



MCO-170AICUVD

CO₂ Incubators

165 L



*Standard for Model No. including UV

Optimising cell culture outcomes and reproducibility

InCu-saFe CO₂ Incubators provide precise control of CO₂ concentration and accurate, uniform, and highly responsive temperature control within the chamber. During cell culturing, the inCu-saFe germicidal interior and optional SafeCell UV lamp continuously prevent contamination.

Precise & Regulated Environment

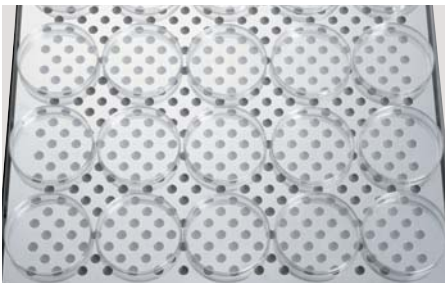
InCu-saFe and SafeCell UV both function to prevent contamination. Direct Heat System and melamine foam insulation ensure optimal temperature distribution throughout the chamber while the Dual IR sensor controls the CO₂ level.

Dual Heat Sterilisation

Dual heat sterilisation utilises the incubator's two heaters during the 180°C sterilisation process, which takes 11 hours. Because there is no effect on temperature inside stacked incubators due to low heat dissipation, cell culturing can continue uninterrupted.

Improved Use & Maintenance

A colour LCD touchscreen panel allows full control, even with gloved hands. Transfer of data is easy via a USB port. The easy-to-clean incubator interior features fully rounded corners and integrated shelf supports.



Optimum cell growth

Optimal results and reproducibility make these incubators ideal for tissue research, genomic expression, antibody production and transfection and transduction procedures.



Efficient workflows

No need to remove inner parts or recalibrate after sterilisation, therefore laboratory processes are more efficient with less incubator downtime.



Intuitive Usability

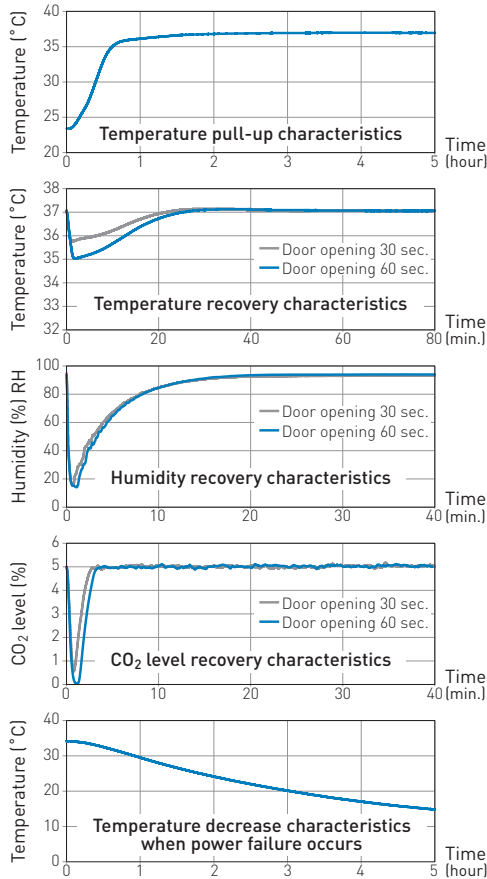
Easy control and visibility of the internal conditions such as CO₂ level and temperature.

Dual IR CO₂ Sensor The incubator's PID controlled Dual IR Sensor enables ultra-fast CO₂ recovery without overshoot even following multiple door-openings.

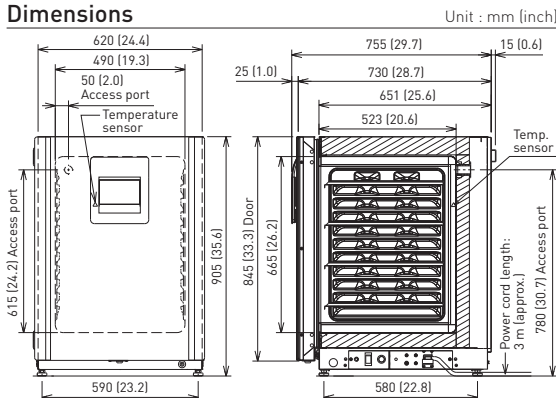
Active Background Decontamination The inCu-saFe copper-enriched stainless steel alloy interior offers the germicidal properties of copper as well as the corrosion resistance of stainless steel. The optional, isolated, SafeCell UV lamp decontaminates circulating air and water in the humidifying pan, without harming cultured cells.

Simultaneous use of stacked units The melamine foam insulation limits heat dissipation during dry heat sterilisation. This means that cell culture can continue uninterrupted in incubators stacked on those actively running sterilisation.

Performance Data



Dimensions



Model Number	MCO-170AICUVDL-PA	MCO-170AICD-PK MCO-170AICUVD-PK	MCO-170AICD-PE MCO-170AICDL-PE MCO-170AICUVDL-PE	
External dimensions (W x D x H) ¹⁾	mm 620 x 755 x 905			
Internal dimensions (W x D x H)	mm 490 x 523 x 665			
Volume	litres 165			
Net weight	kg 79 [MCO-170AICD] / 80 [MCO-170AICUVD/MCO-170AICUVDL]			
Performance				
Temperature control range & fluctuation	°C	AT +5 to +50, ±0.1		
Temperature uniformity ²⁾	°C	±0.25		
CO ₂ control range & fluctuation ²⁾	%	0 to 20, ±0.15		
Humidity level & fluctuation	% RH	95, ±5		
Control				
Temperature sensor		Thermistor		
CO ₂ sensor		Dual IR		
Display		Colour LCD touchscreen		
Construction				
Exterior material		Painted steel (rear cover not painted)		
Interior material		Stainless steel copper-enriched alloy		
Insulation material		Melamine resin foam		
Heating method		Heater jacket		
Sterilisation method ³⁾		Dry heat sterilisation, 180°C, 11 hours		
Outer door	qty	1		
Electric door lock with password		Standard		
Field reversible door		Included		
Inner door		1		
Shelves		4 x Stainless steel copper-enriched alloy		
Shelf dimensions (W x D x H)	mm	475 x 450 x 12		
Max. load per shelf	kg	7		
Access port	qty	1		
Access port position		Rear upper left		
Access port diameter	∅ mm	30		
Alarms [V = Visual Alarm, B = Buzzer Alarm, R = Remote Alarm]				
Power failure		R		
Temperature deviation		V-B-R		
High temperature		V-B-R		
CO ₂ deviation		V-B-R		
Door open		V-B		
Electrical and Noise Level				
Power supply	V	110-120	220	220-240
Frequency	Hz	60	60	50 / 60
Noise level ⁴⁾	dB [A]	25		
Options				
UV system set		MCO-170UVSD-PE (MCO-170AICUVD/MCO-170AICUVDL Standard equipment)		
Gas regulator		MCO-010R-PW		
Gas auto changer		MCO-21GC-PW		
STD gas auto calibration kit		MCO-SG-PW		
Tray		MCO-170ST-PW		
Half tray		MCO-25ST-PW		
Double stacking bracket ⁵⁾		MCO-170PS-PW		
Stacking plate ⁵⁾		MCO-170SB-PW		
Roller base		MCO-170RB-PW		
Optional Communication Systems				
Ethernet interface (LAN) ⁶⁾		MTR-L03-PW		
Digital interface (RS232C/RS485) ⁶⁾		MTR-480-PW		
Analogue interface (4-20 mA)		MCO-420MA-PW		

1) Exterior dimensions of main cabinet only, excluding handle and other external projections. 2) Ambient temperature 23°C, setting 37°C, CO₂ 5%, no load. 3) Dry heat sterilisation can be performed only for the chamber and inner attachments with standard specifications, not for any other objects. 4) Nominal value. 5) If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used. 6) Only for the Data acquisition system MTR-5000 user. MCO-170AICD series can only be fitted with one communications interface.
Caution: PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents of the product.



Preservation (freezers, refrigerators) and Culturing (incubators) Equipment

The management of the design, development, production, sales support, and servicing of the above.

PHC Corporation, Biomedical Division

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