

CO₂ Incubator

Carbon dioxide incubator is a device that simulates the growth environment in vivo and provides stable temperature, CO₂ level and relative humidity for cells and tissues. It is widely used in the fields of immunology, oncology, genetics and bioengineering, and is an indispensable tool for cytodynamics research, antigen production and drug screening.

■ Features

- ◆ High efficiency filter.
- ◆ New high temperature dry heat sterilization or damp heat sterilization technology, reduce the greatest degree of pollution while culturing.
- ◆ The high precision microcomputer control system ensures the high accuracy and uniformity of temperature and CO₂ concentration in the chamber.



Specifications

Model		INO-CI-150D	INO-CI-191D	INO-CI-150DT	INO-CI-191DT	INO-CI-191DTRH					
Product Name		INO-CI-150M	INO-CI-191M	INO-CI-150MT	INO-CI-191MT	INO-CI-191MTRH					
	INO-CI-D:	150L, Dry Heat Sterilization	191L, Dry Heat Sterilization	150L, Dry Heat Sterilization, Touch Screen	191L, Dry Heat Sterilization, Touch Screen	191L, Dry Heat Sterilization, Touch Screen, RH Control					
Differences	INO-CI-M:	150L, Moist Heat Sterilization	191L, Moist Heat Sterilization	150L, Moist Heat Sterilization, Touch Screen	191L, Moist Heat Sterilization, Touch Screen	191L, Moist Heat Sterilization, Touch Screen, RH Control					
Capacity		150L	191L	150L	191L						
Temp. Range		Ambient+5°C~60°C									
Temp. Accuracy		0.1°C									
Temp. Uniformity		±0.3°C(@37°C)									
CO2 Sensor		IR									
CO2 Control Range		0-20%									
CO2 Control Accuracy		0.10%									
Recover Time after Open Door on Temp.		≤6min(@37°C)									
Recover Time after Open Door 30s on CO2		≤6min (@5%)									
Humidity Type		Evapor Naturally									
Max. Humidity		90%(@37°C)									
RH Control Range		NA									
RH Set Accuracy		NA		1%							
RH Control Accuracy		NA		NA							
RH Uniformity		NA		±2%							
Principle of RH Sensor		NA		Capacitance							
Disinfection	Cl:	140°C Dry Heat Sterilization									
	CIB:	90°C Moist Heat Sterilization									
Door Open Direction		Rightward									
Display		NA		7" Color Capacitance Touch Screen							
Touch Screen Type		NA		Capacitance							
Auto-lock		NA		Yes							
Auto-close Screen		NA		Yes							
Protect Set Parameters		NA		Passwords Protect							
Data Display on Interface		NA		In 7 Days							
Data Curve Display		NA		Temp. Curve, CO2 Curve, RH Curve, Speed Curve (with CO2 Orbital							
Max. Number of Shelves	12	13	12	13							
Standard Number of Shelves	3	4	3	4							
Insulation	Dry-Wall										
USB Export Data	NA		Yes								
Operating Data Storage Cycle	NA		More than 912 days								
Operating Data Storage Interval	NA		1 min								
Data Storage Content	NA		Time, Temp, Speed (with CO2 Orbital Shaker), RH, Machine Status								
Auto-run after Power Recovery	Yes										
Noise Level	≤53dB										
Interface Languages	NA		Chinese or English								
Volume of Humidity Pan	3L										
Power	≤1300W										
Power Supply	AC 220V±22V, 50Hz/60Hz										
CO2 Orbital Shaker	CO-06UW Series Optional										
Mobile Monitor and Control by WiFi	NA		Optional								
PC Monitor and Control by RS485	NA		Optional								
Net Weight	97kg	125kg	97kg	129kg							
Outside Dimensions (WxDxH)	670x705x860mm	670x705x101	670x705x860mm	670x705x1010mm							
Chamber Dimensions (WxDxH)	540x510x555mm	540x510x705mm	540x510x555mm	540x510x705mm							
Temp. Alarm	Adjustable										
CO2 Alarm	Adjustable										
HEPA	NA		Yes								

Air-jacketed CO₂ Incubator

Innova CellRoller Incubator is designed with convenient space saving features for cell cultures using a roller culture apparatus. It is an economical alternative to a warm room for small production. Its programmable PID temperature control feature and double wall insulation provide precise, uniform and stable temperature distribution. The product holds full size roller cultures apparatus unit. Its mirror-graded stainless internal wall makes it easy to clean.

Based on INO-ACI-570 and INO-ACI-888 Roll-In Incubators, INO-ACI-888 and INO-ACIC-888 models are designed with feature of automatic CO₂ concentration control for more applications. The CO₂ concentration is microprocessor controlled with PID program. The unit comes with pressure regulator and filter.

Features

- ◆ Programmable PID temperature control.
- ◆ LED digital display.
- ◆ Independent over temperature protection.
- ◆ Double walled window door.
- ◆ Alarm, automatic power off.
- ◆ Concise and practical design with delicate appearance.



Specifications

Model	INO-ACI-570	INO-ACI-888	INO-ACIC-570	INO-ACIC-888		
Feature	570L	888L	570L, with CO ₂	888L, with CO ₂		
Temp. Display	LED					
Temp. Range	Ambient Temperature+5°C~60°C (Environmental Temp.: 5°C~40°C)					
Temp. Accuracy	0.1°C					
Temp. Uniformity	±0.5°C (Environment Temp.25°C;SetT:37°C, No Load)					
Temp. Fluctuation	±0.5°C (Environment Temp.25°C;SetT: 37°C, No Load)					
CO ₂ Concentration Indicator	NA		Digital display			
CO ₂ Control Range	NA		0-20%			
CO ₂ Control Accuracy	NA		0.10%			
Recover Time after Open Door 30s on CO ₂	NA		<7min			
Recover Time after Open Door onTemp.	NA		<10min			
CO ₂ Sensor	NA		IR			
Auto-run after Power Recovery	Yes					
Power Supply	AC220V±22V, 50/60HZ					
Power	1250W					
Interior Dimensions(WxDxH)	745x690x1115mm	870x690x1480mm	745x690x1115mm	870x690x1480mm		
Outside Dimensions(WxDxH)	845x885x1349mm	970x885x1716mm	845x885x1349mm	970x885x1716mm		
Interior Wall	Mirror Grade Stainless Steel					
Door	Double Glass Window					
Alarm Function	Over-temperature, Temperature Sensor Malfunction, CO ₂ Concentration					
Weight	175kg	195kg	175kg	195kg		

Roller Culture Apparatus for Monolayer and Suspension Cell Cultures

Innova CellRoller is designed for the production of monolayer and suspension cell cultures. All Innova CellRoller units have digital control systems and stable mechanical structure. A full range of speed settings and rotation modes come as standard features. These features provide consistent optimal media distribution, gas exchange and maximum surface area for cell growth. Yocell CellRoller systems are the ideal choice for both research and industrial needs.

Features

- ◆ LED speed display.
- ◆ Heavy duty brushless DC motor.
- ◆ Oil-free bearings ensure safe environment.
- ◆ Special rubber roll guarantees stable bottle rotation speed.
- ◆ Programmable rotation mode;
- ◆ Fully functional within full cell culture temperature range.
- ◆ Incubators are available for roller culture.
- ◆ Customized order is available.



II Specifications

Cell Culture Method	Monolayer and Suspension Cell Cultures							
Model	INO-RCAS-45 INO-RCAS-30 INO-RCAA-45 INO-RCAA-30 INO-RCAA-16							
Bottle Rotation Speed	Bottle Rotation Speed: 1~990r/h (φ110mm Bottle)							
Rotation Mode	Clockwise/Counter Clockwise Alternating Rotation(10° -180°)							
Acceptable Bottle Size	Acceptable Bottle Size: φ108mm~φ121mm, L≤495mm Standard Bottle:φ110mm, L=490mm(3000ml)							
Bottle Diameter Setting	φ108mm~φ121mm (3L bottle)							
Bottle Positions per Deck	5	5	5	5	4			
Bottle Positions	45	30	45	30	16			
Material	Stainless Steel		Aluminum					
Digital Control Display	Speed / Angle / Time							
Auto-run after Power Recovery	Yes							
Fuse	4A250V							
Communication	RS 485							
Optional Accessory	RollerMate Sofeware							
Outside Dimensions(WxDxH)	770x594x1850 mm	770x594x1304 mm	797x598x185 0mm	797x598x1304 mm	672x598x936 mm			
Max.Load(L)	135	90	135	90	48			
Environmental Temp.	5°C~70°C							
Relative Humidity	<90%							
Power	70W							
Power Supply	AC220V±22V, 50Hz+1Hz							
Weight	90kg	75kg	90kg	75kg	70kg			

Bench Top Roller Culture Apparatus

This series of products is designed for small scaled cell cultures. These units can operate in regular CO₂ incubators.

Specifications

Cell Culture Method	Monolayer	Suspension
Model	INO-BTRCA-6	INO-BTRCA-6L
Bottle Rotation Speed	3~60r/h (φ	1~15r/h (φ110mm
Rotation Mode	Clockwise/Clunter	Clockwise/Alternatin
Acceptable Bottle Size	φ100mm~φ113mm, L<285mm Standard Bottle: φ 110mm, L=285mm (1500ml)	
Bottle Positions per Deck	3	
Bottle Positions	6	
Material	Aluminum	
Digital Control Display	Speed / Angle/Time	
Auto-run after Power	Yes	
Fuse	4A250V	
Communication	RS 485	
Outside Dimensions (WxDxH)	450x360x431.5mm	
Max.Load(L)	9	
Environmental Temp.	5°C~70°C	
Relative Humidity	<90%	
Maximum Power	70W	
Power Supply	AC220V±22V, 50Hz±1Hz	
Weight	22kg	



Three Gas Incubator

Innova three gas incubator contains temperature control, CO₂ concentration control, while using nitrogen to reduce the concentration of oxygen in the box, suitable for different parts of human or animal cell culture.



II Specifications

Model	INO-TGI-191D	INO-TGI-191M
Main distinguishing feature	Dry heat sterilization	Moist heat sterilization
Effective volume	191L	
Temperature control range	Room temperature ~5°C~60°C	
Temperature control setting accuracy	0.1°C	
Temperature uniformity	±0.3°C(@37°C)	
CO ₂ sensor	IR(Infrared)	
CO ₂ concentration control range	0~20%	
CO ₂ concentration setting accuracy	0.10%	
O ₂ sensor	Fluorescence sensor	
O ₂ concentration control range	1~21%	
O ₂ concentration setting accuracy	0.10%	
Intake pressure	0.08~0.1MPa	
30s Temperature recovery time after opening the door	≤6min(@37°C)	
Open 30s CO ₂ concentration recovery time	≤7min(@5%)	
Open the door 30s O ₂ concentration recovery time	≤13min(@5%)	
Humidification type	Natural humidification	
Maximum humidity	90%(@37°C)	
Humidity display accuracy	1%	
Sterilize	Dry heat sterilization, 140 °C	Moist heat sterilization, 90 °C
Sterilization time	Almost 12 h	Almost 23h
Opening mode	Right-hand drive	
Display mode	7 "color touch screen	
Touch screen type	capacitive	
Automatic lock screen	Yes	
Automatically closes the screen	Yes	
Curve display type	Temperature curve, CO ₂ concentration curve, O ₂ concentration curve, humidity curve, velocity curve (with CO ₂ level shaker)	
Number of partitions that can be placed	13	
Standard number of partitions	4	
Insulation form	Air jacket	
Export data from USB flash drive	Yes	
Operation data storage cycle	More than 912 days	
Operation data storage interval	1 min	
Type of data storage	Running time, temperature parameters, speed parameters (with CO ₂ level shaker), humidity parameters, concentration parameters, machine status	
Noise level	≤53dB	
Interface language	Chinese and English display can be switched	
Internal humidifying disk capacity	3L	
Power	≤1300W	
Power source	AC 220V±22v.50Hz/60Hz	
Control components for centralized control of CO ₂ resistant shaker (optional)	assorting	
CO ₂ resistant shaker (optional)	assorting	
WiFi mobile phone monitoring (optional)	assorting	
Computer monitoring (optional)	assorting	
Net weight	125kg	
Overall dimensions (WxDxH)	670x705x1010mm	
Cavity size (WxDxH)	540x510x705mm	
Ambient temperature	5 °C to 40 °C	
Ambient humidity	≤80%RH	
Temperature alarm	Can set	
Concentration alarm	Can set	
HEPA service life countdown	Yes	