

LABOCON AIR JACKETED CO₂ INCUBATOR

LACI-300 SERIES



Labocon Air Jacketed CO2 Incubator 300 series is ideal for the experiments involving cultivation of animal cells, sperm/ ovum, anaerobic cells, all types of microbe cells, hatching/ germinating and special tissues.

FEATURES

1. 6 sides Direct Heating System

Electric Heating wire is covered on all sides of chamber which makes stable uniformity and provides fast heat-up & temperature recovery.

3 parts of heating section are controlled and calibrated individually by 3 temperature sensors.

2. Dry Wall and Air Jacket

Warm air from heating wire is preserved in space between chamber and insulation. It helps temperature recovered faster and minimize heat loss.

Dry wall with insulation is not required to regular maintenance.

3. Dual Beam IR CO2 Sensor

Fast and precise detection for CO2 gas regardless of temperature and humidity.

4. Natural Humidification using Water Tray

The heater on the bottom side warms the water in tray and it makes humidification.

5. No Condensation

Heating by Front door heater and Frame heater prevent condensation in chamber and on glass door.

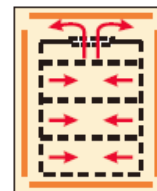
6. Microprocessor PID Control

Intelligence control for CO2 density, Temperature, Alarm, Automatic Decontamination (optionally available).

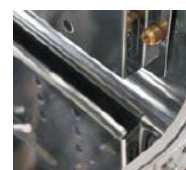
7. HEPA Filtration of Gas supply inlets

ADDITIONAL FEATURES

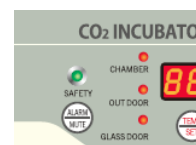
1. Natural Air and Moisture Convection Air and Moisture in chamber are distributed naturally by 6 side heating.



2. Rounded Corner allows easy cleaning. Entire chamber is made of Stainless steel (SUS 304).



3. Buzzer to alarm low or high deviation of CO₂, Temperature.



4. Perforated Shelves are good for natural air flow and are made of Stainless steel which are resistant against rust and contamination.



5. Heating is automatically cut-off by safety device when temperature control fails or there is excessive heating over set point.



6. Access port is optionally available for additional devices used in the chamber.

SPECIFICATION TABLE

Specifications	LACI-301	LACI-302	LACI-303
Chamber Volume	42 L	179 L	850 L
No. of Shelves	2 (Max. 4 can be used)	3 (Max. 8 can be used)	3 (Max. 15 can be used)
Temperature			
Range	Ambient +5°C to 60°C		
Accuracy	±0.25°C at 37°C		
Increment	0.1°C		
Control	Microprocessor Digital PID		
Hot Air Decontamination (Optional)	125°C		100°C
CO2			
Range	0% to 20%		
Accuracy	± 0.1% at 5% 37°C		
Increment	0.10%	100.10%	200.10%
Sensor	IR CO2 Sensor		
Control	Microprocessor		
Inlet Pressure range	0.3 ~ 0.5 bar	0.6 ~ 0.7 bar	0.9 ~1. 0 bar
Door			
Outer door	Silicon Packing Magnet Door		
Inner door	Tempered Glass Door		
Operating panel	Individual 2 Channel Touch Button		

Display	LED Display		
Jacket Type	Dry wall type (6 side heat)		
Chamber Material	Stainless Steel (304)		
Chamber Dimensions (w*d*h)	320*350*370 mm	473*528*710 mm	698*799*1528 mm
Overall Dimensions (w*d*h)	408*482*550 mm	560*665*945 mm	820*950*1840 mm
Power	220V 50Hz, 400W	220V 50Hz, 600W	220V 50Hz, 1.2kW
Weight	35 kg	78 kg	266 kg

OPTIONAL ACCESSORIES

1. Access Port

25 mm Access port is available at left side. (Upon ordering and additional charge)

2. UV Sterilization

4W UV is placed up of chamber ceiling and beside of circulation fan. The UV light is not reached to sample and sterilization is operated during culturing.

3. Cooling Control

Peltier is applicable in LACI-301 & 302. -5°C from room temperature but maximum lowest temperature is up to 20°C.

4. Copper Chamber

Customized copper chamber with oxidizing copper/ copper-plated chamber for enhanced contamination protection.

5. Multi Gas control (O2 Control)

Multi gas supply (N2 & O2) is available for all CO2 Incubators. But, LACI-301 is recommendable due to High Gas consumption when performing Hypoxia or Hyperoxia.

6. Hot Air Decontamination

Maximum 125°C dry hot air in LACI-301 & LACI-302

Maximum 100°C dry hot air in LACI-303

7. Split Inner Door

Lower gas consumption, Lower heat loss, Fast recovery, Easy classification for various samples.

5 Split doors available for LACI-301

6 Split doors available for LACI-302

8. Gas Regulator & CO2 Analyser

(For LACI-301, LACI-302 & LACI-303)

9. Shelves

(For LACI-301, LACI-302 & LACI-303)

10. Roller Base

(LACI-301 & LACI-302)

11. Stacking Kit

(LACI-301 & LACI-302)



SPECIFICATIONS FOR OPTIONAL ACCESSORIES

Specifications	LACI-301	LACI-302	LACI-303
UV Decontamination			
Length	253.7 nm		
Power	4GW/1 each		
Dry Hot Air Decontamination			
Temperature Range	125°C, Time 8 hours programmed decontamination, 3-4 hours recovery time to re-set at 37°C and 5%	100°C, Time 8 hours programmed decontamination, 3-4 hours recovery time to re-set at 37°C and 5%	
Temperature Control	Safety door lock during Decontamination		
Oxygen Control			
Range	0.5~19% or 20~99%		
Sensor	Zirconium Dioxide Oxygen Sensor		

Contact Us:

Labocon Scientific Limited

18A Melton Road, Leicester

LE4 5EA, UNITED KINGDOM

Phone no: +44 203 3724877

Email: info@labocon.com

Website: www.labocon.com