PHCbi

MCO-18AC-PE

Incu*Safe*

CO_2 Incubators

170 L

DIRECT HEAT system · **inCu saFe** · **SafeCell UV**

The high-performance solution for mainstream applications

The Incu*Safe* MCO-18AC CO_2 Incubator offers a controlled and regulated environment and features all of the essential technologies that you would expect in an **Incu*Safe*** CO_2 Incubator. This design approach fulfills the needs within a broad range of mainstream applications.
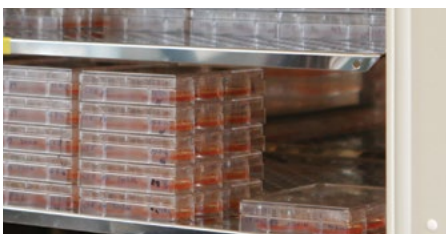
Controlled & Regulated Environment

The Direct Heat and Air Jacket System delivers excellent temperature uniformity throughout the chamber whilst the TC sensor provides accurate control of CO_2 level.

Active Background Decontamination

The exclusive inCu-saFe germicidal interior and optional SafeCell UV lamp both function to actively prevent contamination within the incubator.

Monitoring & Control

The incubator's functions are managed by a fully integrated controller with a range of setpoints, alarms and programmable inputs.
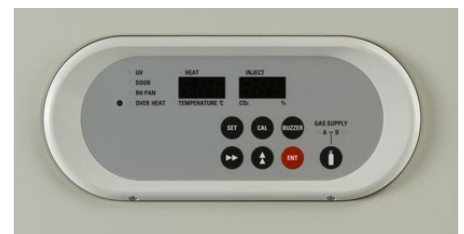

Regulated cell growth
This Incubator is ideal for long-term cultivation projects providing a regulated environment for successful cell growth, optimal results and reproducibility.

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

Ease of Use
Control and confirmation of internal conditions, such as temperature and CO_2 level, are easy with the simple to use controller.

PHC Europe B.V.
Formerly Known as Panasonic Biomedical Sales Europe

IncuSafe CO$_2$ Incubators

Direct Heat and Air Jacket System

Achieves accurate, uniform, and highly responsive temperature control within the chamber, providing exceptional uniformity and rapid recovery after door-opening.

TC CO$_2$ Sensor

The Incubator's CO$_2$ control system, with TC sensor, delivers reliable and repeatable CO$_2$ control.
The CO$_2$ setpoint is adjustable from 0 to 20%.
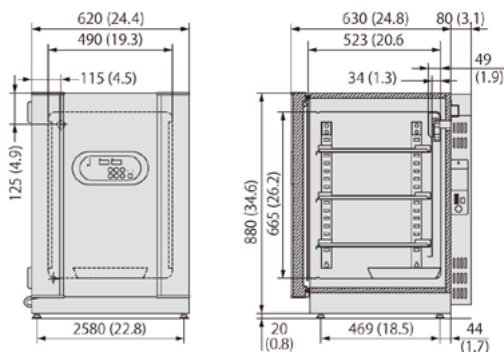A CO$_2$ sample port is integrated into the inner door.

Active Background Decontamination

The exclusive inCu-saFe copper-enriched stainless steel alloy interior 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.

Consistent Humidity

Humidification is achieved through the combined action of forced-air circulation and a reliable, natural, evaporation method.
An optical water level sensor* warns when the water level drops in the humidfying pan.

*Supplied with the optional UV lamp.

Model Number		MCO-18AC-PE	MCO-18ACUV-PE
External Dimensions (W x D x H)[1]	mm	620 x 710 x 900	
Internal Dimensions (W x D x H)	mm	490 x 523 x 665	
Volume	liters	170	
Net Weight	kg	92	
Performance			
Temperature Control Range & Fluctuation	°C	AT +5 ~ +50, ±0.1	
Temperature Uniformity[2]	°C	±0.25	
CO$_2$ Control Range & Fluctuation[3]	%	0 ~ 20, ±0.15	
Humidity Level & Fluctuation	%RH	95, ±5	
Control			
Temperature Sensor		Thermistor	
CO$_2$ Sensor		TC	
Display		LED	
Construction			
Exterior Material		Painted Steel	
Interior Material		Stainless Steel Copper-Enriched Alloy	
Insulation Material		Rigid polyurethane foamed-in place	
Heating Method		Direct Heat & Air Jacket System	
Outer Door	qty	1	
Field Reversible Door		Included	
Inner Door	qty	1	
Shelves	qty	3 x Stainless Steel Copper-enriched Alloy	
Shelf Dimensions (W x D x H)	mm	450 x 450 x 12	
Max. Load per Shelf	kg	7	
Max. Shelf Capacity	qty	15	
Access Port	qty	1	
Access Port Position		Rear Upper Left	
Access Port Diameter	Ø mm	30	
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	
Electrical and Noise Level			
Power Supply	V	230	
Frequency	Hz	50	
Noise Level[4]	dB	24	
Options			
SafeCell UV® System		MCO-18UVS3-PE[4]	Standard
Multiple Inner Doors		MCO-18ID-PW	
CO$_2$ Gas Pressure Regulator		MCO-100L-PW	
Automatic CO$_2$ Cylinder Changeover System		MCO-21GC-PW	
InCu-saFe® Shelf		MCO-47ST-PW	
InCu-saFe® Half Tray System		MCO-25ST-PW	
Stacking Kit		Standard	
Roller Base		MCO-170RB-PW	
Optional communication systems[5]			
Ethernet interface (LAN)		MTR-L03-PW	
Digital interface (RS232C/RS485)		MTR-480-PW	

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections
[2,3] Ambient temperature 25°C, setting 37°C, CO$_2$ 5%, no load
[4] Includes humidifying pan cover and water level sensor
[5] Nominal value

[6] MCO-18AC series can only be fitted with one communications interface.
*If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used