

# CO2 INCUBATOR AIR JACKETED



# CO2 INCUBATOR AIR JACKETED

Precise management of temperature and CO2 provides an exceptionally stable environment, it is easy to maintain precise time/date stamped records of all incubator functions as often as necessary and adopts door heating control system. It is majorly used in issue engineering, mammalian cell research, tissue culturing and oncology studies. Used in Cell Culturing, Tissue culturing, Tissue Engineering, Vitro fertilization, Mammalian cell research, Oncology studies..

Also known as Laboratory CO2 Incubator Air Jacketed.

## INC95 CO2 INCUBATOR AIR JACKETED

- 151 liters internal volume
- Zironuim oxide Sensor
- IR CO2 sensor
- Water Level Alarm
- Integrated electric siphon pump
- Auto-zero
- Temperature deviation (at 37°C)
- Moist-heat disinfection at 90°C
- Relative humidity  $\geq 95\%$



### SPECIFICATIONS

Model	INC95-151IR	INC95-151TCD
Capacity	151 L	
Temperature Range	Amb. +2 to 55°C	
Temperature Accuracy	$\pm 0.1^\circ\text{C}$	
Temperature recovery Time	$\leq 7$ mins(After 30 sec. Door opening)	
CO2 Range	0~20%	
CO2 Accuracy	$\pm 0.1$	
CO2 Sensor	IR	TCD
Humidity Range	$\geq 95\% \pm 3\%$	
Interior	Stainless steel, type 304	
Temperature Sensors	PT1000	
Internal Dimension	470Wx530Dx607H mm	
Exterior Dimension	637Wx768Dx869H mm	
Shelves/Trays	3 standard, 10 maximum	
Shelf Dimension(WxD)	423x445 mm	
Max. Load per Shelf	10 kg	
CO2 control system	Microprocessor PID	
Weight	80 kg	
Power	$\leq 650$ VA+10%	
Power Supply	220 V $\pm 10\%$ / 50 Hz	



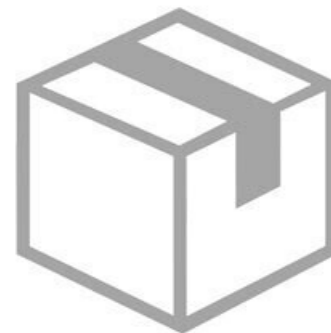
INC95-151IR



INC95-151TCD

## INC94 AIR JACKETED CO2 INCUBATOR

- 151 liters internal volume
- Zirconium oxide Sensor
- IR CO2 sensor
- Water Level Alarm
- Integrated electric siphon pump
- Auto-zero
- Temperature deviation (at 37°C)
- Moist-heat disinfection at 90°C
- Relative humidity  $\geq 95\%$

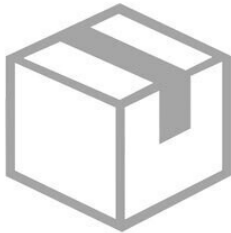


Product Image Coming Soon

### SPECIFICATIONS

Model	INC94-240	INC94-240A
Capacity	240 L	
Temperature Range	5°C above ambient temperature to 50°C	
Temperature Stability	$\pm 0.1^\circ\text{C}$	
Temperature Uniformity	$\pm 0.2^\circ\text{C}$	
CO2 Range	0-20%	
CO2 Stability	$\pm 0.1\%$	
CO2 Sensor	Thermal Conductivity	
CO2 Inlet Pressure	0.1 Mpa	
Filter	0.3 um, Efficiency:99.998% (for CO2)	
Access Port	Standard	
Remote alarm contacts	Standard	
Relative Humidity	$\geq 95\%$	
Humidifying System	Special designed water reservoir	
Water reservoir volume	3 L	
Inner Door	6 inner doors standard	
Interior	Type 304, mirror finish, stainless steel	
Exterior	Electrolyzed galvanization steel, powder coated	
Temperature Sensors	PT1000	
Internal Dimension	607Wx580Dx670H mm	
Exterior Dimension	780Wx820Dx944H mm	
Shelves/Trays	3 standard, 12 maximum	
Shelf Dimension(WxD)	423x445 mm	

Temperature control method	Microprocessor	
CO2 control system	Microprocessor	
Alarm System	Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection	
Weight	80 kg	
Data Output	RS232	
De-contamination	90°C moist heat disinfection	
Power	735 W	
Power Supply	AC-220 V/AC 110 V 50/60 Hz	
Half-size shelves	-	6



Product Image Coming Soon

INC94-240



INC94-240A

## INC91 AIR JACKETED CO2 INCUBATOR

Microcomputer intelligent PID control

Equipped with UV lamp

Unique air circulation

Adopt door heating control system

Double door design



### SPECIFICATIONS

Model	INC91-080	INC91-160
Capacity	80 L	160 L
Temperature Range	RT +5-60°C	
Temperature Accuracy	±1°C	
Temperature Fluctuation	±0.5%	
CO2 Range	0~20%	
CO2 Recovery Time	≤concentration x 1.2 min	
Filter	0.3um, Efficiency:99.998% (for CO2)	
Sterilization	UV lamp	90°C moist heat decontamination
Heating method	Direct Heat & Air Jacket (DHA)	
Relative Humidity	≥ 95%	
Water Reservoir Volume	6 L	3 L

Humidifying Method	Special designed water reservoir	
Jacket Type	Air jacket type	
Inner door	one inner door standard	6 mini inner doors optional
Internal Dimension	500Wx400Dx400H mm	650Wx550Dx500H mm
Exterior Dimension	835Wx550Dx550H mm	985Wx700Dx650H mm
Shelves	2	
Weight	36 kg	57 kg
Power	350 W	550 W
Power Supply	220V	



INC91-080



INC91-160

## INC92 AIR JACKETED CO2 INCUBATOR

Forced Convection

Inner material: SUS304 stainless steel

ALLHEAT™: Chamber Preheating Technology

ALLFLOW™: Clean Air Circulation System

ALLSENST™: Programmable PID Controller



### SPECIFICATIONS

Model	INC92-080	INC92-160
Capacity	80 L	160 L
Temperature Range	RT+5~55°C	
Ambient Temperature	10~30°C	
Temperature Accuracy	0.1°C	
Temperature Fluctuation	±0.5 at 37°C	
Temperature Uniformity	±0.8 at 37°C	
Temperature Recovery Time	(after 30 seconds door opening to 37°C) ≤ 8 min	
Ambient Humidity	<70%	
CO2 Range	0~20%	
CO2 Sensor	IR sensor (±0.1%)	
CO2 Recovery Time	(after 30 seconds door opening to 5%) ≤ 2 min	
Filter	None	

Humidifying Method	Natural Evaporation	
Jacket Type	Water Jacketed	
Internal Dimension	500Wx400Dx400H mm	650Wx460Dx540H mm
Exterior Dimension	755Wx550Dx547H mm	650Wx460Dx540H mm
Shelves	2	3
Weight	35 kg	55 kg
Power	500 W	650 W
Power Supply	Single phase AC220V/50Hz	



INC92-080



INC92-160

## INC91-151 AIR JACKETED CO2 INCUBATOR

- 151 liters internal volume
- Zironuim oxide Sensor
- IR CO2 sensor
- Water Level Alarm
- Integrated electric siphon pump
- Auto-zero
- Temperature deviation (at 37°C)
- Moist-heat disinfection at 90°C
- Relative humidity ≥95%



### SPECIFICATIONS

Model	INC91-151
Capacity	151 L
Temperature Range	5°C above ambient temperature to 50°C
Temperature Stability	±0.1°C
Temperature Uniformity	±0.2°C
CO2 Range	0-20%
CO2 Stability	±0.1%
CO2 Sensor	Thermal Conductivity
CO2 Inlet Pressure	0.1 Mpa
Filter	0.3 um, Efficiency:99.998% (for CO2)
Access Port	Optional
Remote alarm contacts	Standard
Relative Humidity	≥ 95%
Humidifying System	Special designed water reservoir

Water reservoir volume	4 L
Inner Door	one inner door standard
Interior	Type 304, mirror finish, stainless steel
Exterior	Electrolyzed galvanization steel, powder coated
Temperature Sensors	PT1000
Internal Dimension	470Wx530Dx607H mm
Exterior Dimension	615Wx768Dx865H mm
Shelves/Trays	3 standard, 10 maximum
Shelf Dimension(WxD)	423x445 mm
Temperature control method	Microprocessor
CO2 control system	Microprocessor
Alarm System	Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection
Weight	75 kg
De-contamination	UV lamp
Power	600 W
Power Supply	AC-220 V/AC 110 V 50/60 Hz

## INC92-151 AIR JACKETED CO2 INCUBATOR

151 liters internal volume  
 Zirconium oxide Sensor  
 IR CO2 sensor  
 Water Level Alarm  
 Integrated electric siphon pump  
 Auto-zero  
 Temperature deviation (at 37°C)  
 Moist-heat disinfection at 90°C  
 Relative humidity ≥95%



### SPECIFICATIONS

Model	INC92-151
Capacity	151 L
Temperature Range	5°C above ambient temperature to 50°C
Temperature Stability	±0.1°C
Temperature Uniformity	±0.2°C
CO2 Range	0-20%
CO2 Stability	±0.1%
CO2 Sensor	Thermal Conductivity
CO2 Inlet Pressure	0.1 Mpa
Filter	0.3 um, Efficiency:99.998% (for CO2)
Access Port	Standard
Remote alarm contacts	Standard
Relative Humidity	≥ 95%
Humidifying System	Special designed water reservoir

Water reservoir volume	3 L
Inner Door	3 inner doors standard
Interior	Type 304, mirror finish, stainless steel
Exterior	Electrolyzed galvanization steel, powder coated
Temperature Sensors	PT1000
Internal Dimension	470Wx530Dx607H mm
Exterior Dimension	637Wx762Dx909H mm
Shelves/Trays	3 standard, 10 maximum
Shelf Dimension(WxD)	423x445 mm
Temperature control method	Microprocessor
CO2 control system	Microprocessor
Alarm System	Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection
Weight	80 kg
Data Output	RS232
De-contamination	90°C moist heat disinfection
Power	600 W
Power Supply	AC-220 V/AC 110 V 50/60 Hz

## INC93-212 AIR JACKETED CO2 INCUBATOR

- 151 liters internal volume
- Zirconium oxide Sensor
- IR CO2 sensor
- Water Level Alarm
- Integrated electric siphon pump
- Auto-zero
- Temperature deviation (at 37°C)
- Moist-heat disinfection at 90°C
- Relative humidity ≥95%



### SPECIFICATIONS

Model	INC93-212
Capacity	212 L
Temperature Range	5°C above ambient temperature to 50°C
Temperature Stability	±0.1°C
Temperature Uniformity	±0.3°C
CO2 Range	0-20%
CO2 Stability	±0.1%
CO2 Sensor	Thermal Conductivity
CO2 Inlet Pressure	0.1 Mpa
Filter	0.3 um, Efficiency:99.998% (for CO2)
Access Port	Optional
Remote alarm contacts	Standard
Relative Humidity	≥ 95%



Humidifying System	Special designed water reservoir
Water reservoir volume	6 L
Inner Door	one inner door standard
Interior	Type 304, mirror finish, stainless steel
Exterior	Electrolyzed galvanization steel, powder coated
Temperature Sensors	PT1000
Internal Dimension	600x588x600 mm
Exterior Dimension	910Wx763Dx795H mm
Shelves/Trays	3 standard, 12 maximum
Shelf Dimension(WxD)	590x510 mm
Temperature control method	Microprocessor
CO2 control system	Microprocessor
Alarm System	Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection
Weight	95 kg
De-contamination	UV lamp
Power	700 W
Power Supply	AC-220 V/AC 110 V 50/60 Hz

## INC070 CO2 INCUBATOR AIR JACKETED

Replace traditional button operation to touch screen interface.

It can display on time performance curve. You can check the temp., humidity and CO2 concentration three group curves changes at the same time. And abnormal alarm and door open or close message

When parameters are set, the controller will lock the screen automatically, it avoid unauthorized person wrong operation on the machine

72 hours machine performance inquiry, it is convenient for user to check abnormal situation and track historical running information

RS-485 communication port as options can be remote control on computer for monitoring the running and start or close the machine

PT100 temp. sensor keeps inside chamber temperature accurate. It can adjust the heating power according to the temp. differences between actual temp. in the chamber and set temp. to make sure temp. in the chamber is accurate. It can resume experiment temp. in 3 min after user open and close door to take samples

Water jacket heating method to ensure working chamber temperature is uniform, when it is power off, the chamber can maintain the temp. for a long time

Outer door ring has heating function. The temperature of door ring will be a little bit higher than temp. in the chamber to prevent condensed water coming from the inner glass door. It facilitates observe the experiment process, also it avoid the biological pollution possibility due to the condensed water from the inner glass door

Simple operation: The user just press the sterilization start button on the control panel, the sterilization system starts to thoroughly sterilize the chamber (Including temp. sensor, CO2 concentration sensor, fan, shelves and brackets etc)

The whole sterilization cycle is shorten to 18 hours



### SPECIFICATIONS

Model	INC070-155	INC070-190	INC070-240
Capacity	155 L	190 L	240 L
Electrical requirement	AC 220 V / 50 Hz		

Input Power	750 W		950 W
Heating power	Air jacket micro computer PID control		
Temp. control range	RT+3 - 50°C		
Work environment temp	+5 - 30°C		
Temp. accuracy	±0.1°C		
CO2 control range	0 - 20 %		
CO2 control accuracy	±0.1% (IR sensor)		
CO2 restore time	(Door open 30s, recovery to 5%) ≤ 3min		
Temp. restore time	(Door open 30s, recovery to 37°C) ≤ 8min		
Related humidity	Nature vaporate > 95%(Can equip with related humidity digital display)		
Chamber size	480Wx530Dx610H mm	520Wx530Dx690H mm	600Wx630Dx670H mm
Overall size	670Wx767Dx880H mm	708Wx710Dx1030H mm	788Wx837Dx940H mm
Standard shelves quantity	3 pcs		
Sterilization	90 degree centigrade and UV sterilization + HEPA high efficient filter		



INC070-155



INC070-190



INC070-240

## INC072 CO2 INCUBATOR AIR JACKETED

LCD screen, micro computer PID control that can display temp. CO2 concentration, related humidity, operation failure reminder and menu operation are easily to observe and use

90 degree high temp. high humidity sterilization system (RHP) can thoroughly sterilize the chamber (Including temp. sensor, CO2 concentration sensor, fan, shelves and brackets etc) with high temp and high humidity

It eliminates bacteria, mold, mycoplasma etc microbiology those will pollute the microorganisms cell culture and provides a safe experiment environment

Cycle fan speed can be adjusted automatically.

When chamber temp. is stable, the fan speed will be lower down, the speed will be adjusted to a suitable speed that the cell can growth. It avoids the fast fan speed that evaporating the samples

CO2 inlet control system has pressure protection function, it prevents over pressure or low pressure to the pipes

High and low temp. and over temp. alarm

Chamber sensor failure alarm

Door temp. sensor failure alarm

Over temp sensor failure alarm

CO2 condensation too high or too low alarm

Independent temp. limiter alarm

Door open too long alarm

Disinfection and sterilization status reminder

All data can be stored through RS485 port, if any failures, user can read the diagnostic message and data from computer at any time.



## SPECIFICATIONS

Model	INC072-040	INC072-080	INC072-155
Capacity	40 L	80 L	155 L
Electrical requirement	AC 220 V / 50 Hz		
Input Power	350 W	500 W	750 W
Heating power	Air jacket micro computer PID control		
Temp. control range	RT+5 - 55°C		
Work environment temp	+5 - 30°C		
Temp. accuracy	±0.1°C		
CO2 control range	0 - 20 %		
CO2 control accuracy	±0.1% (IR sensor)		
CO2 restore time	(Door open 30s, recovery to 5%) ≤ 3min		
Temp. restore time	(Door open 30s, recovery to 37°C) ≤ 8min		
Related humidity	Nature vaporate > 95%(Can equip with related humidity digital display)		
Chamber size	400Wx286Dx350H mm	400Wx450Dx500H mm	480Wx530Dx610H mm
Overall size	590Wx440Dx576H mm	590Wx687Dx790H mm	670Wx767Dx880H mm
Standard shelves quantity	2 pcs		3 pcs
Sterilization	UV sterilization+HEPA sterilization		

Model	INC072-190	INC072-240
Capacity	190 L	240 L
Electrical requirement	AC 220 V / 50 Hz	
Input Power	750 W	950 W
Heating power	Air jacket micro computer PID control	
Temp. control range	RT+5 - 55°C	
Work environment temp	+5 - 30°C	
Temp. accuracy	±0.1°C	
CO2 control range	0 - 20 %	
CO2 control accuracy	±0.1% (IR sensor)	
CO2 restore time	(Door open 30s, recovery to 5%) ≤ 3min	
Temp. restore time	(Door open 30s, recovery to 37°C) ≤ 8min	
Related humidity	Nature vaporate > 95%(Can equip with related humidity digital display)	
Chamber size	520Wx530Dx390H mm	600Wx630Dx670H mm
Overall size	708Wx710Dx1030H mm	790Wx837Dx940H mm
Standard shelves quantity	3 pcs	
Sterilization	UV sterilization+HEPA sterilization	



INC072-040



INC072-080



INC072-155



INC072-190



INC072-240

## INC086 CO2 INCUBATOR AIR JACKETED

Touch screen controller, 72-hour machine operation record query function to help user tracking abnormal conditions and trace historical operation information

Faster CO2 concentration Restoration Speed

Infrared sensor can keep CO2 concentration stability and uniformity when door open frequently

Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable

Microorganism filter at inlet provides 99.99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO2 into the incubator

Door temperature controller prevents dewfall on glass door of incubator effectively

Independent audible and visible temperature-limiting alarm system ensures experiments run safely

Alarm function for temperature difference, CO2 over concentration and concentration difference, door open time, UV working status

Auto-controller of fan speed to prevent damage to the samples

90°C high temperature and humidity sterilization function



### SPECIFICATIONS

Model	INC086-040	INC086-080	INC086-150
Capacity	40 L	80 L	150 L
Electrical Requirement	220 V 50 Hz		
Screen	7" Touch screen		
Power Consumption	350 W	500 W	700 W
Temperature range	RT+5 - 50°C		
Ambient Temperature	+5 - 30°C		
Temperature Stability	±0.1°C		
CO2 Range	0 - 20% V/V		
CO2 Control Resolution	±0.1%(IR sensor)		
CO2 Recovery	(Door open 30s, recovery to 5%) ≤ 3min		
Temperature Recovery	(Door open 30s, recovery to 37°C) ≤ 8min		
Humidity Method	Natural vaporization ≥ 90%		
Interior Dimension	400Wx286Dx350H mm	400Wx450Dx500H mm	480Wx530Dx610H mm
Exterior Dimension	590Wx440Dx576H mm	590Wx687Dx790H mm	670Wx770Dx880H mm
shelves	2 pcs		3 pcs
Sterilization method	18hrs (90°C moist heat disinfection)		

Model	INC086-190	INC086-240
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Capacity	190 L	240 L
Electrical Requirement	220 V 50 Hz	
Screen	7" Touch screen	
Power Consumption	750 W	1000 W
Temperature range	RT+5 - 50°C	
Ambient Temperature	+5 - 30°C	
Temperature Stability	±0.1°C	
CO2 Range	0 - 20% V/V	
CO2 Control Resolution	±0.1%(IR sensor)	
CO2 Recovery	(Door open 30s,recovery to 5%) ≤ 3min	
Temperature Recovery	(Door open 30s,recovery to 37°C ) ≤ 8min	
Humidity Method	Natural vaporization ≥ 90%	
Interior Dimension	520Wx530Dx690H mm	600Wx630Dx670H mm
Exterior Dimension	708Wx710Dx1030H mm	790Wx840Dx940H mm
shelves	3 pcs	
Sterilization method	18hrs (90°C moist heat disinfection)	



INC086-040



INC086-080



INC086-150



INC086-190



INC086-240

# INC088 CO2 INCUBATOR AIR JACKETED

Faster CO2 concentration Restoration Speed

Infrared sensor can keep CO2 concentration stability and uniformity when door open frequently

Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable

Microorganism filter at inlet provides 99.99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO2 into the incubator

Door temperature controller prevents dewfall on glass door of incubator effectively

Independent audible and visible temperature-limiting alarm system ensures experiments run safely

Alarm function for temperature difference, CO2 over concentration and concentration difference, door open time, UV working status

Auto-controller of fan speed to prevent damage to the samples

UV light system for periodic sterilization of chamber

PID controller with LCD screen ensures precise and reliable control

Two-layer stacking available



## SPECIFICATIONS

Model	INC088-050	INC088-080	INC088-150
Capacity	50 L	80 L	150 L
Electrical Requirement	220 V 50 Hz		
Power Consumption	450 W	500 W	750 W
Temperature Range	RT+5 - 50°C		
Ambient Temperature	+5 - 30°C		
Temperature Stability	±0.2°C		
CO2 Range	0 - 20% V/V		
CO2 Control Resolution	±0.1%(IR sensor)		
CO2 Recovery	(Door open 30s, recovery to 5%) ≤ 3min		
Temperature Recovery	(Door open 30s, recovery to 37°C ) ≤ 8min		
Humidity Method	Natural vaporization ≥ 90%		
Interior Dimension	400Wx350Dx350H mm	400Wx450Dx500H mm	480Wx530Dx610H mm
Exterior Dimension	580Wx450Dx540H mm	590Wx657Dx870H mm	670Wx710Dx950H mm
Shelves	2 pcs		
Sterilization method	UV Sterilizer		

Model	INC088-190	INC088-240
Capacity	190 L	240 L
Electrical Requirement	220 V 50 Hz	
Power Consumption	750 W	
Temperature Range	RT+5 - 50°C	
Ambient Temperature	+5 - 30°C	
Temperature Stability	±0.2°C	
CO2 Range	0 - 20% V/V	
CO2 Control Resolution	±0.1%(IR sensor)	
CO2 Recovery	(Door open 30s, recovery to 5%) ≤ 3min	
Temperature Recovery	(Door open 30s, recovery to 37°C ) ≤ 8min	

Humidity Method	Natural vaporization $\geq$ 90%	
Interior Dimension	520Wx530Dx690H mm	600Wx630Dx670H mm
Exterior Dimension	708Wx710Dx1030H mm	788Wx837Dx940H mm
Shelves	2 pcs	3 pcs
Sterilization method	UV Sterilizer	



INC088-050



INC088-080



INC088-150



INC088-190



INC088-240

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