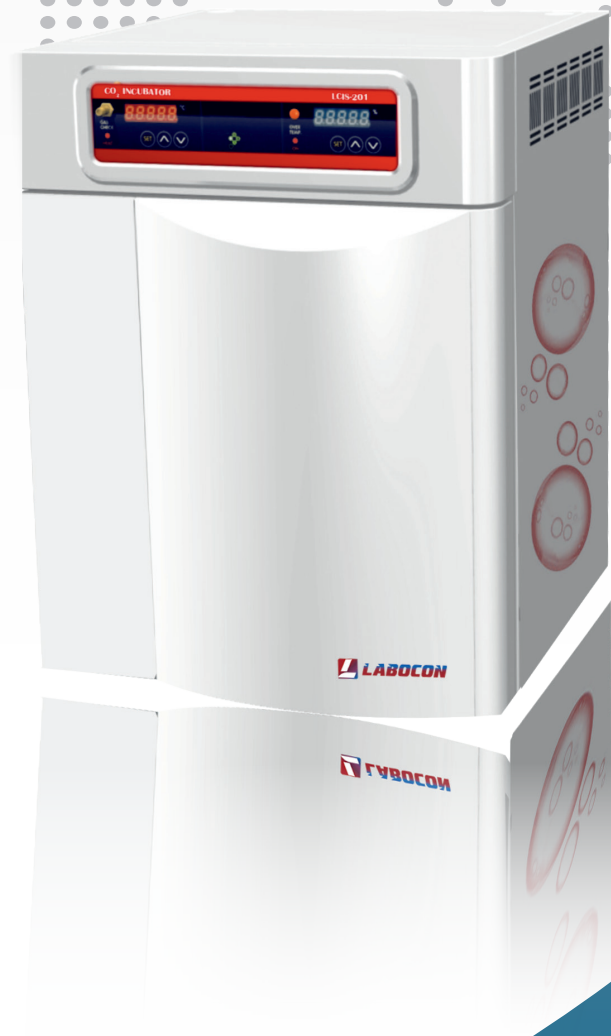




CO₂

INCUBATOR





CO₂ Incubator Water Jacketed LWCI-100 Series

Labocon CO₂ Incubator Water Jacketed LWCI-100 Series provides a precisely controlled and accurate stable in-vitro growth environment for cell and tissue culture applications. It is equipped with an advanced microprocessor based temperature control system and an efficient air-adjusting type CO₂ controller specially designed for quick and uniform heating.

✔ FEATURES

- Mirror finished stainless steel interior and plastic coated cold-rolling steel exterior
- Double seal door structure with magnetic seal at the outer door
- Silicone seal strips between working chamber and inner glass door ensures air-tight sealing
- Door heating control system provides frost-free inner glass door
- Long lasting, low noise centrifugal fan to ensure temperature uniformity
- Dual LED screen display with touch screen keypad
- Microcomputer auto-restrain control system avoids temperature fluctuation
- Assistant control system plays a key role during invalidation of main control system
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure

✔ APPLICATION

Labocon CO₂ Incubator Water Jacketed is applicable in research and production of microorganisms, for cells, tissue and bacteria cultivation. It is ideal to be used in the fields of immunology, oncology, genetics and biological engineering.

✔ SPECIFICATION

Model	LWCI-101	LWCI-102
Capacity	80 L	160 L
Temp. Range	RT +5-60°C	
Temp. Accuracy	0.1°C	
Temp. Uniformity	<±0.8°C	
Temp. Fluctuation	<±0.5°C	
Temp. Resolution	0.1°C	
CO ₂ Range	0-19.9%	
CO ₂ Sensor	None	
CO ₂ Control Method	Air-adjusting Type	
CO ₂ Recovery Time	≤concentration x 1.2 min	
Display	Dual LED display with touch screen keypad	
Jacket Type	Water Jacketed	
Humidifying Method	Natural Evaporation	
Filter	None	

Model	LWCI-101	LWCI-102
Shelves	2	3
Chamber Dimension	400x400x500 mm	550x500x650 mm
Overall Dimension	550x510x830 mm	770x605x980 mm
Power	550 W	750 W
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	56 / 66 kg	84 / 97 kg
Catalog No.	9341120127	9341121127

Water Jacketed Incubator LWCI-200 Series

Labocon CO₂ Incubator Water Jacketed LWCI-200 Series is an ideal unit for cell culture applications. It is equipped with an advanced microcomputer controlled intelligent controller along with a sensitive IR CO₂ concentration sensor specially designed to provide uniform temperatures and highly stable CO₂ environment.

FEATURES

- Mirror finished stainless steel interior and plastic coated cold-rolling steel exterior
- Double seal door structure with magnetic seal at the outer door
- Silicone seal strips between working chamber and inner glass door ensures air-tight sealing
- Door heating control system provides frost-free inner glass door
- Long lasting, low noise centrifugal fan to ensure temperature uniformity
- Microprocessor intelligent controller
- Temperature, humidity and CO₂ concentration displayed on LCD screen
- Audio visual alarm over temperature control
- IR CO₂ concentration sensor with precise sensitivity
- Humidity sensor displays real-time data
- UV light for effective killing of bacteria, mold and mycoplasma
- HEPA offers 99.998% filtration efficiency for 0.3µm particulate
- Microcomputer auto-restrain control system avoids temperature fluctuation
- Assistant control system plays a key role during invalidation of main control system
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure
- RS485 interface



APPLICATION

Labocon CO₂ Incubator Water Jacketed is applicable in research and production of microorganisms, for cells, tissue and bacteria cultivation, immunology, oncology, genetics and biological engineering.

✓ SPECIFICATION

Model	LWCI-201	LWCI-202
Capacity	80 L	160 L
Temp. Range	RT +5-60°C	
Temp. Accuracy	0.1°C	
Temp. Uniformity	37°C ≤ ±0.2°C	
Temp. Fluctuation	37°C ≤ ±0.1°C	
Temp. Resolution	0.1°C	
CO ₂ Range	0-20%	
CO ₂ Sensor	IR CO ₂ Sensor	
CO ₂ Control Method	IR	
CO ₂ Recovery Time	≤ concentration x 1.2 min	
Display	LCD	
Jacket Type	Water Jacketed	
Humidifying Method	Natural Evaporation	
Filter	HEPA filter	
Shelves	2	3
Chamber Dimension	400x400x500 mm	550x500x650 mm
Overall Dimension	550x530x835 mm	700x630x985 mm
Power	475 W	775 W
Power Supply	220 V, 60 Hz	
Weight (Net/Gross)	63 / 72 kg	85 / 98 kg
Catalog No.	9341122127	9341123127

Air Jacketed CO₂ Incubator LACI-100 Series

Labocon CO₂ Incubator Air Jacketed LACI-100 Series ensures optimal and stable environment for cell and tissue culture applications. It is equipped with an advanced microprocessor based temperature control system and an efficient air-adjusting type CO₂ controller specially designed to regulate temperature accuracy.

● FEATURES

- Mirror finished stainless steel interior and plastic coated cold-rolling steel exterior
- Double seal door structure with magnetic seal at the outer door
- Silicone seal strips between working chamber and inner glass door ensures air-tight sealing
- Door heating control system provides frost-free inner glass door
- Long lasting, low noise centrifugal fan to ensure temperature uniformity
- Dual LED screen display with touch screen keypad
- Microcomputer auto-restrain control system avoids temperature fluctuation
- Assistant control system plays a key role during invalidation of main control system
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure

✔ APPLICATION

Labocon CO₂ Incubator Air Jacketed is suitable for use in research and production of microorganisms; for cells, tissue and bacteria cultivation; in immunology, oncology, genetics and biological engineering.

✔ SPECIFICATION

Model	LACI-101	LACI-102
Capacity	80 L	160 L
Temp. Range	RT +5-60°C	
Temp. Accuracy	0.1°C	
Temp. Uniformity	<±0.8°C	
Temp. Fluctuation	<±0.5°C	
Temp. Resolution	0.1°C	
CO ₂ Range	0-19.9%	
CO ₂ Accuracy	0.1%	
CO ₂ Sensor	None	
CO ₂ Control Method	Air-adjusting Type	
CO ₂ Recovery Time	≤concentration x 1.2 min	
Display	Dual LED display with touch screen keypad	
Jacket Type	Air Jacketed	
Humidifying Method	Natural Evaporation	
Filter	None	



Model	LACI-101	LACI-102
Shelves	2	3
Chamber Dimension	500x400x400 mm	550x500x650 mm
Overall Dimension	760x530x550 mm	770x630x810 mm
Power	350 W	550 W
Power Supply	220V, 60Hz	
Weight (Net/Gross)	46 / 58 kg	70 / 85
Catalog No.	9341112127	9341113127

Air Jacketed CO₂ Incubator LACI-200 Series

Labocon CO₂ Incubator Air Jacketed LACI-200 Series ensures optimal and stable environment for cell and tissue culture applications. It is equipped with an advanced microcomputer controlled intelligent controller along with a precise and sensitive IR CO₂ concentration sensor specially designed for quick and uniform heating.

FEATURES

- Mirror finished stainless steel interior and plastic coated cold-rolling steel exterior
- Double seal door structure with magnetic seal at the outer door
- Silicone seal strips between working chamber and inner glass door ensures air-tight sealing
- Door heating control system provides frost-free inner glass door
- Long lasting, low noise centrifugal fan to ensure temperature uniformity
- Microprocessor intelligent controller
- Temperature, humidity and CO₂ concentration displayed on LCD screen
- Audio visual alarm over temperature control
- IR CO₂ concentration sensor with precise sensitivity
- Humidity sensor displays real-time data
- UV light for effective killing of bacteria, mold and mycoplasma
- HEPA offers 99.998% filtration efficiency for 0.3μm particulate
- Microcomputer auto-restrain control system avoids temperature fluctuation
- Assistant control system plays a key role during invalidation of main control system
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure
- RS485 interface

APPLICATION

Labocon CO₂ Incubator Air Jacketed is suitable for use in research and production of microorganisms; for Cells, tissue and bacteria cultivation; in immunology, oncology, genetics and biological engineering.

✓ SPECIFICATION

Model	LACI-201	LACI-202	LACI-203
Capacity	90 L	160 L	250 L
Temp. Range	RT +5-60°C		
Temp. Accuracy	0.1°C		
Temp. Uniformity	<±0.5°C		
Temp. Fluctuation	<±0.2°C		
Temp. Resolution	0.1°C		
CO ₂ Range	0-20%		
CO ₂ Accuracy	0.1%		
CO ₂ Sensor	IR CO ₂ Sensor		
CO ₂ Control Method	IR		
CO ₂ Recovery Time	≤concentration x 1.2 min		
Display	LCD		
Jacket Type	Air Jacketed		
Humidifying Method	Natural Evaporation		
Filter	HEPA filter		
Shelves	2	3	
Chamber Dimension	420x400x550 mm	540x490x680 mm	600x600x770 mm
Overall Dimension	580x560x900 mm	700x650x1030 mm	840x775x1175 mm
Power	800 W		
Power Supply	220V, 60Hz		
Catalog No.	9341114127	9341115127	9341116127

Air Jacketed CO₂ Incubator LACI-300 Series

Labocon CO₂ Incubator Air Jacketed LACI-300 Series ensures optimal and stable environment for cell and tissue culture applications. It is equipped with an advanced microcomputer controlled intelligent controller along with a Thermal Conductivity Detector TCD CO₂ control method specially designed for quick and uniform heating.

FEATURES

- Mirror finished stainless steel interior and plastic coated cold-rolling steel exterior
- Double seal door structure with magnetic seal at the outer door
- Silicone seal strips between working chamber and inner glass door ensures air-tight sealing
- Door heating control system provides frost-free inner glass door
- Long lasting, low noise centrifugal fan to ensure temperature uniformity
- Microprocessor intelligent controller
- Temperature, humidity and CO₂ concentration displayed on LCD screen
- Audio visual alarm over temperature control
- TCD CO₂ concentration sensor with precise sensitivity
- Humidity sensor displays real-time data
- UV light for effective killing of bacteria, mold and mycoplasma
- High temperature moist heat sterilization at 90°C
- HEPA offers 99.998% filtration efficiency for 0.3μm particulate
- Microcomputer auto-restrain control system avoids temperature fluctuation
- Assistant control system plays a key role during invalidation of main control system
- Audio visual alarm for water level control and over temperature control
- Data can be stored and recovered on power or system failure
- RS485 interface



APPLICATION

Labocon CO₂ Incubator Air Jacketed is suitable for use in research and production of microorganisms; for cells, tissue and bacteria cultivation; in immunology, oncology, genetics and biological engineering.

✓ SPECIFICATION

Model	LACI-301	LACI-302	LACI-303
Capacity	80 L	160 L	250 L
Temp. Range	RT +5-60°C		
Temp. Accuracy	0.1°C		
Temp. Uniformity	<±0.5°C		
Temp. Fluctuation	<±0.2°C		
Temp. Resolution	0.1°C		
CO ₂ Range	0-19.9%		
CO ₂ Accuracy	0.1%		
CO ₂ Sensor	TCD CO ₂ Sensor		
CO ₂ Control Method	TCD		
CO ₂ Recovery Time	≤concentration x 1.2 min		
Display	LCD		
Jacket Type	Air Jacketed		
Humidifying Method	Natural Evaporation		
Filter	HEPA filter		
Shelves	2	3	
Chamber Dimension	420x400x550 mm	540x490x680 mm	600x600x770 mm
Overall Dimension	580x560x900 mm	700x650x1030 mm	840x775x1175 mm
Power	800 W		
Power Supply	220V, 60Hz		
Catalog No.	9341117127	9341118127	9341119127



CO₂ INCUBATOR SHAKER LCIS-100 SERIES

Labocon CO₂ Incubator Shaker LCIS-100 Series ensures a stable environment for cell and tissue culture applications. It has an advantage of conducting both shaking culture and general culture synchronically as incubation in different conditions can be carried out in the same incubator.

✓ FEATURES

- Chamber bottom is mounted with roller apparatus or shaker
- Easy to clean rounded corners
- Microprocessor PID controller
- Individual 2 channel touch button operating panel
- Controlled operation at external control panel
- Simultaneous conduction of adherent and suspension cell culture
- Six-sides heating chamber keeps temperature uniformity in the chamber and reduces potential condensation as well as ensure the precise control of temperature
- Warm air ensures faster temperature recovery and minimal heat loss
- Maintenance-free insulated dry wall
- Circulation system delivers air and moisture convection
- Fast and precise detection of CO₂ gas through dual beam IR CO₂ sensor
- Natural humidification using water tray
- Rust resistant and contamination-free perforated shelves
- Optional:
 - 100ml Flask Holder x 16 with Platform
 - 250ml Flask Holder x 9 with Platform
 - 500ml Flask Holder x 5 with Platform
 - 1000ml Flask Holder x 4 with Platform
 - Spring Rack with Platform



✓ APPLICATION

Labocon CO₂ Incubator Shaker is suitable for use in research and production of microorganisms, cells, tissue and bacteria cultivation, immunology, oncology, genetics and biological engineering.

✓ SPECIFICATION

Model		LCIS-101	LCIS-102
Capacity		179 L	179 L
Temp. Range		Ambient+5°C to 60°C	
Temp. Accuracy		±0.1°C at 37°C	
Temp. Increment		0.1°C	
Co ₂ Range		0% to 20%	
Co ₂ Accuracy		±0.1 % at 5% at 37°C	
CO ₂ Sensor		IR CO ₂ sensor	
Co ₂ Control		Microprocessor Digital	
Speed		Roller apparatus	Shaker
Speed Range		0.1 rpm to 5 rpm	30 rpm to 300 rpm
Speed Accuracy		±0.1%	0 rpm to 100 rpm
Speed Increment		0.1 rpm	1 rpm
Timer Range		∞ or up to 999hr	∞ or up to 48 hours
Display		5 digit LED x 3	5 digit LED x 3
Jacket Type		Dry Wall Type (6 side IR heat)	
Chamber Material		Stainless Steel SUS 304	
Door	Inner	Tempered Safety Glass Door	
	Outer	Silicon Packing Magnet Door	
Chamber Dimension		473x528x710 mm	473x528x710 mm
Overall Dimension		560x 665x 945 mm	560x 665x 945 mm
Power		600 W	550 W
Power Supply		220 V, 60 Hz	
Weight (Net/Gross)		89 kg	70 kg
Catalog No.		9341124362	9341125362



CO₂ INCUBATOR SHAKER LCIS-200 SERIES

Labocon CO₂ Incubator Shaker LCIS-200 Series features microprocessor controller and is equipped with durable and removable shakers providing an optimal solution for cell culture suspension. An outstanding air circulation system ensures excellent temperature uniformity and humidity with faster temperature recovery and minimal heat loss.

✓ FEATURES

For Model LCIS-201

- Equipped with built-in-two detachable mini shakers on 2 shelves
- Simultaneous conduction of adherent and suspension cell culture
- Maintenance-free insulated dry wall
- Microprocessor PID controller
- Dual Beam Infra-Red Sensor is used to maintain control of CO₂ density
- Temperature, humidity and RPM can be viewed on the LED Display
- All six sides are directly heated and combined with P. I. D control to ensure that temperature is reached quickly and uniformity maintained. Further the system combines forced air and natural convection to maintain the best temperature uniformity
- Circulation system delivers air and moisture convection
- Built-in-shaker is run by low noise, low particle or heat occurrence, vibration-free plate BLDC Magnetic Induction Drive
- Natural humidification using water tray
- Optional:
 - 100ml Flask
 - 250ml Flask
 - 500ml Flask
 - 1000ml Flask
 - Tube Rack
 - 96 well Microplate Rack
 - Sticky mat and non-slip rubber pad

For Model LCIS-202 and LDCI-203

- Internal chamber is subdivided into 3 compartments each holding a removable orbital shaker which can hold Erlenmeyer, cylindrical flasks or deepwell blocks
- Simultaneous conduction of adherent and suspension cell culture
- Maintenance-free insulated dry wall
- HEPA filter, located post circulation fan, traps microbes and helps to maintain a sterile environment
- Combination of forced and natural air circulation system
- Shaker controlled by an external control panel
- Dual Beam Infra-Red Sensor is used to maintain control of CO₂ density
- Temperature, humidity and RPM can be viewed on the LED Display
- UV lamp sited next to the circulation fan works to sterilize the air in the incubator even during cell culturing
- All six sides are directly heated and combined with P. I. D control to ensure that temperature is reached quickly and uniformity maintained. Further the system combines forced air and natural convection to maintain the best temperature uniformity

- Circulation system delivers air and moisture convection
- Auto restart function if the inner glass door is open or in case of power failure
- Platform of each shakers can be pulled out for loading flasks on each shakers efficiently
- Built-in-shaker is run by low noise, low particle or heat occurrence, vibration-free plate BLDC Magnetic Induction Drive
- Natural humidification using water tray
- Optional:
 - 125ml Flask x 158 platform
 - 250ml Flask x 90 platform
 - 500ml Flask x 60 platform
 - 1000ml Flask x 48 platform
 - 2000ml Flask x 9 platform

✓ APPLICATION

Labocon CO₂ Incubator Shaker is used for cell culture applications in cell biology, microbiology, proteomics, genomics, molecular biology, drug development etc.

✓ SPECIFICATION

Model		LCIS-201	LCIS-202	LCIS-203
INCUBATOR				
Capacity		179 L	650 L	850 L
Temp. Range		Ambient +5°C to 60°C		
Temp. Accuracy		± 0.25°C at 37°C	± 0.3°C at 37°C	
Humidity		≥70% at 37°C		
CO ₂ Range		0% to 20%		
CO ₂ Accuracy		±0.1% at 5% at 37°C	±0.3% at 5% at 37°C	
CO ₂ Sensor		IR CO ₂ sensor		
CO ₂ Inlet Pressure		0.7 ~ 1 bar		
CO ₂ Control		Microprocessor Digital		
Chamber Material		Stainless Steel SUS 304		
Door	Inner	Tempered safety glass door	3 Shelves inner door	3 Shelves inner door
	Outer	Silicon packing magnet door		
Display		LED Display	5 digital LEDx5	5 digital LEDx5



Model	LCIS-201	LCIS-202	LCIS-203
Jacket Type	Dry Wall Type (6 sides heating)	Air jacket type (6 sides heating)	
Filter	None	Anti-Bacterial HEPA filter	
Sterilization	None	U.V 4Wx1ea	
Shelves	2 each	3 each	
Chamber Dimension (WDXH)	473x528x710 mm	700x650x1430 mm	700x800x1530 mm
Each Compartment Dimension (WDXH)	None	Compartment 1 (Bottom): 700x650x430mm Compartment 2, 3 (Middle, Top): 700x650x380 mm	700x800x410 mm
Overall Dimension (WDXH)	560x665x945 mm	820x780x1740 mm	820x920x1840 mm
Weight	93 kg	323 kg	393 kg
Power Supply	220 V, 60 Hz		

SHAKER

Shaking Motion	Orbital		
Speed Range	30 to 200 rpm		30 to 250 rpm
Speed Accuracy	±1 rpm		
Speed Increment	1 rpm		
Timer Range	Continuous or up to 47h 59mins		
Timer Accuracy	-	±1%	±1%
Time Increment	1 min		
Motor	Plate type BL/DC Motor		
Drive System	Beltless direct drive		
Orbit Diameter	25mm		
Platform Size (WXD)	300x330 mm	520x520 mm	520x520 mm
Shaker Dimension	305x350x75 mm	465x540x125 mm	465x540x125 mm
Catalog No.	9341175362	9341176362	9341177362