

MCO-80ICL-PA

# CytoGrow ReachIn

CO<sub>2</sub> Incubator

30.1 cu.ft. | 851 L



MCO-80ICL-PA



The ReachIn CO<sub>2</sub> incubator is designed to save lab space while offering the flexibility to grow your culturing needs. The control system provides a precise and repeatable chamber environment.

## Horizontal Laminar Airflow

The cross shelf, horizontal laminar airflow system promotes optimum temperature uniformity throughout the chamber which contributes to quick temperature recovery after door openings. Side plenum walls are perforated for positive, even airflow. The horizontal airflow allows for full use of solid shelves providing maximum culturing capacity.

## Contamination Control

Incubator interior, shelves and plenum system incorporate inCu-saFe® copper enriched, stainless steel alloy which offers germicidal properties of elemental copper. InCu-saFe prevents corrosion and discoloration of the incubator interior.

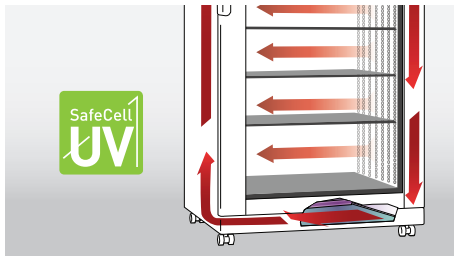
## Control and Monitoring

The incubator functions are managed by a fully integrated microprocessor controller with a range of setpoints and alarms for temperature and CO<sub>2</sub>. Two humidity ranges can be selected. All functions are programmable through the control panel. Independent LED displays for CO<sub>2</sub> and temperature are standard.



### CO<sub>2</sub> Control

IR sensor coupled with the PID microprocessor controller is used to provide superior CO<sub>2</sub> control and exceptionally fast recovery after door openings. Gas system design minimizes CO<sub>2</sub> consumption.



### Optional UV Protection

Located safely below the interior base, the optional patented SafeCell™ UV lamp destroys airborne contaminants as they pass over the humidity reservoir surface. Pathogens introduced during door openings are ultimately removed.



### User Convenience

Softkey eight button menu for intuitive programming. LED indicators monitor incubator functions. Remote alarm contacts provided standard.

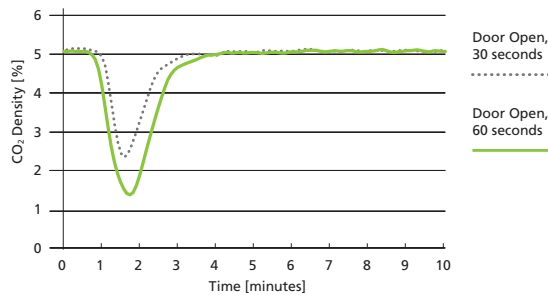
Large Capacity CO<sub>2</sub> Incubator

The MCO-80ICL-PA is ideal for culturing large volumes of biological samples, performing microbiological studies and working with large volume cell apparatus.

Humidity Control

Humidity reservoir heaters are located outside the walls of the reservoir. They are not as susceptible to corrosion and scaling from water as competitive systems are. The unit can be set to normal (80% RH or above) or high (90% RH or above) humidity mode.

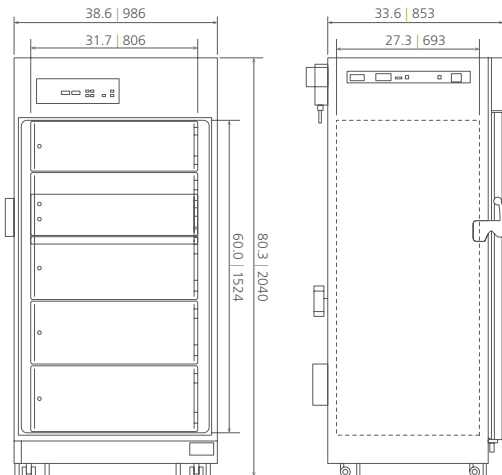
Rapid CO<sub>2</sub> Density Recovery



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

Dimensions

Unit : inch | mm



Model Number	MCO-80ICL-PA		With Optional UV Decontamination
External Dimensions (W x D x H) <sup>1)</sup>	inches   mm	38.6 x 37.2 x 80.3	986 x 945 x 2040
Internal Dimensions (W x D x H)	inches   mm	31.7 x 27.3 x 60.0	806 x 693 x 1524
Volume	cu.ft.   liters	30.1	851
Net Weight	lbs   kg	606	275
<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	± 0.5 (9 point measurement)	
CO <sub>2</sub> Control Range and Fluctuation <sup>3)</sup>	%	0 to 20, ± 0.15	
Humidity Level & Fluctuation	% RH	Normal mode: over 80 (high mode: over 90)	
<b>Control</b>			
Controller		Microprocessor	
Temperature Sensor		Thermistor	
Display	qty	2; LED (1 for temperature and 1 for CO <sub>2</sub> ) readable to 0.1 increments	
Sensor	CO <sub>2</sub>	IR	
<b>Construction</b>			
Exterior Material		Painted steel	
Interior Material		Stainless steel copper enriched alloy	
Outer Door	qty	1; Dual pane heated glass with latch (provision for padlock)	
Shelves	qty	5 (stainless steel copper enriched alloy)	
Shelf Dimension (W x D x H)	inches   mm	30.6 x 25.9 x 0.4   776 x 659 x 10	
Max. Load per Shelf - Distributed Evenly	lbs   kg	66.1   30	
Max. Total Load	lbs   kg	330.0   150	
Max. Shelf Capacity	qty	18	
Access Port / Position	qty	2; right side and left side	
Access Port Diameter	inches   mm	1.6   40 (with silicone (non-VOC) stopper)	
Casters	qty	4; Dual wheel (swivel)	
Leveling Feet	qty	4	
Humidity Reservoir Drain	qty	Drain valve – lower side front (drainage tray provided)	
Humidity Reservoir Material		Stainless steel	
<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
<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>	V-B-R	
Supply Empty	CO <sub>2</sub>	V-B-R	
Door Open		V-B	
Low Water in Humidity Reservoir		V	
<b>Electrical and Noise Level</b>			
Power Supply		115V, 1Ø, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle	
Noise Level <sup>4)</sup>	dB(A)	33	
<b>Outlets</b>			
Chamber Duplex – Vapor Proof Cover	qty	1; 115V 3 amps max rating	
Cabinet Outlet	qty	1; 115V 1 amps max rating	
<b>Options</b>			
SafeCell UV Light System		MCO-80UVS-PA	Included
Humidity Reservoir–Auto Fill System		MCO-80AS-PW	
CO <sub>2</sub> Gas Pressure Regulator	psi	0 – 15; MCO-100L	
Automatic CO <sub>2</sub> Cylinder Changeover System		MCO-80GC-PW	
Inner Door Kit		MCO-80ID-PW	
InCu-safe Solid Shelf with Brackets		MCO-80ST-PW	
InCu-safe Solid Shelf Reinforced with Brackets		MCO-80AICRSLF (Max 3 Shelves)	
Cell Roller Mounting Ramp Kit		MCO-80RBS-PW	
4-20mA Analog Output		MCO-420MA-PW	
<b>Optional Communication System</b>			
Wireless, Cloud-based, Automatic Data Management		LabAlert® Monitoring System	

<sup>1)</sup> Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections. Consult sales rep for doorway entry instructions, less than 37.2".

<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 (in a +20°C to +35°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)

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.

