

## cellIQ™

Multigas (CO<sub>2</sub>/O<sub>2</sub>) Incubator

5.7 cu.ft. | 161 L



MCO-170M-PA



Our multigas (CO<sub>2</sub>/O<sub>2</sub>) incubator optimizes mammalian cell cultures through variable O<sub>2</sub> 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-170M-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<sub>2</sub>O<sub>2</sub>) 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.

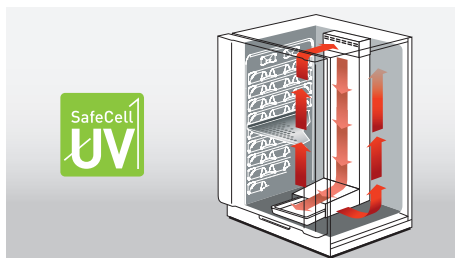
### Improved Use and Maintenance

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.



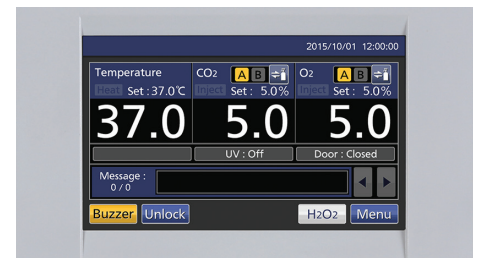
### Germicidal Interior

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<sub>2</sub>, O<sub>2</sub> and other internal conditions of your incubator.

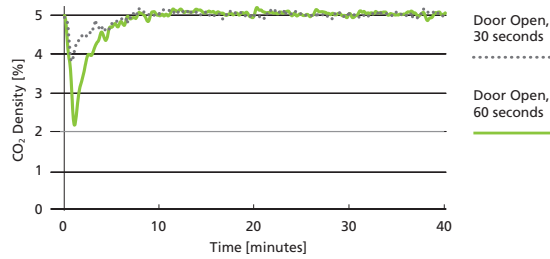


**Direct Heat and Air Jacket System**

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

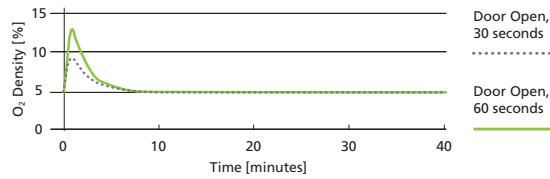
Model MCO-170M-PA

**Rapid CO<sub>2</sub> Density Recovery**



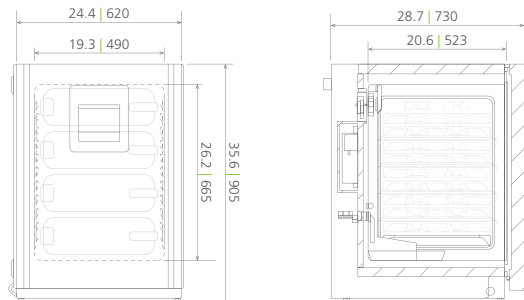
Proprietary IR2 sensor achieves ultrafast CO<sub>2</sub> recovery without overshoot, even following multiple door openings.

**Rapid O<sub>2</sub> Density Recovery**



**Dimensions**

Unit : inch | mm



Model Number	MCO-170M-PA		With Optional UV Decontamination	With Optional H <sub>2</sub> O <sub>2</sub> Decontamination
External Dimensions (W x D x H) <sup>1)</sup>	inches   mm	24.4 x 28.0 x 35.6   620 x 710 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		
<b>Performance</b>				
Warranty <sup>2)</sup>		3 years parts and labor		
Temperature Control Range and Fluctuation <sup>3)</sup>	°C	+5 above ambient to +50, ± 0.1		
Temperature Uniformity <sup>3)</sup>	°C	± 0.25		
Control Range and Fluctuation <sup>3)</sup>	%	0 to 20, ± 0.15   1 to 18 and 22 to 80, ± 0.2		
Humidity Level & Fluctuation	% RH	95 at 37°C ± 5		
<b>Control</b>				
Controller		Microprocessor		
Temperature Sensor		Color LCD touchscreen - readable to 0.1 increments		
Display	qty	Thermistor		
Sensor	CO <sub>2</sub>   O <sub>2</sub>	Dual filter IR   Stabilized zirconia		
<b>Construction</b>				
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	15.4   7		
Max. Total Load	lbs   kg	45.0   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		
<b>Decontamination Control</b>				
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 <sub>2</sub> O <sub>2</sub> ) Vapor	active	Optional	Optional	Included
<b>Alarms</b> (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)				
Power Failure			R	
Temperature Deviation	high		V-B-R	
Gas Deviation	CO <sub>2</sub>   N <sub>2</sub> /O <sub>2</sub>		V-B-R   V-B-R	
Supply Empty	CO <sub>2</sub>   N <sub>2</sub> /O <sub>2</sub>		V-B-R	
Door Open			V-B   V-B	
<b>Electrical and Noise Level</b>				
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle		
Noise Level <sup>4)</sup>	dB(A)	29		
<b>Options</b>				
SafeCell UV Light System		MCO-170UVS-PA	Included	MCO-170UVS-PA <sup>5)</sup>
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Board		MCO-170HB-PA <sup>5)</sup>	MCO-170HB-PA <sup>5)</sup>	Included
Outer Door-Password Access Electronic Lock		MCO-170EL-PW <sup>5)</sup>	MCO-170EL-PW <sup>5)</sup>	Included
H <sub>2</sub> O <sub>2</sub> Vapor Generator		MCO-HP-PW <sup>5)</sup>	MCO-HP-PW <sup>5)</sup>	MCO-HP-PW <sup>5)</sup>
H <sub>2</sub> O <sub>2</sub> Reagent	package of 6		MCO-H2O2-PV	
CO <sub>2</sub> Gas Pressure Regulator	psi		0 - 15; MCO-100L	
Automatic CO <sub>2</sub> 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 <sup>6)</sup>			MCO-170SB-PW	
Roller Base			MCO-170RB-PW	

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections  
<sup>2)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only  
<sup>3)</sup> Ambient temperature 23°C, setting 37°C, CO<sub>2</sub> 5%, no load, air temperature measured at incubator center  
<sup>4)</sup> Nominal value - Background noise 20dB(A)  
<sup>5)</sup> MCO-170M series requires MCO-170HB-PA, MCO-170EL-PW, MCO-170UVS-PW and MCO-HP-PW for H<sub>2</sub>O<sub>2</sub> Decontamination  
<sup>6)</sup> 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.phcd.com.  
 Performance data herein is based on independent testing at time of publication.

