Panasonic

MCO-170M-PE

Multigas Incubators

161 L

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

Panasonic's Class IIa Medical Device certified, multigas incubators optimize mammalian cell cultures through variable O_2 control to simulate *in vivo* conditions for regenerative medicine and stem cell applications. The MCO-170M helps to achieve more accurate results when culturing cells at physiological oxygen levels.

Reproduction of *in vivo* conditions

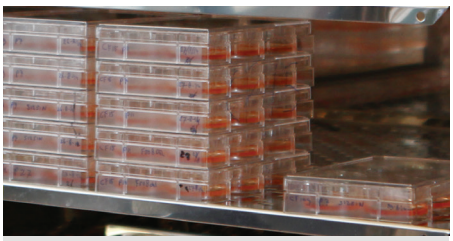
With a unique solid state zirconia sensor for precise oxygen control (1-18%; 22-80%), the MCO-170M is able to reproduce low oxygen concentrations found in many tissues and organs.

Time-Saving Decontamination

Panasonic's 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.

Improved Use & Maintenance

A colour LCD touch panel allows full control, even with gloved hands, while a USB port makes transferring data to a PC convenient. The easy to clean incubator interior features fully rounded corners and integrated shelf supports.



Sensitive Cell Culturing

Culturing cells at physiological oxygen levels allows them to grow faster, live longer, and experience fewer mutations.

Efficient Workflows

Conduct your lab's processes and experiments more efficiently with less incubator downtime.

Intuitive Usability

Easy control and visibility of CO_2, O_2, temperature, and other internal conditions of your MCO-170M incubator.

Multigas Incubators

Zirconia O_2 Sensor

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

Rapid CO_2 Recovery

The PID controller and Dual Infra Red sensor achieves ultra-fast CO_2 recovery without overshoot, even following multiple door openings.

Germicidal Interior

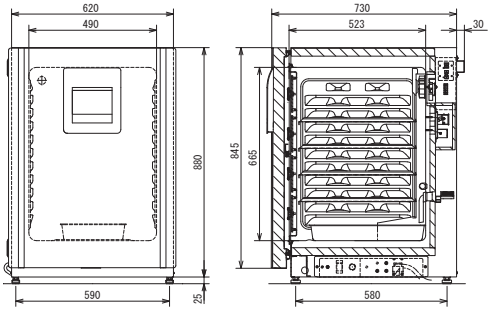
InCu-saFe® copper-enriched stainless steel alloy offers the germicidal properties of copper, as well as the corrosion resistance of stainless steel.

Proactive Contamination Control

The optional isolated UV lamp decontaminates circulating air and the 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.

Panasonic

For more information, please visit our website:

www.biomedical.panasonic.eu

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		
O2 control range & Fluctuation[4]	%	1 -18 and 22 - 80, ±0.2		
Humidity Level & Fluctuation	%RH	95, ±5		
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		

[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.