MCO-170M-PE

IncuSafe

Multigas Incubators

161 L

DIRECT HEAT system | zirconia O_2 control | IR dual sensor | inCu saFe | SafeCell UV | H_2O_2 decontamination | MDD medical device directive

So comfortable, your cells will feel *in vivo*

IncuSafe, Class IIa Medical Device Certified Multigas Incubators optimise mammalian cell cultures through variable CO_2 & O_2 control to simulate *in vivo* conditions. The MCO-170M helps to achieve more accurate results and higher reproducibility when culturing cells at controlled physiological oxygen levels.

Reproduction of *in vivo* conditions

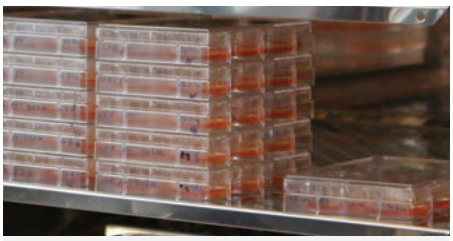
With a unique, solid-state, zirconia sensor for precise oxygen control (1-18%; 22-80%) the MCO-170M Multigas Incubator is able to reproduce the low oxygen concentrations found in many tissues and organs.

Time-Saving Decontamination

The high-speed decontamination system uses vaporized hydrogen peroxide and UV light to safely clean the chamber in less than 3 hours, with at least a 6 log reduction of major contaminants.

Ease of Use & Maintenance

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



Sensitive Cell Culturing

Culturing cells at physiological oxygen levels allows them to grow faster and live longer, and reduces the frequency of mutations.

Efficient Workflows

Complete laboratory procedures and experiments more efficiently with less incubator downtime. Ideal for commercial applications.

Intuitive Usability

Control and visibility of the internal conditions, such as CO_2, O_2 levels, and temperature, is easy with the MCO-170M multigas incubator.

IncuSafe Multigas Incubators

Direct Heat and Air Jacket System

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

Zirconia O_2 Sensor

The incubator's unique, solid-state, Zirconia O_2 sensor delivers precise control of physiological oxygen levels to simulate *in vivo* conditions.

Dual IR CO_2 Sensor

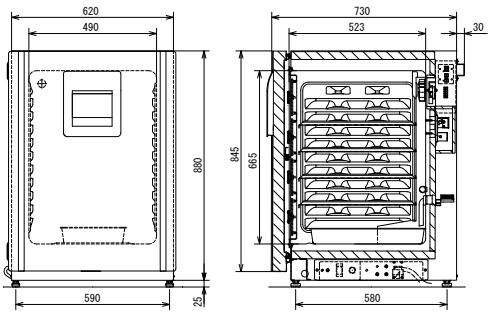
The incubator's Dual IR sensor and P.I.D control enables ultra-fast CO_2 recovery without overshoot, even following multiple door-openings.

Active Background Decontamination

The exclusive inCu-saFe copper-enriched stainless steel alloy interor 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.

Condensation Management

With a unique antibacterial coating, the 'dew stick'—controlled by Peltier technology—condenses water on its surface, which then drips into the humidifying pan, preventing unwanted condensation in the chamber and possible contamination.



CE 0123 The MCO-170M series are certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC) for medical purposes of culturing cells, tissues, organs and embryos.

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Model Number		MCO-170M-PE	MCO-170MUV-PE	MCO-170MUVH-PE
External Dimensions (W x D x H)[1]	mm	620 x 710 x 905		
Internal Dimensions (W x D x H)	mm	490 x 523 x 665		
Volume	liters	161		
Net Weight	kg	79		
Performance				
Temperature Control Range & Fluctuation	°C	AT +5 ~ +50, ±0.1		
Temperature Uniformity[2]	°C	±0.25		
CO_2 Control Range & Fluctuation[3]	%	0 ~ 20, ±0.15		
O_2 control range & Fluctuation[4]	%	1 -18 and 22 - 80, ±0.2		
Humidity Level & Fluctuation	%RH	95, ±5		
Sterilisation Method		H_2O_2 Decontamination		
Control				
Temperature Sensor		Thermistor		
CO_2 Sensor		Dual IR		
O_2 Sensor		Stabilized Zirconia Sensor		
Display		LCD Touch Screen		
Construction				
Exterior Material		Painted Steel (rear cover not painted)		
Interior Material		Stainless Steel Copper-Enriched Alloy		
Insulation Material		Expandable Polystyrene Beads		
Heating Method		Direct Heat & Air Jacket System		
Outer Door	qty	1		
Outer Door Lock		Optional	Optional	Standard
Field Reversible Door		Included		
Inner Doors	qty	4 gastight - made of tempered glass		
Shelves	qty	3 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		
Out of O_2 setting		V-B-R		
Door open		V-B		
Electrical and Noise Level				
Power Supply	V	230		
Frequency	Hz	50		
Noise Level[5]	dB	25		
Options				
SafeCell UV® System		MCO-170UVS-PE[6]	Standard	
H_2O_2 Decontamination Board		MCO-170HB-PE[6]		Standard
Electric Door Lock with Password		MCO-170EL-PW[6]		Standard
H_2O_2 Vapor Generator		MCO-HP-PW[6]		
H_2O_2 Reagent, pack of 6 bottles		MCO-H2O2-PE		
Multiple Inner Doors		Standard		
CO_2 Gas Pressure Regulator		MCO-100L-PW		
N_2 Gas Pressure Regulator				
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[7]				
Ethernet interface (LAN)		MTR-L03-PW		
Digital interface (RS232C/RS485)		MTR-480-PW		
Analogue interface (4-20mA)		MCO-420MA-PW		

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections
[2,3,4] Ambient temperature 23°C, setting 37°C, CO_2 5%, O_2 5%, no load
[5] Nominal value
[6] MCO-170M series requires MCO-170HB-PE, MCO-170EL-PW, MCO-HP-PW and SafeCell UV option for H_2O_2 decontamination

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