

### **Technical Details**

Drive mode	Magnetic drive	Controller digital display	LED						
Amplitude	12.5/25/50mm	Power-off memory function	standard						
Speed range	20~350rpm	Maximum load	6kg						
Maximum power	20W	Environmental temperature range	Temperature 4°C~60°C、humidity <99%RH						
Timing function	0-999 hours (when set to 0, it is continuous operation)	Power supply	220~240V,50/60Hz						
Tray size (LxW)	365×350mm	Weight	17kg						
Host dimensions (L×W×H)	365×355×87mm (sticky pad included)								
Host material	304 stainless steel	The maximum load capacity of the conical flask	30×50ml;15×100ml;15×250ml;9×500ml; 6×1000ml;4×2000ml;3×3000ml;1×5000ml (The above is an "or" relationship)						
Controller dimensions (L×W×H)	160×80×30mm		(the above is all of relationship)						

\*All products are tested biologically in a controlled environment. Radobio does not guarantee the consistency of field test results under different conditions.



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180°C HIGH HEAT STERILIZATION CO₂ INCUBATOR

## **XC170** NEW

RADOBN

Relying on years of production experience and design breakthroughs,  $\ensuremath{\mathsf{CO}}_2$ incubators have demonstrated some key features in practical cell culture applications. It provides an excellent cell growth environment and effective pollution control technology, enhanced anti-vibration and turbulence functions are suitable for more important applications, and is easy to operate and monitor, allowing you to spend more time on your research goals.



#### **Product Features**

# ANTI-VIBRATION AND NO TURBULENCE

Fanless design can effectively avoid vibration negative effects of inner wall cell culture.

The fanless design avoids the turbulent flow caused by the fan, effectively reducing the volatilization of the culture liquid and the consumption of  $CO_2$  gas.

Generating a smooth airflow cycle through an intelligent algorithm temperature difference control system to achieve a high degree of uniformity in the cultivation environment.

Ter	Femperature °C																			
50							_													
37																				
	_		-				_	_									_			_
						8	3			1	6			2	4			Tir	ne	(h)



### DIRECT HEATING ONE-PIECE SEAMLESS CABIN 6-SIDED HEATING

The 6-sided direct heating method, the high-efficiency and high-performance heating system distributed on the surface of each culture room, provides a highly uniform temperature distribution for the entire incubator, making the temperature of the entire incubator more uniform, and stabilized under ideal conditions. The temperature uniformity in the cabin is as high as  $\pm 0.2^{\circ}$ C.

### DISASSEMBLED WITHOUT TOOLS IN 30 SECONDS

Flexible combination of detachable pallets, stainless steel pallets and brackets can be disassembled in 30 seconds without tools. Standard right door opening mode, left and right door opening direction can be selected according to needs. Polished stainless steel one-piece seamless culture chamber for easy cleaning and disinfection.



## ACCURATE DETECTION BY MULTIPLE TEMPERATURE SENSORS

Equipped with multiple independent temperature sensors in different parts of the incubator, combined with an excellent microcomputer algorithm temperature control system, the internal temperature is uniform, and the temperature uniformity can reach  $\pm 0.2^{\circ}$ C. This 3D temperature detection control is equipped with a temperature sensor products form a distinct difference.

The multi-point temperature control system is also conducive to the rapid recovery of the temperature after opening the door, and the temperature can be restored to  $37^{\circ}$ C within 5 minutes.

## dry heat sterilization AT 180°C

Provide 180°C dry heat high temperature sterilization as needed, which simplifies the cleaning work, no need to disassemble and sterilize the components, and one-key sterilization according to the software guidance, effectively improving work efficiency.

180°C dry heat high temperature sterilization system can effectively eliminate bacteria, mold, yeast and mycoplasma on the surface of the inner chamber.





## PRECISE MONITORING INFRARED (IR) CO2 SENSOR

Infrared (IR)  $CO_2$  sensor, stable monitoring when the humidity and temperature are less predictable, effectively avoiding the problem of measurement deviation caused by frequent opening and closing of doors.

Ideal for sensitive applications, or where frequent opening of the incubator is required.



Radobio XC170: Fast stabilizing

Similar products B: Slow concentration recovery

#### **Product Features**

#### ENSURE A HIGH HUMIDITY ENVIRONMENT

# NOT PRONE TO CONDENSATION

The easy-to-clean 304 stainless steel water tray can hold 4L of water to ensure the high humidity environment of the culture cabin. Under normal room temperature conditions, even when the humidity tray produces high humidity, it is still not easy to produce condensed water above the cabin, which is for cells and tissues. Culturing provides maximum protection and avoids the dangerous formation of condensation. Turbulence-free chamber ventilation ensures a constant and homogeneous cell culture environment.

## SLIDE TO SET PARAMETERS

## 7-INCH LCD TOUCH SCREEN

Intuitive control and easy operation, can display real-time running curves and historical running curves.

The installation position above the door is convenient and easy to control, and the capacitive touch screen is sensitive to touch and has a good control experience.

Audible and visual alarms, on-screen menu prompts.

### **Technical Details**

Control interface	7° LCD touch coroop	Volume (L)	1441					
Control Interface	7 ECD touch screen	volume (L)	100L					
Temperature control mode	PID control mode	Relative Humidity (humidity pan humidification)	ambient humidity-95% (ambient temperature:25°C;set value:37°C,no-load)					
Heating method	6-side direct heat air-jacket	Sterilization method	180°C dry heat high temperature sterilization					
Temperature control range	Ambient+4°C~60°C	Temperature recovery time	≤5 min (open door:30sec; room temperature:25°C;set value:37°C,no-load)					
Temperature display resolution	0.1°C	CO2 concentration recovery time	≤5 min (open door:30sec; room temperature:25°C;set value:37°C,no-load)					
Temperature stability	±0.1°C (ambient temperature:25°C;set value:37°C,no-load)	Data export interface	USB interface					
Temperature field uniformity	±0.2°C (ambient temperature:25°C;set value:37°C,no-load)	Data Storage Interval	1min~9999min can be set					
Internal Dimensions(LxWxH)	542×445×690mm	Historical data storage	2500,00 messages					
Outline Dimension(LxWxH)	702×697×896mm(Base included)	Working environment temperature	10°C-30°C					
Heating power	900W	Number of settable programs	6					
Timing function	0-999.9 hours	Number of stages per program	60					
CO2 measurement principle	Infrared (IR) detection	Power supply	220~240V,50/60Hz					
CO2 control range	0-20%	Weight	105kg					
CO2 display resolution	0.1%	Scalability	Up to 2 units can be stacked					
CO2 supply	pressure reducing valve range 0.5~1bar(0.05~0.1MPa)							



### MAGNETIC DRIVE ORBITAL SHAKER

**UNIS70** 

DESIGNED FOR CO<sub>2</sub> INCUBATOR

UNIS70 Magnetic Drive Orbital Shaker is a special horizontal shaker for carbon dioxide incubator. It adopts magnetic drive mode. It can work normally in the high temperature, high humidity and CO<sub>2</sub> acidic environment in the carbon dioxide incubator, and it can also be used as an ordinary horizontal shaker. The controller part adopts separate design and can be placed outside the incubator to control the shaker. When the host is working in the incubator, the host can be controlled without opening the door of the incubator to avoid pollution and air leakage from the box. The body of the shaker is slim, with a height of only 87mm, which saves the available space inside the incubator.



# LOW ENERGY CONSUMPTION, ONLY 20W ENVIRONMENTAL PROTECTION

## MAGNETIC DRIVE

Magnetic drive eliminates the need for a drive belt. Smooth starting and braking technology, specially designed for cell culture, will not generate high liquid shear force to damage cells. The magnetic drive mode, the power is very small, and almost no heat enters the incubator, which ensures the temperature stability in the incubator and provides ideal culture conditions for cell culture.



#### EASY TO SET OPERATING PARAMETERS

## SEPARATE CONTROLLER

The separate controller is placed outside the chamber and connected with the shaker through cables. The cable can be connected to an external power supply through the test hole of the incubator or the sealing strip of the glass door, even if the incubator has no power interface. It can also be fixed on the outer wall of the chamber with magnets or hooks, or placed directly on the top of the chamber. The value of the separate controller is clear, and the setting parameters can be viewed without opening the incubator. Saves operating time and reduces heat loss and CO2 consumption due to opening and closing doors.



# REDUCE POLLUTION RISK NO BELTS

No belts are used, reducing the influence of background heat from belt friction on the incubation temperature and the risk of contamination from abrasive particles.

# 12.5/25/50 mm

VARIOUS AMPLITUDES OF

Radobio UNIS70 has multiple levels of amplitude for adjustment. Create more possibilities to meet different cell culture conditions.







#### WITHSTAND 37°C, 20% CO<sub>2</sub> CONCENTRATION, 95% HUMIDIT

RESISTANT TO WEAK ACID ENVIRONMENT

Specially treated mechanical parts can withstand environmental conditions of 37°C, 20% CO<sub>2</sub> concentration and 95% humidity.



# wider speed range 20~350 <sup>rpm</sup>

Wider speed range of 20~350rpm, suitable for most experimental needs.

