Panasonic

CytoGrow Optimal Series

Cell Culture CO₂ Incubators



Space Saving Design

CytoGROW Optimal CO_2 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®



Active Background





6.0 cu.ft.



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.







CytoGrow Optimal Series - CO, Cell Culture Incubators



CO, Recovery

The automatic CO_2 control system delivers precise, reliable, and repeatable CO_2 control. The CO_2 setpoint is adjustable from 0 to 20%. A CO_2 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 $^{\otimes}$ 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.



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% CO₂, no load | |
| CO ₂ CONTROL RANGE AND DEVIATION | 0 to 20% ±0.15% (in 25°C ambient, setting 37°C, 5% CO2, no load) | |
| INTERIOR HUMIDITY | 95% RH at 37°C through evaporation via DHA heating system, optional reflective/deflective optical low-water sensor | |
| TEMPERATURE AND CO2 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) | |

