacities of flasks, tubes and other vessels which in turn allows smoother operation. Highly efficient insulation guarantees homogenous temperature dispersion as well as reproducible cultivation results.



## Features

- Stainless steel SUS304 interior and powder coated exterior
- Built-in cooling system provides optimum environment for cultivation of microbes, cells and special tissues in low temperatures
- Large transparent window for observation
- Stable air circulation and maintenance of internal temperature distribution
- Tempered glass observation window
- Triple gravity balance rotation
- Refrigerant: CFC R134a
- Compressor with power outages for delayed start and timed defrost design
- Three-point bearing transmission is suitable for heavy loads and continuous function
- Micro-processing P.I.D environmental scanning controller with automatic audio and visual alarm
- Touch panel with LED display
- Installed with Fluorescent lamp 20W for clear observation
- Brushless DC Motors: Low maintenance, no brush sparking, high operating speed, high efficiency, constant torque, constant speed of rotation
- Safety switch immediately stops shaking when lid is open
- Automatic delay in start-up in case of power cut and a defrost timer
- Over heat and over low protector
- Based on requirement we also offer customised Clamps



## Application

Labocon Shaking Incubator is suitable for cell culturing, cell aeration, solubility studies, sample preparation, water analysis, BOD measurement, plating and breeding experiments in research institutions, universities and colleges, etc.



## Specification

Model	LCSIO-301	LCSIO-302	LCSIO-303	LCSIO-304
Capacity	150 L	560 L	819 L	175X2 L
Temp. Range	0-70°C	0-70°C		
Temp. Accuracy	±0.1°C			
Temp. Uniformity	±1°C			
Temp. Fluctuation	0.1°C			
Temp. Resolution	±0.1°C			
Shaking Motion	Orbital			
Shaking Speed Range	30-200 rpm (optional 20-500 rpm)	20-150 rpm (optional 20-500 rpm)		
Shaking Speed Accuracy	±1 rpm			
Shaking Speed Increment	1 rpm			
Shaking Orbit	25 mm	50 mm		25 mm
Timer Range	999 h/999 m/ 999 s			
Shelves	2			1
Load per Shelf	-	-	-	-
Platform Dimension	480x380 mm	600×480 mm	960x600 mm	640x440 mm
Max. Vessel Height	-	-	-	-
Inner Dimension	600x500x500 mm	830x580x1000 mm	1100x690x1100 mm	700x500x500 mm
Overall Dimension	-	-	-	-
Power	-	-	-	-
Power Supply	-	-	-	-
Weight (Net/Gross)	100 kg	280 kg	300 kg	180 kg
Catalog No.	9172161584	9172162584	9172163584	9172164584

## Platform Accessories

For Model	Model	Description (Volume x No. of Flasks)
LCSIO-301	LP-233	125mlx60
	LP-234	250mlx40
	LP-235	500mlx24
LCSIO-302	LP-236	125mlx96
	LP-237	250mlx60
	LP-238	500mlx40
	LP-239	1000mlx24
	LP-240	2000mlx18
	LP-241	3000mlx12
	LP-242	4000mlx12
	LP-243	5000mlx8
	LP-244	125mlx156
LCSIO-303	LP-245	250mlx100
	LP-246	500mlx72
	LP-247	1000mlx36
	LP-248	2000mlx20
	LP-249	3000mlx20
	LP-250	4000mlx16
	LP-251	5000mlx16
	LP-252	125mlx(40x4sets)
LCSIO-304	LP-253	250mlx(28x4sets)
	LP-254	500mlx(20x4sets)

## Cooled Shaking Incubator LCSIO-600 Series

Labocon Cooled Standing Shaking Incubator LCSIO-600 Series is best suited for low temperature applications. It combines uniform, reliable performance with low energy consumption. It has a unique balance weighting system that accommodates varying capacities of flasks, tubes and other vessels which in turn allows smoother operation. Highly efficient insulation guarantees homogenous temperature dispersion as well as reproducible cultivation results.

### Features

- Built-in cooling system provides optimum environment for cultivation of microbes, cells and special tissues in low temperatures
- Door with observation window
- Dust filter located at the sides helps to maintain a sterile environment
- Microprocessor digital PID controller
- Operating panel with touch screen
- Brushless DC Motors: Low maintenance, no brush sparking, high operating speed, high efficiency, constant torque, constant speed of rotation
- Platform with easy to access sample feature
- Easy to place on shaker, type of platform accessory with no bolts
- Automatic halting on opening of the chamber door
- Optional
  - Fluorescent lamp or UV lamp for illumination
  - Automatic timer for illumination

### Application

Labocon Shaking Incubator is suitable for cell culturing, cell aeration, solubility studies, sample preparation, water analysis, BOD measurement, plating and breeding experiments in research institutions, universities and colleges, etc.





## Specification

Model	LCSIO-601	LCSIO-602
Capacity	100 L	100 L
Temp. Range	0-60°C	
Temp. Accuracy	±0.1°C(37°C)	
Temp. Uniformity	±1(25°C)	
Temp. Fluctuation	±0.2 (37°C)	
Temp. Resolution	0.1°C	
Humidity Range	None	
Humidity Fluctuation	None	
Shaking Motion	Orbital	
Shaking Speed Range	30-300 rpm	
Shaking Speed Accuracy	±1 rpm	
Shaking Speed Increment	1 rpm	
Shaking Orbit	30 mm	
Timer Range	1 min-47 h 59 min continuous	
Shelves	-	-
Load per Shelf	-	-
Platform Dimension	450x450mm	720x610mm
Max. Vessel Height		
Inner Dimension		
Overall Dimension	600x660x995mm	820x765x1018mm
Power	-	-
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	106 kg	150 kg
Catalog No.	9172175362	9172176362

## Cooled Shaking Incubator LCSIR-200 Series

Labocon Cooled Standing Shaking Incubator LCSIR-200 Series is best suited for low temperature applications. It combines uniform, reliable performance with low energy consumption. It has a unique balance weighting system that accommodates varying capacities of flasks, tubes and other vessels which in turn allows smoother operation. Highly efficient insulation guarantees homogenous temperature dispersion as well as reproducible cultivation results.

### Features

- Base structure adopts stable vermicular casting technique
- Built-in cooling system provides optimum environment for cultivation of microbes, cells and special tissues in low temperatures
- Sound air duct structure ensures homogeneity and precision of temperature
- Operation panel designed for the convenience of users to configure operating and test parameters
- Advanced numerically controlled processing technique ensures reliable and stable mechanical structure
- Scientific off-centre weight balancing technique ensures long service time for three-axis off-centre actuating machine
- Three-axis off-centre actuating structure ensures stable start and stop of the samples
- Adopts abrasion resistance axletrees
- Avoids dithering while operating and prevents damage of sensitive cells
- Brushless actuating system with unidirectional flow
- Less error during mechanical processing ensures long service time, stable and non-vibrating machine
- Cooling system uses environmental R134a cryogen
- Membrane touch keys with large scale LCD display
- Advanced fuzzy logic PID controlling system provides precise rotation speed, temperature control and operating time
- Mechanical over temperature protection device
- Top and bottom temperature limit alarm
- Standard mode configures fixed temperature, rotation speed and time
- Program mode configures temperature, rotation speed and time as required by the user
- RS232 interface

### Application

Labocon Shaking Incubator is suitable for cell culturing, cell aeration, solubility studies, sample preparation, water analysis, BOD measurement, plating and breeding experiments in research institutions, universities and colleges, etc.

## Specification

Model	LCSIR-201	LCSIR-202
Capacity	100 L	
Temp. Range	4-60°C	
Temp. Accuracy	±0.1°C	
Temp. Uniformity	±1°C	
Temp. Fluctuation	±1°C	
Temp. Resolution	0.1°C	
Shaking Motion	Reciprocal	
Shaking Speed Range	25-300rpm	25-400rpm
Shaking Speed Accuracy	±1 rpm	
Shaking Speed Increment	1 rpm	
Shaking Orbit	-	
Timer Range	0-99 h	
Shelves	-	
Load per Shelf	-	
Platform Dimension	460x460 mm	
Max. Vessel Height	-	
Inner Dimension	520x550x450 mm	
Overall Dimension	620x840x630 mm	
Power	800 W	
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	100/110 kg	
Catalog No.	9172177472	9172178472

## Platform Accessories

For Model	Clamp Model	Description (Volume x No. of Flasks)
LCSIR-201, LCSIR-202	LP-287	100ml x 5
	LP-288	500ml x 3
	LP-289	1000ml x 5

## Optional Accessories & Features

1. RS-232 Port and USB Port
2. PUF Insulation: 155 mm thickness\* (cooled incubator only)
3. Universal Sticky Mate
4. Program temperature controller: 2 segments, each 8 points
5. Shaking Programming motor Controller: 9 segments/rotates to left or right to set auto-start on a schedule
6. Universal Spring rack (430x290mm, 580x460mm, 360x260mm, 410x410mm, 440x340mm)
7. Timer Switch & Indicator light
8. Viewing window with sliding door
9. Electrical Outlet inside the chamber
10. Change RPM to 500 and 400
11. Light set (2pc) with Timer and Switch
12. Buzzer Alarm after timer and overheat
13. Indicator light of low water level
14. Oven change max. temperature to 250degree Celsius.
15. UV light with switch and anti-UV film
16. Photosynthetic light with switch
17. Data transfer-D sub
18. Speed Controller
19. Remote Alarm System
20. Test Tube Racks/Culture tube Holder - variable size
21. 96 well Deep Well/ELISA Microplate Holder



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