PHCBI

MCO-170AICD-PE

Incu*Safe*

CO$_2$ Incubators

165 L

DIRECT HEAT system **IR dual sensor** **inCu saFe** **SafeCell UV** **DUAL HEAT sterilisation** **MDD medical device directive**

Optimising cell culture outcomes and reproducibility

Incu*Safe* CO$_2$ Incubators provide precise control of CO$_2$ concentration and accurate, uniform, and highly responsive temperature control within the chamber. During cell culturing the inCu-saFe germicidal interior and SafeCell UV lamp work continuously to prevent contamination.
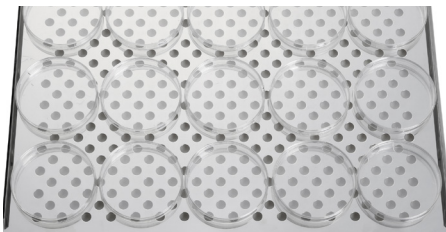
Precise & Regulated Environment

InCu-saFe and SafeCell UV both function to prevent contamination. The direct heat system and melamine foam insulation ensure optimal temperature distribution throughout the chamber whilst the Dual IR sensor controls the CO$_2$ level.

Dual Heat Sterilisation

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

Ease of Use & Maintenance

A full colour LCD touch-screen 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

Outstanding quality and performance for successful cell growth, optimal results and reproducibility. Perfect fit for the strictest and most sensitive protocols.

Efficient Workflows

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

Intuitive Usability

Control and visibility of the internal conditions, such as CO$_2$ level and temperature, is easy with the MCO-170AICD CO$_2$ incubator.

Incu*Safe* CO$_2$ Incubators

Melamine Foam Insulation and Direct Heat

Achieves accurate, uniform, and highly responsive temperature control within the chamber, providing exceptional uniformity and rapid recovery after door-openings.

Dual IR CO$_2$ Sensor
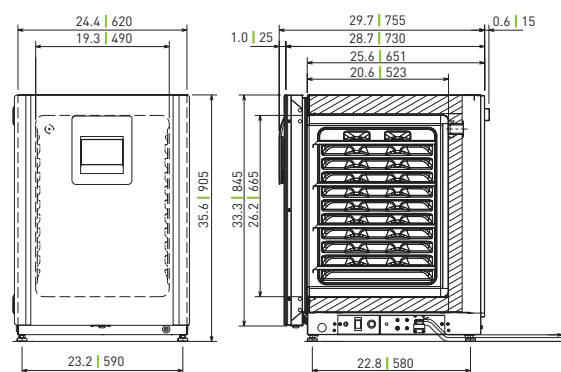
The incubator's Dual IR sensor and P.I.D control enables ultra-fast CO$_2$ recovery without overshoot, even following multiple door-openings.

Active Background Decontamination

The inCu-saFe copper-enriched stainless steel alloy interior offers the germicidal properties of copper and the durability 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 with those actively running sterilisation.

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Model Number		MCO-170AICD-PE	MCO-170AICUVD-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	liters	165	
Net Weight	kg	79	80
Performance			
Temperature Control Range & Fluctuation	°C	AT +5 ~ +50, ±0.1	
Temperature Uniformity[2]	°C	±0.25	
CO$_2$ Control Range & Fluctuation	%	0 ~ 20, ±0.15	
Humidity Level & Fluctuation	%RH	95, ±5	
Sterilisation Method		Dry heat sterilisation, 180°C, 11 hours	
Control			
Temperature Sensor		Thermistor	
CO$_2$ Sensor		Dual IR	
Display		LCD Touch Screen	
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	
Outer Door	qty	1	
Outer Door Lock		Standard	
Field Reversible Door		Included	
Inner Door	qty	1	
Shelves	qty	4 x Stainless Steel Copper-enriched Alloy	
Shelf Dimensions (W x D x H)	mm	470 x 450 x 12	
Max. Load per Shelf	kg	7	
Max. Shelf Capacity	qty	10	
Access Port	qty	1	
Access Port Position		Rear Upper Left	
Access Port Diameter	Ø mm	30	
Alarms		(R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)	
Power Failure		R	
Out of Temperature Setting		V-B-R	
High Temperature		V-B-R	
Out of CO$_2$ Setting		V-B-R	
Door open		V-B	
Electrical and Noise Level			
Power Supply	V	230	
Frequency	Hz	50	
Noise Level[3]	dB	25	
Options			
SafeCell UV® System		MCO-170UVSD-PE	Standard
Electric Door Lock with Password		Standard	
Multiple Inner Doors		N/A	
CO$_2$ Gas Pressure Regulator		MCO-010R-PW	
Automatic CO$_2$ Cylinder Changeover System		MCO-21GC-PW	
Semi-automatic one point Gas Calibration Kit		MCO-SG-PW	
InCu-saFe® Shelf		MCO-170ST-PW	
InCu-saFe® Half Tray System		MCO-25ST-PW	
Double Stacking Bracket*		MCO-170PS-PW	
Stacking Plate*		MCO-170SB-PW	
Roller Base		MCO-170RB-PW	
Optional communication systems[4]			
Analogue interface (4-20mA)		MCO-420MA-PW	

Appearance and specifications are subject to change without notice.

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings on website for full details.
[2] ±0.25°C; ambient temp 23°C, setting 37°C, CO2 5%, no load
[3] Nominal value

[4] MCO-170AICD series can only be fitted with one communications interface.
* If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used.