

CytoGrow Optimal Series

Cell Culture CO₂ Incubators



Space Saving Design

CytoGROW Optimal CO₂ incubator offers a high performance solution for mainstream cell culture applications in the research and clinical environment, where precise control and contamination resistance is critical.

Consistent Environment

The patented Direct Heat and Air Jacket system offers optimum temperature control, while CO₂ control and recovery is provided by Panasonic TC sensors.

Optimum Contamination Control

InCu-saFe® interior and optional SafeCell UV offer continuous and preventative contamination control during normal operation.

InCu-saFe®



SafeCell UV



Active Background Control

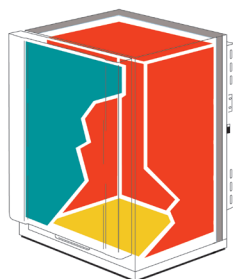


6.0 cu.ft.



Consistent Environment

The patented Direct Heat and Air Jacket system **distributes proportional energy to the interior chamber** through a natural convection air jacket. This is surrounded by high density insulation to protect against ambient temperature fluctuations.



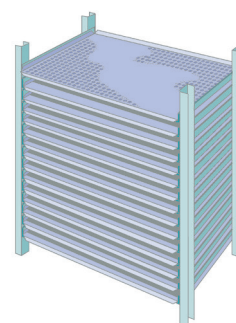
Control & Monitoring

The incubator functions are managed by a **fully integrated microprocessor controller** with a range of setpoints, alarm, and programmable inputs that are established through the use of a function key.



Ergonomic Design

Shelves are easily arranged in 1.1"/29 mm increments. Three shelves are supplied with the MCO-18ACL-PA. Total incubator capacity allows for fifteen shelves.





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CO₂ Recovery

The automatic CO₂ control system delivers precise, reliable, and repeatable CO₂ control. The CO₂ setpoint is adjustable from 0 to 20%. A CO₂ sample port is integrated into the inner door.



InCu-saFe® Interior

Superior contamination control, with an anti-microbial copper alloy stainless steel interior, offers germicidal protection for your cultured cells, while providing a non-corrosive environment.



Consistent Humidity

Humidification is achieved by combined forced-air and natural evaporation method enhanced by the Direct Heat and Air Jacket system. Optical water level indicator warns when the water level reduces in the humidity pan.



SafeCell UV (Optional)

Patented SafeCell UV technology uses a programmable ultraviolet lamp that decontaminates the air and humidity water pan without affecting the cell cultures.



Active Background Contamination Control

InCu-saFe® and SafeCell UV eliminates the need for time consuming and disruptive heat decontamination. It minimizes downtime for total cleaning, when required, while providing continuous, preventive contamination control during normal operation.

Field-Reversible Door

The Field-Reversible Door allows universal installation using the left-hand hinge (standard) or a right-hand hinge modification. The outer door includes a universal finger grip at each side. Mounting holes for hinge hardware are predrilled and capped with easily removable trim plugs. The door heater cable plugs into the alternate connection to complete the change.



MODEL	MCO-18ACL-PA	MCO-18ACUVL-PA
CONTAMINATION CONTROL	InCu-saFe®	InCu-saFe® / SafeCell UV / Active Background Contamination Control
INTERIOR DIMENSIONS	19.3" x 20.6" x 26.2" (490 x 523 x 665 mm)	
EXTERIOR DIMENSIONS	24.4" x 28.0" x 35.4" (620 x 710 x 900mm)	
VOLUME	6.0 Cu.Ft. (170 liters)	
SHELVES	Maximum 15/chamber, 5 supplied standard; 22.8" X17.7"X 0.5" / 579 X 450X 13mm (wXf-bX h) lip, 15.4 lbs./ 7 kg. capacity	
TEMPERATURE CONTROL RANGE	+5°C above ambient to 50°C	
NET WEIGHT	205 lbs. (93 kg.)	
TEMPERATURE CONTROL UNIFORMITY DEVIATION	±0.25°C (in 25°C ambient, setting 37°C, 5% CO ₂ , no load)	
CO ₂ CONTROL RANGE AND DEVIATION	0 to 20% ±0.15% (in 25°C ambient, setting 37°C, 5% CO ₂ , no load)	
INTERIOR HUMIDITY	95% RH at 37°C through evaporation via DHA heating system, optional reflective/deflective optical low-water sensor	
TEMPERATURE AND CO ₂ CONTROL	LED., Setpoint resolution 0.1% and 0.1°C	
OUTER DOOR	Reversible	
ACCESS PORT	Single, 1.18"/30 mm with silicone (non-VOC) stoppers (upper-left rear)	