

PRODUCT CATALOG



CO2 INCUBATOR AIR JACKETED





Used in Cell Culturing, Tissue culturing, Tissue Engineering, Vitro fertilization, Mammalian cell research, Oncology studies..

Also known as Laboratory CO2 Incubator Air Jacketed.

200 CO2 INCUBATOR AIR JACKETED



Forced Convection
Inner material: SUS304 stainless steel
ALLHEATTM:Chamber Preheating Technology
ALLFLOWTM:Clean Air Circulation System
ALLSENSTM:Programmable PID Controller

Model	BCAJ-201	BCAJ-202		
Capacity	80 L	160 L		
Temperature Range	RT+5~55°C			
Ambient Temperature	10~30°C			
Temperature Accuracy	0.3	0.1°C		
Temperature Fluctuation	±0.5 a	nt 37°C		
Temperature Uniformity	±0.8 a	nt 37°C		
Temperature Recovery Time	(after 30 seconds door	opening to 37°C) ≤ 8 min		
Ambient Humidity	<7	0%		
CO2 Range	0~20%			
CO2 Sensor	IR sensor (±0.1%)			
CO2 Recovery Time	(after 30 seconds door opening to 5%) ≤2 min			
Filter	No	one		
Humidifying Method	Natural E	vaporation		
Jacket Type	Water J	acketed		
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			







Microprocessor control Stainless steel shelves

Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection alarm system

RS232 Interface

Model	BCAJ-301	BCAJ-304	
Capacity	151 L	240 L	
Temperature Range	5°C above ambient temperature to 50°C		
Temperature Stability	±0.1°C		
Temperature Uniformity	±0.2°C		
Temperature Sensors	PT10	000	
CO2 Range	0~2	0%	
CO2 Stability	±0.1	. %	
CO2 Sensor	Thermal co	nductivity	
CO2 Inlet Pressure	0.1 N	1ра	
Filter	HEPA filter	-	
Humidifying Method	Natural Evaporation	-	
Jacket Type	Water Jacketed		
Interior	Type 304, mirror finish, stainless steel		
Exterior	Electrolyzed galvanization steel, powder coated		
Shelve Dimension	423Wx44	15D mm	
Internal Dimension	470Wx530Dx607H mm	607Wx583Dx670H mm	
Exterior Dimension	637Wx762Dx909H mm	780Wx820Dx944H mm	
Shelves	3,10	3,12	
Weight	80 kg		
Remote Alarm	Standard		
Access port	Standard		
Power	600 W	735 W	

Power Supply	220V/50Hz (standard), 110V/60Hz (Optional)	
Relative Humidity	-	95±3%







Microprocessor control

Stainless steel shelves

Power interruption, High/Low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection alarm system

Model	BCAJ-302	BCAJ-303		
Capacity	151 L	212 L		
Temperature Range	5°C above ambient to	5°C above ambient temperature to 50°C		
Temperature Stability	±0.1	±0.1°C		
Temperature Uniformity	±0.2°C	±0.3°C		
Temperature Sensors	PT10	000		
CO2 Range	0~2	0%		
CO2 Stability	±0.1	L%		
CO2 Sensor	Thermal co	nductivity		
CO2 Inlet Pressure	0.1 N	1 ра		
Filter	HEPA filter	-		
Humidifying Method	Natural Evaporation	-		
Jacket Type	Water Ja	cketed		
Interior	Type 304, mirror fin	ish, stainless steel		
Exterior	Electrolyzed galvanization	on steel, powder coated		
Shelve Dimension	423Wx445D mm	590Wx510D mm		
Internal Dimension	470Wx530Dx607H mm	600Wx588Dx600H mm		
Exterior Dimension	615Wx768Dx865H mm	910Wx763Dx795H mm		
Shelves	3,10	3,12		
Weight	75 kg	95 kg		

Remote Alarm	Standard		
Access port	Optional		
Power	600 W 700 W		
Power Supply	220V/50Hz (standard), 110V/60Hz (Optional)		
Relative Humidity	-	95±3%	







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

Model	BCAJ-6601	BCAJ-6602	BCAJ-6603
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		rol
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	(Do	or open 30s, recovery to 5%) ≤ 3	min	
Temp. restore time	(Doc	(Door open 30s, recovery to 37°C) ≤ 8min		
Related humidity	Nature vaporate >	Nature vaporate > 95%(Can equip with related humidity digital display)		
Chamber size	480Wx530Dx610H mm	480Wx530Dx610H mm		
Overall size	670Wx767Dx880H mm	670Wx767Dx880H mm		
Standard shelves quantity		3 pcs		
Sterilization	90 degree centigrade and UV sterilization + HEPA high efficient filter			









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.

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Model	BCAJ-6801	BCAI-6802	BCAJ-6803	
Capacity	40 L	80 L	155 L	
Electrical requirement	40 0	AC 220 V / 50 Hz		
Input Power	350 W	500 W	750 W	
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Heating power	All	r jacket micro computer PID cont	.101	
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	(Doc	(Door open 30s, recovery to 5%) ≤ 3min		
Temp. restore time	(Doo	(Door open 30s, recovery to 37°C) ≤ 8min		
Related humidity	Nature vaporate > 9	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	2 pcs		
Sterilization	U	UV sterilization+HEPA sterilization		

Model	BCAJ-6804	BCAJ-6805	
Capacity	190 L	240 L	
Electrical requirement	AC 220 V / 50 Hz		
Input Power	750 W	950 W	
Heating power	Air jacket micro cor	nputer PID control	
Temp. control range	RT+5 -	- 55°C	
Work environment temp	+5 - 3	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		













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 (Φ <0.3 μ 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 streilization function

Model	BCAJ-8201	BCAJ-8202	BCAJ-8203	
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	(Do	(Door open 30s,recovery to 5%) ≤ 3min		
Temperature Recovery	(Doc	(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	2 pcs 3 pcs		
Sterilization method	18	18hrs (90°C moist heat disinfection)		

Model	BCAJ-8204	BCAJ-8205
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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 - 5	RT+5 - 50°C	
Ambient Temperature	+5 - 30)°C	
Temperature Stability	±0.1℃		
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 vaporiza	ation ≥ 90%	
Interior Dimension	520Wx530Dx690H mm	600Wx630Dx670H mm	
Exterior Dimension	708Wx710Dx1030H mm	790Wx840Dx940H mm	
shelves	3 pcs		
Sterilization method	18hrs (90°C moist heat disinfection)		













Faster CO2 concentration Restoration Speed

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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

Madal	DCAL 0.401	DCAL 0403	DCAL 0402
Model	BCAJ-8401	BCAJ-8402	BCAJ-8403
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	BCAJ-8404	BCAJ-8405	
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,recov	(Door open 30s,recovery to 37°C) ≤ 8min		
Humidity Method	Natural vapor	Natural vaporization ≥ 90%		
Interior Dimension	520Wx530Dx690H mm	600Wx630Dx670H mm		
Exterior Dimension	708Wx710Dx1030H mm	788Wx837Dx940H mm		
Shelves	2 pcs	3 pcs		
Sterilization method	UV Ste	UV Sterilizer		













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