

# CO<sub>2</sub> Incubator

Carbon dioxide incubator is a device that simulates the growth environment in vivo and provides stable temperature, CO<sub>2</sub> 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.

#### **I**|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 CO<sub>2</sub> concentration in the chamber.







### **■** Specifications

		INO-CI-150D	INO-CI-191D	INO-CI-150DT	INO-CI-191DT	INO-CI-191DTRH	
Model		INO-CI-150M	INO-CI-191M	INO-CI-150MT	INO-CI-191MT	INO-CI-	
Product Name				CO2 Incub			
	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, RH Control	
Capacity		150L	191L	150L 191L			
Temp. Range		Ambient+5°C~60°C					
Temp. Accuracy		0.1°C					
Temp. Uniform CO2 Sensor		±0.3°C(@37°C) IR					
CO2 Control Ra		0-20%					
CO2 Control Acc			0-20%				
Recover Time after Open		0.10% ≤6min(@37°C)					
Recover Time after Open D				≤6min (@			
Humidity Typ			Evapor Naturally RH Cont				
Max. Humidi				90%(@37°C)		95%(@37℃)	
RH Control Range			NA		Ambient Humidity + 10%~95%		
RH Set Accura	асу	NA	NA				
RH Control Accu			NA 19			1%	
RH Uniformity		NA ±2%					
Principle of RH S		NA Capacitance					
Disinfection	CI:			140°C Dry Heat S			
Dana On an Dina	CIB:			90°C Moist Heat S			
Door Open Dire Display	ction	Rightward					
Touch Screen T	vne	NA 7" Color Capacitance Touch Screen NA Capacitance			:11		
Auto-lock	урс	NA NA		Yes			
Auto-close Scr	een	NA Yes					
Protect Set Paran	neters	NA Passwords Protect					
Data Display on In	terface	NA In 7 Days					
Data Curve Dis		NA	NA Temp. Curve, CO2 Curve, RH Curve, Speed Curve (wit		(with CO2 Orbital		
Max. Numberof Shelves		12	13	12	13		
Standard Number o	f Shelves	3	4	3	4		
Insulation		Dry-Wai I					
USB Export Da		NA Yes					
Operating Data Store Operating Data Store		NA More than 912 days					
Data Storage Co	ge iiiteivai ntent	NA 1 min  NA Time, Temp, Speed (with CO2 Orbital Shaker), RH, Machine Statu				1 Machine Status	
Auto-run after Power		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 Monitorand Control by WiFi PC Monitor and Control by RS485		NA NA		Optional			
Net Weight		97kg	125kg	97kg	Optional 129kg		
		670x705x860mm	670x705x101	670x705x860mm		670x705x1010mm	
Chamber Dimensions		540x510x555mm	540x510x705 mm	540x510x555mm			
Temp. Alarm		Adjustable					
CO2 Alarm		Adjustable					
HEPA		NA			Yes		



## Air-jacketed CO<sub>2</sub> 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  $CO_2$  concentration control for more applications. The  $CO_2$  concentration is microprocessor controlled with PID program. The unit comes with pressure regulator and filter.

### **■Type I Ultra purified water**

- 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.





### **■**Type I Ultra purified water

Model	INO-ACI-570	INO-ACI-888	INO-ACIC-570	INO-ACIC-888	
Feature	570L	888L	570L, with CO <sub>2</sub>	888L, with CO <sub>2</sub>	
Temp. Display	LED				
Temp. Range	Ambient Temperature+5°C~60°C (Environmental Temp.: 5°C~40 <sup>D</sup> C)				
Temp. Accuracy		0.1%			
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 <sub>2</sub> Concentration Indicator	NA		Digital display		
CO <sub>2</sub> Control Range	NA		0-20%		
CO <sub>2</sub> Control Accuracy	NA		0.10%		
Recover Time after Open Door 30s on CO <sub>2</sub>	NA		<7min		
Recover Time after Open Door onTemp.	NA		<10min		
CO <sub>2</sub> Sensor	NA		IR		
Auto-run after Power Recovery	Yes				
Power Supply	AC220V±22V,		50/60HZ		
Power	1250\		N		
Interior Dimensions(WxDxH)	745x690x1115mm	870x690x1480mm	745x690x111 5mm	870x690x1480mm	
Outside Dimensions(WxDxH)	845x885x1349mm	970x885x1716mm		970x885x1716mm	
Intorior Moll	Missass Carada Ch		9mm		
Interior Wall Door	Mirror Grade Stainless Steel				
Alarm Function	Double Glass Window				
	Over-temperature, Temperature Sensor Malfunction, CO <sub>2</sub> Concentration				
Weight	175kg	195kg	175kg	195kg	



### Roller Culture Apparatus for Monolayerand 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.

#### **Il 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.





### **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/Clunter Clockwise Alternating Rotation(10° -180			180°)		
Accordate Bottle Ci-	Acceptable Bottle Size: φ108mm~φ121mm, L≤495mm					
Acceptable Bottle Size	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	770x594x1304	797x598x185	797x598x1304	672x598x936	
Outside Dimensions(WXDXH)	mm	mm	0mm	mm	mm	
Max.Load(L)	135	90	135	90	48	
Environmental Temp.	5℃~70℃					
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  $CO_2$  incubators.

### **■** Specifications

Cell Culture Method	Monolayer	Suspension	
Model	INO-BTRCA-6	INO-BTRCA-6L	
Bottle Rotation Speed	3~60r/h (φ 1~15r/h (φ110		
Rotation Mode	Clockwise/ClunterClockwiseAlternatin		
	φ100mm~φ113mm,L<285mm		
Acceptable Bottle Size	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		
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### **Three Gas Incubator**

Innova three gas incubator contains temperature control,  $CO_2$  concentration control, while using nitrogen to reduce the concentration of oxygen in the box, suitable for different parts of human or animal cell culture.







### **■**Type I Ultra purified water

Model  Main distinguishing feature  Effective volume  Temperature control range  Temperature control setting accuracy  Temperature uniformity		INO-TGI-191M Moist heat sterilization 191L	
Effective volume Temperature control range Temperature control setting accuracy Temperature uniformity			
Temperature control range Temperature control setting accuracy Temperature uniformity			
Temperature control setting accuracy Temperature uniformity	Room temperature +5°C~60°C		
Temperature uniformity	0.1°C		
	±0.3°C(@37°C)		
CO <sub>2</sub> sensor	IR(Infrared)		
CO <sub>2</sub> concentration control range	0~20%		
CO <sub>2</sub> concentration setting accuracy	0.10%		
O <sub>2</sub> sensor	Fluorescence sensor		
O <sub>2</sub> concentration control range	1~21%		
	0.10%		
O <sub>2</sub> concentration setting accuracy			
Intake pressure	0.08~0.1MPa		
30s Temperature recovery time after opening the door	≤6min(@37°C)		
Open 30s CO <sub>2</sub> concentration recovery time	≤7min(@5%)		
Open the door 30s O <sub>2</sub> concentration recovery time	≤13r	min(@5%)	
Humidification type	Natural ł	numidification	
Maximum humidity	90%	6(@37℃)	
Humidity display accuracy		1%	
Sterilize Dr.	ry heat sterilization,140 ℃	Moist heat sterilization, 90 ℃	
Sterilization time	Almost 12 h	Almost 23h	
Opening mode	Right-	hand drive	
Display mode	•	touch screen	
Touch screen type	capacitive		
Automatic lock screen	Yes		
Automatically closes the screen	Yes		
Curve display type	Temperature curve, CO <sub>2</sub> concentration curve, O <sub>2</sub> concentrati curve, humidity curve, velocity curve (with CO <sub>2</sub> level shake)		
Number of partitions that can be placed	<u> </u>	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 cycle	1 min		
Type of data storage	Running time, temperature parar level shaker), humidity parame machir		
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 <sub>2</sub>	assorting		
resistant shaker (optional)			
CO <sub>2</sub> resistant shaker (optional)	assorting		
WiFi mobile phone monitoring (optional)	assorting		
Computer monitoring (optional)	assorting		
Net weight	125kg		
Overall dimensions (WxDxH)	670x705×1010mm		
Cavity size (WxDxH)	540x510×705mm		
Ambient temperature	540x510×705mm 5 °C to 40 °C		
Ambient humidity	≤80%RH		
Temperature alarm	Can set		
Concentration alarm	Can set		
HEPA service life countdown	Yes		