PHCBI

MCO-170MP-PA

cellIQ™

Multigas (CO$_2$/O$_2$) Incubator

5.7 cu.ft. | 161 L

inCu saFe | SafeCell UV | AIR jacket | IR dual sensor

MCO-170MP-PA

Our multigas (CO$_2$/O$_2$) incubator optimizes mammalian cell cultures through variable O$_2$ control to better mimic *in vivo* conditions. The incubator helps you achieve more accurate results by culturing your cells at physiological oxygen levels.

Reproduction of *In Vivo* Conditions

With a unique, solid zirconia sensor for precise oxygen levels (1-18% and 22% to 80%), the MCO-170MP-PA is able to reproduce low oxygen concentrations often found in many tissues, organs and pathogenic tissues.

Time-Saving Decontamination

The optional high speed decontamination system uses hydrogen peroxide (H$_2$O$_2$) vapor to safely clean the chamber in less than three hours while providing 100% kill rate with at least a six log reduction of major contaminants.
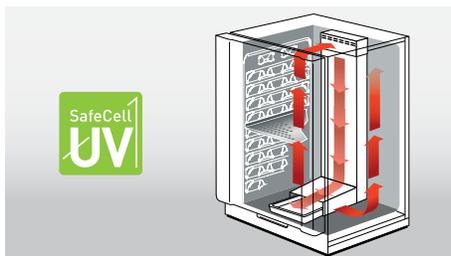
Improved Use and Maintenance

A color LCD touchscreen delivers full control, even with gloved hands, while a standard USB port makes log data transfer to PC convenient. The incubator offers integrated shelf channels with minimal parts for easy cleaning.

Germicidal Interior

InCu-saFe® copper enriched, stainless steel alloy offers germicidal properties of elemental copper without corrosion or discoloration.

Optional UV Protection

Our patented SafeCell™ UV technology uses a programmable UV lamp that decontaminates the air and humidity pan without affecting the cell cultures.

Intuitive Control

The control panel interface allows for easy programming of temperature, CO$_2$, O$_2$ and other internal conditions of your incubator.

PHC Corporation of North America

cell*IQ* Multigas (CO₂/O₂) Incubator
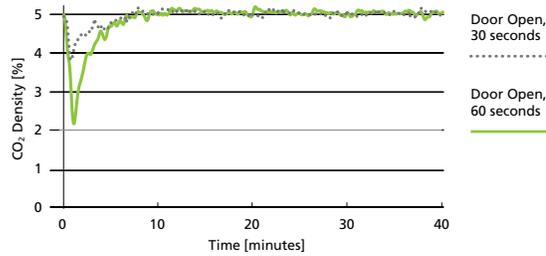
MCO-170MP-PA

Direct Heat and Air Jacket System

Accurate temperature levels are maintained by the Direct Heat and Air Jacket system which functions under microprocessor control.
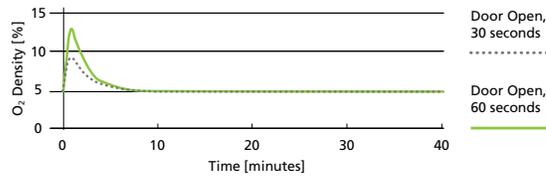
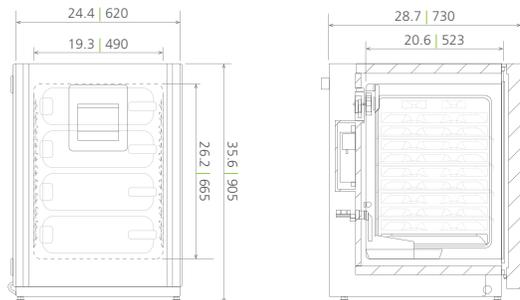Model MCO-170MP-PA

Rapid CO₂ Density Recovery

Door Open, 30 seconds

Door Open, 60 seconds

Proprietary IR2 sensor achieves ultrafast CO₂ recovery without overshoot, even following multiple door openings.

Rapid O₂ Density Recovery

Door Open, 30 seconds

Door Open, 60 seconds

Dimensions

Unit : inch | mm

Model Number		MCO-170MP-PA	With Optional UV Decontamination	With Optional H₂O₂ Decontamination
External Dimensions (W × D × H) ¹⁾	inches	mm	24.4 × 28.0 × 35.6	620 × 710 × 905		
Internal Dimensions (W × D × H)	inches	mm	19.3 × 20.6 × 26.2	490 × 523 × 665		
Volume	cu.ft.	liters	5.7	161		
Net Weight	lbs	kg	170	77		
Performance				
Warranty ²⁾		3 years parts and labor		
Temperature Control Range and Fluctuation ³⁾	°C	+5 above ambient to +50, ± 0.1		
Temperature Uniformity ³⁾	°C	± 0.25		
Control Range and Fluctuation ³⁾	%	0 to 20, ± 0.15	1 to 18 and 22 to 80, ± 0.2		
Humidity Level & Fluctuation	% RH	95 at 37°C ± 5		
Control				
Controller		Microprocessor		
Temperature Sensor		Color LCD touchscreen - readable to 0.1 increments		
Display	qty	Thermistor		
Sensor	CO₂	O₂	Dual filter IR	Stabilized zirconia		
Construction				
Exterior Material		Painted steel (rear cover coated steel)		
Interior Material		Stainless steel copper enriched alloy		
Insulation Material		Polystyrene		
Outer Door	qty	1		
Field Reversible Door		Included		
Inner Door with Inner Glass Doors	qty	1 (stainless steel frame sealing with positive latch + 4 tempered glass sealing with positive latches)		
Humidity Pan	qty	1 (stainless steel)		
Shelves	qty	3 (stainless steel copper enriched alloy)		
Shelf Dimension (W × D × H)	inches	mm	18.5 × 17.7 × 0.5	470 × 450 × 12		
Max. Load per Shelf	lbs	kg	15.4	7		
Max. Total Load	lbs	kg	61	28		
Max. Shelf Capacity	qty	10		
Access Port / Position	qty	1; rear upper left		
Access Port Diameter	inches	mm	1.2	30 (with silicone (non-VOC) stopper)		
Leveling Feet	qty	4		
Decontamination Control				
InCu-saFe Chamber, Air Plenum and Shelves	passive	Included (stainless steel copper enriched alloy)		
SafeCell UV Light System	passive/active	Optional	Included	Included
Hydrogen Peroxide (H₂O₂) Vapor	active	Optional	Optional	Included
Alarms		**(V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)**		
Power Failure		R		
Temperature Deviation	high	V-B-R		
Gas Deviation	CO₂	N₂/O₂	V-B-R	V-B-R		
Supply Empty	CO₂	N₂/O₂	V-B-R		
Door Open		V-B	V-B		
Electrical and Noise Level				
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle		
Noise Level ⁴⁾	dB(A)	29		
Options				
SafeCell UV Light System		MCO-170UVS-PA	Included	MCO-170UVS-PA ⁵⁾
Hydrogen Peroxide (H₂O₂) Vapor Board		MCO-170HB-PA ⁵⁾	MCO-170HB-PA ⁵⁾	Included
Outer Door–Password Access Electronic Lock		MCO-170EL-PW ⁵⁾	MCO-170EL-PW ⁵⁾	Included
H₂O₂ Vapor Generator		MCO-HP-PW ⁵⁾	MCO-HP-PW ⁵⁾	MCO-HP-PW ⁵⁾
H₂O₂ Reagent	package of 6	MCO-H2O2-PV		
CO₂ N₂ Gas Pressure Regulator	psi	0-15; MCO-100L	0-60; MCO-100N		
Automatic CO₂ Cylinder Changeover System		MCO-21GC-PW		
4-20mA Analog Output		MCO-420MA-PW		
InCu-saFe Shelf		MCO-170ST-PW		
InCu-saFe Shelf–Reinforced		MCO-170RT-PW		
Double Stacking Bracket ⁶⁾		MCO-170SB-PW		
Roller Base		MCO-170RB-PW		

¹⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections
²⁾ Current warranty offered at time of printing and may be subject to change; US and Canada only
³⁾ Ambient temperature 23°C, setting 37°C, CO₂ 5%, no load, air temperature measured at incubator center
⁴⁾ Nominal value – Background noise 20dB(A)
⁵⁾ MCO-170MP series requires MCO-170HB-PA, MCO-170EL-PW, MCO-170UVS-PW and MCO-HP-PW for H₂O₂ Decontamination
⁶⁾ If stacking two incubators, make sure the double stacking dedicated secure hardware and spacer are used
Note: Additional options available.

Specifications are subject to change without notice.
For latest specification information contact PHC Corporation of North America at info@us.phchd.com.
Performance data herein is based on independent testing at time of publication.

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