

MCO-171AICUVD-PA

cellIQ™

High Heat Sterilization CO<sub>2</sub> Incubator

5.8 cu.ft. | 165 L



MCO-171AICUVD-PA



Our Cell-IQ™ CO<sub>2</sub> incubators provide optimal cultivation conditions with precise CO<sub>2</sub> concentration, temperature and humidity while remaining easy to clean and operate. During cell culturing, the inCu-saFe® germicidal interior and SafeCell™ UV-LED continuously protect against potential contaminants. A unique dry heat system sterilizes the incubator interior.

### Precise and Repeatable Environment

InCu-saFe and SafeCell UV-LED function together to create contamination control against external microbes. InCu-saFe is comprised of a germicidal copper enriched stainless steel interior. SafeCell UV-LED decontaminates circulated air and the humidity reservoir. A unique heating system and the dual filter infrared sensor precisely control temperature and CO<sub>2</sub> levels, respectively.

### High Heat Sterilization

An integrated auxiliary sterilization system is utilized together with the incubator cultivation heaters to provide an effective, energy efficient sterilization process. Glass wool insulation minimizes heat leakage to adjacent incubators and dramatically reduces elevated external surface temperatures compared to the insulation in our previous, legacy model.

### Improved Use and Maintenance

A color LCD touchscreen allows full control and visibility of the incubator's internal conditions, even with gloved hands. A USB port makes exporting data convenient while an 4-20 mA module allows for constant monitoring of key parameters such as temperature and CO<sub>2</sub>. The incubator has fully rounded corners and shelf channels integrated into the chamber side walls for ease of cleaning and maintenance.



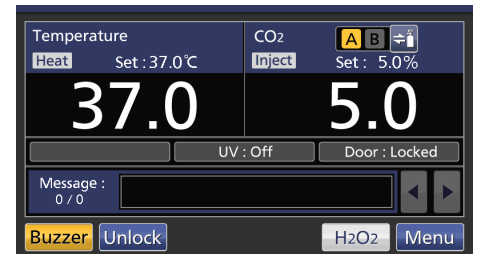
### Optimum Cell Growth

Optimal results and reproducibility make the MCO-171AICUVD-PA incubator ideal for tissue culture research, genomic expression, antibody production, transfection and transduction procedures.



### Eco-Friendly Alternative to Decontamination

The new SafeCell UV-LED technology is an eco-friendly and longer lasting upgrade to our previous legacy UV mercury bulb. This UV-LED bulb eliminates the need for constant replacement and waste associated with traditional HEPA filters.



### Intuitive Usability with Security in Mind

The control panel interface allows for easy programming of temperature, CO<sub>2</sub>, and high heat sterilization cycles. It features a built-in electronic & display lock to help prevent accidental changes to your settings and unwanted door openings.



Model MCO-171AICUVD-PA

### Specialized Heating System

The MCO-171AICUVD-PA is engineered with a primary heater that maintains a precise temperature control over a setpoint range from 5°C above ambient to 50°C as well as 180°C for a high heat dry sterilization cycle with stable temperature over the course of the cycle compared to legacy models. Glass wool cabinet insulation retains high heat sterilization temperature while maintaining safe exterior surface temperatures.

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

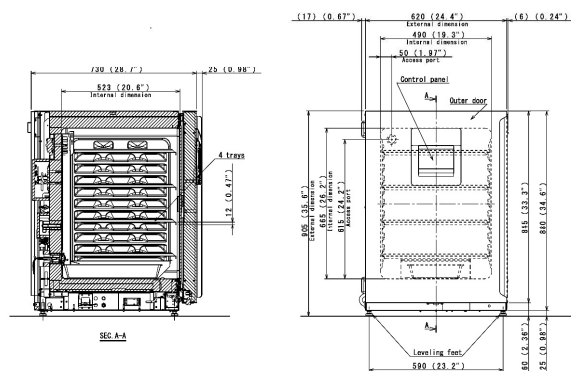
A dual filter infrared sensor signals the microprocessor controller to inject CO<sub>2</sub> to maintain desired setpoint conditions. Sensor response accelerates CO<sub>2</sub> recovery to setpoint without overshoot following frequent door openings and regardless of relative humidity levels.

### Antimicrobial Interior

InCu-saFe copper enriched stainless steel interior surfaces create a germicidal barrier to airborne contaminants that enter the incubator during door openings. The stainless steel material resists corrosion and offers the contamination fighting advantages of copper but without discoloration.

### Dimensions

Unit : inch | mm



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Model Number		MCO-170AICUVDL-PA
External Dimensions (W x D x H) <sup>1)</sup>	inches   mm	24.4 x 29.7 x 35.6   620 x 755 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	5.8   165
Net Weight	lbs   kg	176   80
Performance		
Warranty <sup>2)</sup>		3 years parts and labor, 5 years CO <sub>2</sub> sensor
Temperature Control Range and Variation <sup>3)</sup>	°C	+5 above ambient to 50 °C max, ± 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		
Temperature and CO <sub>2</sub> Controller		Microprocessor PID Control System
Temperature Sensor		Thermistor
Display		Color LCD touchscreen readable in 0.1 °C increments
CO <sub>2</sub> Gas Sensor	CO <sub>2</sub>	Dual wavelength IR
Construction		
Exterior Material		Painted steel (bottom and rear cover coated steel)
Interior Material		Stainless steel copper enriched alloy
Insulation		Glass wool insulation
Outer Door	qty	1 with electronic password protected lock
Field Reversible Door		Included
Inner Door	qty	1 (sealing tempered glass with positive latch)
Humidity Pan	qty	1 (stainless steel)
Shelves	qty	4 (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	61.6   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, Plenum, Shelves	passive	Included (stainless steel copper-enriched alloy)
SafeCell UV-LED Light System	passive/active	Included
Alarms (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)		
Power Failure		R
Temperature Deviation	high & low	V-B-R
Gas Level Deviation	CO <sub>2</sub>	V-B-R
Door Open		V-B
Gas Supply Empty	CO <sub>2</sub>	V-B-R
Electrical and Noise Level		
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P requires NEMA 5-15R receptacle. Max 6.4 A (during cultivation)/Max 8.3 A (during dry heat sterilization).
Noise Level <sup>4)</sup>	dB(A)	25
Options		
Semi-Automatic One Point Gas Calibration Kit		MCO-SG-PW
CO <sub>2</sub> Gas Pressure Regulator	psi	0 – 15; MCO-100L
Automatic CO <sub>2</sub> Cylinder Changeover System		MCO-21GCP-PW
InCu-saFe Shelf		MCO-170ST-PW
InCu-saFe Shelf-Reinforced	lbs   Kg	66   30 MCO-170RT-PW
InCu-saFe Half Tray System		MCO-25ST-PW
Stacking Plate <sup>5)</sup>		MCO-170PS-PW
Double Stacking Bracket <sup>5)</sup>		MCO-170SB-PW
Roller Base		MCO-170RB-PW
Optional Communication System		
4-20mA Analog Output		Included - Temperature 25-50 °C / CO <sub>2</sub> Density 0-20%
Wireless, Cloud-based, Automatic Data Management		LabAlert® Monitoring System*   LabSVIFT® Gen 2

<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  
<sup>4)</sup> Nominal value, background noise 20 dB(A)  
<sup>5)</sup> If stacking two incubators, make sure the double stacking dedicated secure hardware and spacer are used  
<sup>6)</sup> Must be purchased with MTR-480 or other LabSVIFT probes  
 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](mailto:info@us.phcd.com).  
 Performance data herein is based on independent testing at time of publication.