

MCO-170ML-PA

cellIQ™

Multigas (CO₂/O₂) Incubator

5.7 cu.ft. | 161 L



MCO-170ML-PA



Our multigas (CO₂/O₂) incubator optimizes mammalian cell cultures through variable O₂ 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-170ML-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 (H₂O₂) 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.

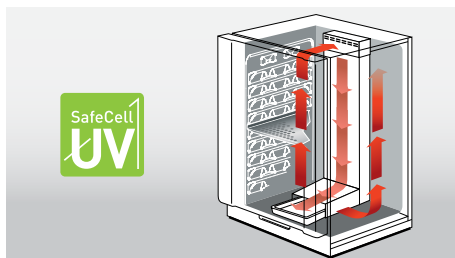
Improved Use and Maintenance

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, CO₂, O₂ and other internal conditions of your incubator.

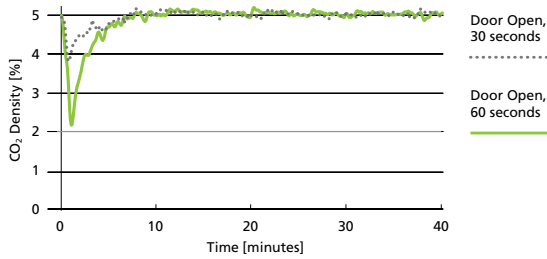


Direct Heat and Air Jacket System

Accurate temperature levels are maintained by the Direct Heat and Air Jacket system which functions under microprocessor control.

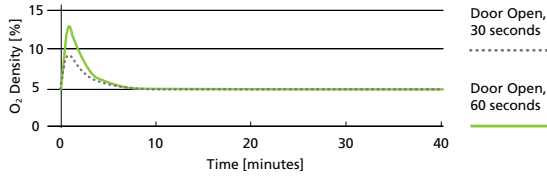
Model MCO-170ML-PA

Rapid CO₂ Density Recovery



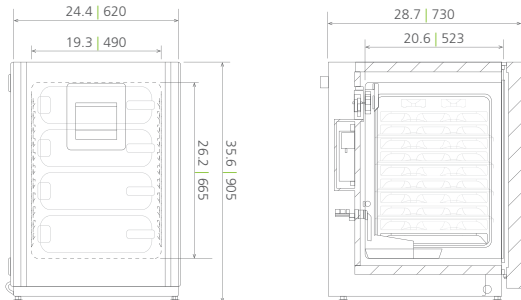
Proprietary IR2 sensor achieves ultrafast CO₂ recovery without overshoot, even following multiple door openings.

Rapid O₂ Density Recovery



Dimensions

Unit : inch | mm



Model Number	MCO-170ML-PA ¹⁾	With Optional UV Decontamination	With Optional H ₂ O ₂ Decontamination	
External Dimensions (W x D x H) ²⁾	inches mm	24.4 x 28.7 x 35.6 620 x 730 x 905		
Internal Dimensions (W x D x H)	inches mm	19.3 x 20.6 x 26.2 490 x 523 x 665		
Volume	cu.ft. liters	5.7 161		
Net Weight	lbs kg	170 77		
Performance				
Warranty ³⁾		3 years parts and labor		
Temperature Control Range and Fluctuation ⁴⁾	°C	+5 above ambient to +50, ± 0.1		
Temperature Uniformity ⁴⁾	°C	± 0.25		
Control Range and Fluctuation ⁴⁾	%	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	CO ₂ O ₂	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 x D x H)	inches mm	18.5 x 17.7 x 0.5 470 x 450 x 12		
Max. Load per Shelf	lbs kg	15 7		
Max. Total Load	lbs kg	45 21		
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 (H ₂ O ₂) 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	CO ₂ N ₂ /O ₂	V-B-R V-B-R		
Supply Empty	CO ₂ N ₂ /O ₂	V-B		
Door Open		V-B-R V-B-R		
Electrical and Noise Level				
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle		
Noise Level ⁵⁾	dB(A)	29		
Options				
SafeCell UV Light System		MCO-170UVS-PA	Included	MCO-170UVS-PA ⁶⁾
Hydrogen Peroxide (H ₂ O ₂) Vapor Board		MCO-170HB-PA ⁶⁾	MCO-170HB-PA ⁶⁾	Included
Outer Door—Password Access Electronic Lock		MCO-170EL-PW ⁶⁾	MCO-170EL-PW ⁶⁾	Included
H ₂ O ₂ Vapor Generator		MCO-HP-PW ⁶⁾	MCO-HP-PW ⁶⁾	MCO-HP-PW ⁶⁾
H ₂ O ₂ Reagent	package of 6		MCO-H2O2-PV	
CO ₂ Gas Pressure Regulator	psi		0 – 15; MCO-100L	
Automatic CO ₂ Cylinder Changeover System			MCO-21GC-PW	
InCu-safe Shelf			MCO-170ST-PW	
Double Stacking Bracket ⁷⁾			MCO-170PS-PW	
Roller Base			MCO-170RB-PW	

¹⁾ For ova or embryo use, contact your PHC Corporation of North America sales representative
²⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections
³⁾ Current warranty offered at time of printing and may be subject to change; US and Canada only
⁴⁾ Ambient temperature 23°C, setting 37°C, CO₂ 5%, no load, air temperature measured at incubator center
⁵⁾ Nominal value – Background noise 20dB(A)
⁶⁾ MCO-170M series requires MCO-170HB-PA, MCO-170EL-PW, MCO-170UVS-PW and MCO-HP-PW for H₂O₂ Decontamination
⁷⁾ If stacking two incubators, make sure the double stacking dedicated secure hardware and spacer are used
 Note: Additional options available.

