

MCO-18ACL-PA

# CytoGrow

CO<sub>2</sub> Incubator

6.0 cu.ft. | 170 L



MCO-18ACL-PA



The CytoGrow CO<sub>2</sub> incubator offers a high performance solution for mainstream cell culture applications in the research environment, where precise control and contamination resistance are critical.

## Precise and Repeatable Environment

The patented Direct Heat and Air Jacket conditioning system provides for stable chamber temperature. High density insulation surrounds the incubator chamber to maintain precise temperature and protect against ambient temperature fluctuations.

## Passive Contamination Control

Incubator interior, shelves and shelf rack system incorporate inCu-saFe® copper enriched, stainless steel alloy which offers germicidal properties of elemental copper. This passive contamination control method prevents corrosion and discoloration.

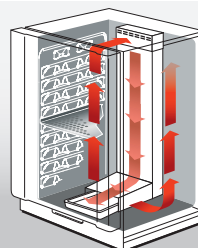
## Control and Monitoring

The CytoGrow incubator utilizes a microprocessor controller and provides accurate digital display of chamber conditions along with an easy to operate control panel with independent LED displays for temperature and CO<sub>2</sub>.



## Superior Growth Environment

The thermal conductivity (TC) sensor provides precise control of CO<sub>2</sub> with fast recovery and reproducible environmental conditions for optimal cell culturing.



## 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.



## User Convenience

The softkey seven button menu for intuitive programming. Alarm notifications warn when functions deviate from setpoints. Remote alarm contacts are provided standard.

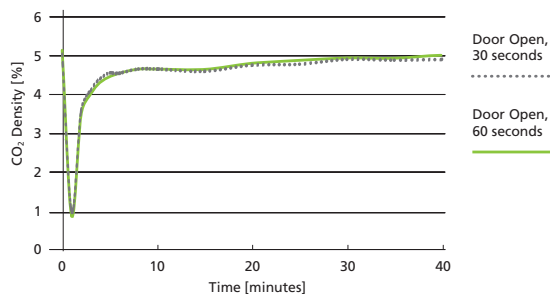


Model MCO-18ACL-PA

## Shelf Channel System

The incubator offers a removable shelf channel system, no tools required, for easy cleaning. Supplied with three shelves standard the incubator holds a maximum of 15 shelves on 1.1" (29 mm) centers.

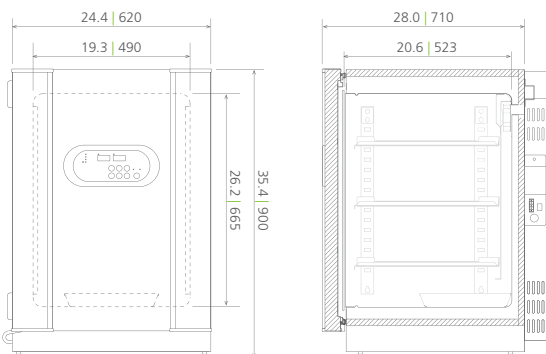
## Rapid CO<sub>2</sub> Density Recovery





The automatic CO<sub>2</sub> control system delivers precise, reliable and repeatable CO<sub>2</sub> control. The CO<sub>2</sub> setpoint is adjustable from 0% to 20%. CO<sub>2</sub> sample port is integrated into the inner glass door.

## Dimensions

Unit : inch | mm



Model Number		MCO-18ACL-PA	With Optional UV Decontamination	
External Dimensions (W x D x H) <sup>1)</sup>	inches   mm	24.4 x 28.0 x 35.4   620 x 710 x 900		
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	6.0   170		
Net Weight	lbs   kg	203   92		
Performance				
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		
CO <sub>2</sub> Control Range and Fluctuation <sup>3)</sup>	%	0 to 20, ± 0.15		
Humidity Level & Fluctuation	% RH	95 at 37°C, ± 5		
Control				
Controller		Microprocessor – softkey 7 button menu		
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>	Thermal conductivity		
Construction				
Exterior Material		Painted steel (rear cover coated steel)		
Interior Material		Stainless steel copper enriched alloy		
Outer Door	qty	1		
Field Reversible Door		Included		
Inner Door	qty	1 (sealing tempered glass with positive latch)		
Humidity Pan	qty	1 (stainless steel)		
Shelves	qty	3 (stainless steel copper enriched alloy)		
Shelf Dimension (W x D x H)	inches   mm	17.7 x 17.7 x 0.5   450 x 450 x 12		
Max. Load per Shelf	lbs   kg	15   7		
Max. Total Load	lbs   kg	61   28		
Max. Shelf Capacity	qty	15		
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	
Alarms (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		
Electrical and Noise Level				
Power Supply	 	115V, 1Ø, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle		
Noise Level <sup>4)</sup>	dB(A)	24		
Stacking Bracket				
Double Stacking Bracket <sup>5)</sup>		Included (allows for stacking two MCO-18 series incubators)		
Options				
SafeCell UV Light System	passive/active	MCO-18UV3-PA	Included	
CO <sub>2</sub> Gas Pressure Regulator	psi	0 – 15; MCO-100L		
InCu-safe Shelf (and Brackets if Required)		MCO-47ST-PW		
InCu-safe Half Tray System		MCO-25ST-PW		
Double Stacking Bracket <sup>5)</sup>		MCO-170SB-PW (allows for stacking MCO-18 series onto MCO-170 series incubator)		
Stacking Plate <sup>5)</sup>		MCO-18SB-PW		
Roller Base		MCO-18RB-PW		
Optional Communication System				
Wireless, Cloud-based, Automatic Data Management		LabAlert® Monitoring System		

<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> 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.