MCO-80IC-PE

IncuSafe

CO_2 Incubators

851 L

IR sensor | inCu saFe | SafeCell UV | ISO cleanroom classified 14644-1 – Part 14

Large-scale cell culture CO_2 Incubator

The IncuSafe MCO-80IC CO_2 Incubator is ideal for culturing high volumes of samples. The incubator has optimum temperature and CO_2 uniformity throughout the chamber and rapid recovery after door openings with exceptionally low CO_2 gas consumption. During cell culturing, the inCu-saFe germicidal interior and SafeCell UV lamp continuously prevent contamination.

Superior Control & Rapid Recovery

The incubator features a cross-shelf, horizontal airflow system that ensures optimal temperature and CO_2 uniformity throughout the chamber, and contributes to rapid recovery after door-opening.

Active Background Decontamination

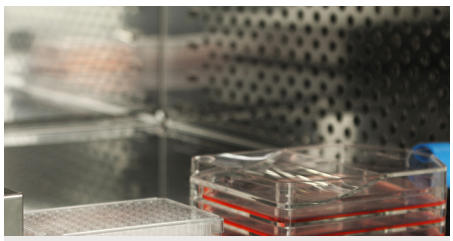
The incubator's interior and plenums are made from inCu-saFe, a germicidal copper-enriched stainless steel alloy. The heated glass door and door frame heater prevent condensation which reduces the risk of contamination.

Large Capacity & Reach-in Design

The MCO-80IC CO_2 Incubator has a large capacity of 851 litres. In addition, it has adjustable shelving, which adds even more flexibility in use. The full-view, double-paned glass door allows clear observation of cultured samples.

Critical Applications

The MCO-80IC is specifically designed for critical large scale applications in hospitals, research and the pharmaceutical / biotechnology industry.



Efficient Workflows

In situ contamination prevention in the incubator enhances protection and helps save time, without affecting cell cultures.

High Volume Culturing

Ideal for culturing high volumes of patient samples and working with large volume cell culture systems.

IncuSafe CO_2 Incubators

MCO-80IC with optional inner door kit (MCO-80ID-PW)

Horizontal laminar airflow system

Horizontal airflow in the incubator helps to maintain uniform air-circulation and even temperature distribution when samples are placed inside. The conditioned air is directed evenly throughout the incubator via perforated side plenums.

IR CO_2 Sensor

The incubator's IR sensor and P.I.D control system enables ultra-fast CO_2 recovery without overshoot, even following multiple door-openings.

Active Background Decontamination

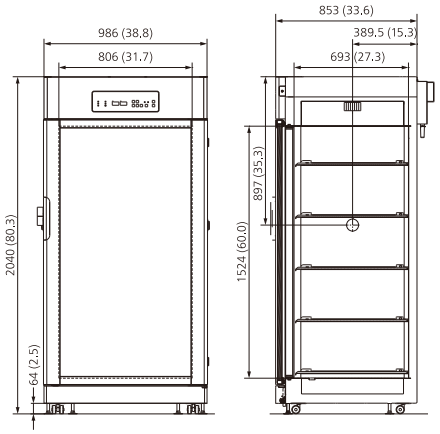
The exclusive inCu-saFe copper-enriched stainless steel alloy interor offers the germicidal properties of copper and the durability of stainless steel.
The optional, isolated, SafeCell UV lamp decontaminates circulating air and water in the humidifying pan, without harming cultured cells.

Humidity Selection

The MCO-80IC can be set to normal or high humidity modes for different application needs. For reliability and reduced maintenance the humidity reservoir heater is located on the outside wall of the reservoir and is not susceptible to corrosion or scaling through contact with water. An optional auto-fill 20 litre secondary water tank (Model MCO-80AS) provides an additional water supply to the humidity reservoir.

Cleanroom-compatibility

The MCO-80IC-PE is classified as ISO class 5.5 for usage in a cleanroom. Cleanroom classification was determined in accordance with ISO 14644-1 - Part 14: Assessment of suitability for use of equipment by airborne particle concentration.



Model Number		MCO-80IC-PE
External Dimensions (W x D x H)[1]	mm	986 x 853 x 2040
Internal Dimensions (W x D x H)	mm	806 x 693 x 1524
Volume	liters	851
Net Weight	kg	275
Classification		
ISO clean room classification [4]		5.5
Performance		
Temperature Control Range & Fluctuation	°C	AT +5 ~ +50, (AT; 20°C to 35°C) ±0.1
Temperature Uniformity[2]	°C	±0.5
CO_2 Control Range & Fluctuation	%	0 ~ 20, ±0.15
Humidity Level & Fluctuation	%RH	Normal mode; >80 | High mode; > 90
Control		
Temperature Sensor		Thermistor
CO_2 Sensor		IR
Display		LED
Construction		
Exterior Material		Painted Steel
Interior Material		Stainless Steel Copper-Enriched Alloy
Insulation Material		Rigid polyurethane foamed-in place (CFC-Free)
Heating Method		Horizontal laminar airflow system
Outer Door	qty	1 double paned glass
Outer Door Lock		N/A
Shelves	qty	5 x Stainless Steel Copper-enriched Alloy
Shelf Dimensions (W x D x H)	mm	776 x 659 x 10
Max. Load per Shelf	kg	30
Max. Total Load	kg	150
Max. Shelf Capacity	qty	37
Access Port	qty	2
Access Port Position		Left and right hand side
Access Port Diameter	Ø mm	40
Alarms		(R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)
Power Failure		R
Out of Temperature Setting		V-B-R
High Temperature		V-B-R
Out of CO_2 Setting		V-B-R
Door open		V
Water level sensor		V
Electrical and Noise Level		
Power Supply	V	230
Frequency	Hz	50
Noise Level[3]	dB	33
Options		
SafeCell UV® System		MCO-80UVS-PE
Multiple Inner Doors		MCO-80ID-PW (5 small doors)
CO_2 Gas Pressure Regulator		MCO-010R-PW
Automatic CO_2 Cylinder Changeover System		MCO-80GC-PW
Automatic water supply system kit		MCO-80AS-PW
InCu-saFe® shelf and brackets		MCO-80ST-PW
Roller bottle rack mounting kit		MCO-80RBS-PW

Appearance and specifications are subject to change without notice.

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections.
[2] Ambient temp 25°C, settings 37°C, CO_2 5%, no load
[3] Nominal value
[4] Cleanroom classification in accordance with ISO 14644-1 - Part 14: Assessment of suitability for use of equipment by airborne particle concentration.

PHC Europe B.V.
Nijverheidsweg 120 | 4879 AZ Etten-Leur | Netherlands
T: +31 (0) 76 543 3839 | F: +31 (0) 76 541 3732
www.phchd.com/eu/biomedical