Panasonic

CO_2 incubators

Optimising cell culture productivity

MCO-230AIC

Optimum cell growth

Panasonic MCO-230AIC CO_2 incubators offer outstanding quality in performance for successful cell growth.

Discovery powered by precision

Optimising cell culture productivity

We understand that creating successful cell cultures requires a CO_2 incubator that offers the highest levels of precision, security and ease of use. Our latest MCO-230AIC CO_2 incubators with Panasonic's innovative technologies offer outstanding quality in performance, maximise cell culture productivity and provide optimum results and reproducibility.

Providing a precisely controlled environment for sensitive cell cultures

Delivering long-term performance, optimal cell viability and successful experiments, each Panasonic incubator provides precise control of CO_2 concentration and temperature, while remaining easy to operate and maintain. The MCO-230AIC CO_2 incubators support a reliable, stable cell culture environment across all shelf positions, meaning each and every cell is safely maintained under ideal conditions.

DHA Direct heat and air jacket system

- Provides high precision temperature control for advanced uniformity and rapid recovery after door opening.

NEW **PID Control of CO_2 and temperature**

- Precise control guarantees exceptional performance and optimum results.

NEW **Dual IR CO_2 sensor**

- Minimises the effect of temperature and humidity changes during and after door openings for outstanding CO_2 control and fast recovery.

Optimum protection for your cell cultures

We know how valuable your cultures can be. Our advanced contamination control systems are designed to prevent the loss of your irreplaceable cell cultures with continuous background contamination control, all supported by a new security system.

InCu saFe® copper-enriched stainless steel interior

- Protects cell cultures by eliminating surface contamination sources and mitigating the effect of airborne contaminants.

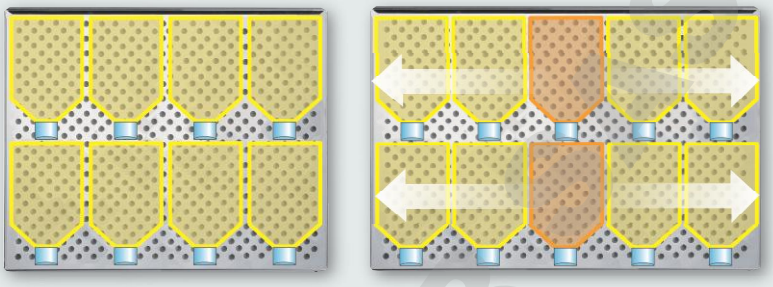
Optional Safe Cell UV® with NEW increased UV lamp life

- Sterilises airborne and water pan contamination with 2.5 times longer lamp life.[1]

NEW **Optional electric door lock**

- Provide enhanced security for your cultures and their conditions with an optional automatic electric door lock with password. Multiple registered users can have access with their individual ID and password, ensuring that valuable cell lines are only accessed by authorized persons.

1) Compared to the previous Panasonic MCO-20AIC CO_2 incubator.



Increasing work efficiency

We have designed our incubators with ease of use and efficiency in mind. By delivering a user friendly cell culture incubator with rapid systems and processes, Panasonic can help make your work as simple as possible.

NEW More space for more cultures

- In a laboratory environment it is important to make the most of all the space available. With new integrated shelf supports, the Panasonic MCO-230AIC CO_2 incubators provide space for up to 25% more culture vessels[2].

NEW Integrated shelf supports

- Save valuable time and reduce the risk of contamination with an easy to clean incubator interior featuring fully rounded corners and integrated shelf supports.

NEW USB port

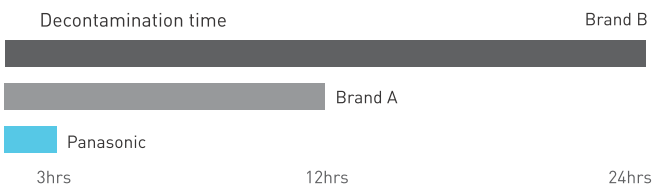
- Optimise cell culture protocols and adhere to standard operating procedures by conveniently transferring data to a USB memory stick to pass on to a PC. Logged parameters include chamber temperature, CO_2 level, door open status and alarms.

NEW Full colour LCD touch screen

- The user friendly full colour LCD touch screen provides clear information of incubator status with easy access to controller functions for fast, convenient set-up.

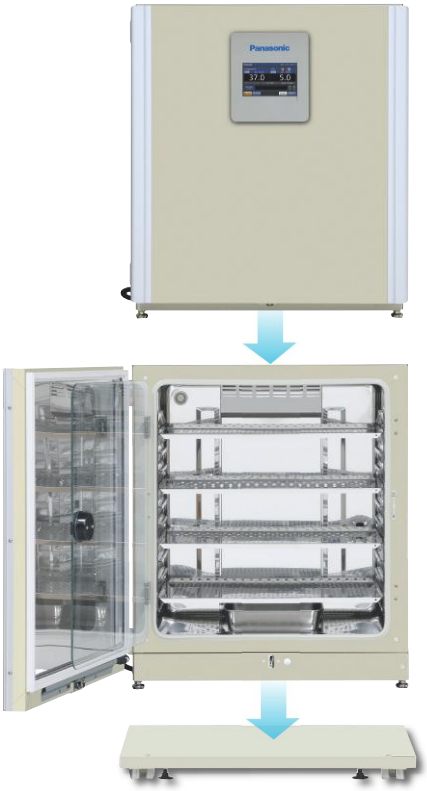
NEW Rapid sterilisation cycle

- Panasonic's H_2O_2 vapour sterilisation cycle reduces downtime to less than 3 hours for complete, validatable decontamination for increased productivity.



2) The MCO-230AIC CO_2 incubators can accommodate 25% more BD Falcon 225 cm^2 flasks per shelf compared to the previous Panasonic MCO-20AIC CO_2 incubator.

Specifications and options



- The MCO-230AIC is designed for stacking, allowing one unit to be positioned on top of another, doubling interior volume without additional floor space.
- An optional roller base is available for stacked installations for easier mobility.

See table below for details.

Double stacking table

Spacer for double-stacking		Lower unit MCO-230AIC
Upper unit	MCO-230AIC	MCO-170PS-PW
	MCO-19AIC(M)/MCO-170AIC MCO-18AC	MCO-230SB-PW
	MCO-20AIC	MCO-230SB-PW

The MCO-230AIC can also be stacked on top of a MCO-20AIC by using the stacking plate MCO-230SB-PW.

CE 0123 The MCO-230AIC series are certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC) for medical purposes of culturing cells, tissues, organs and embryos.

MCO-230AIC CO_2 incubators

Characteristics

V = Visual alarm
B = Buzzer alarm
R = Remote alarm

MODEL		MCO-230AIC-PE (standard)	MCO-230AICUV-PE (standard + UV)	MCO-230AICUVH-PE (standard + UV + H_2O_2)
Dimensions				
External dimensions (WxDxH)[1]	mm	770 x 730 x 905		
Internal dimensions (WxDxH)	mm	643 x 523 x 700		
Volume	litres	230		
Net weight (approx)	kg	90		
Performance				
Temperature control range and fluctuation	°C	AT +5 ~ +50, ±0.1		
Temperature uniformity[2]	°C	±0.25		
CO_2 control range and fluctuation	%	0 ~ 20, ±0.15		
Humidity level and fluctuation	%RH	95, ±5		
Control				
Temperature sensor		Thermistor		
CO_2 sensor		Dual IR		
Display		LCD touch screen		
Construction				
Exterior material		Painted steel (rear cover not painted)		
Interior material		SS copper alloyed		
Insulation material		Extruded polystyrene		
DHA heating system		Y		
Outer door	qty	1		
Outer door lock		option	option	standard
Reversible door		Y		
Inner door	qty	1		
Shelves	qty	4		
Max. load per shelf	kg	7		
Max. total load	kg	20		
Max. shelf capacity	qty	10		
Access port	qty	1		
- position		Rear		
- diameter	Ø mm	30		
Alarms				
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-B		
Electrical and noise level				
Power supply	V	230		
Frequency	Hz	50		
Noise level[3]	dB	25		
Options				
SafeCell UV® system		MCO-170UVS-PE[4]	standard	standard
H_2O_2 decontamination board		MCO-170HB-PE[4]	MCO-170HB-PE[4]	standard
Electric door lock with password		MCO-170EL-PW[4]	MCO-170EL-PW[4]	standard
H_2O_2 vapour generator		MCO-HP-PW[4]		
H_2O_2 reagent, pack of 6 bottles		MCO-H2O2-PE		
CO_2 gas pressure regulator		MCO-100L-PW		
Automatic CO_2 cylinder changeover system		MCO-21GC-PW		
Semi-automatic one point gas calibration kit		MCO-SG-PW		
InCu saFe® shelf		MCO-230ST-PW		
InCu saFe® half tray system		MCO-35ST-PW		
Double stacking bracket *		MCO-170PS-PW		
Stacking plate *		MCO-230SB-PW		
Roller base		MCO-230RB-PW		
Optional communication systems[5]				
Ethernet interface (LAN)		MTR-L03-PW		
Digital interface (RS232C/RS485)		MTR-480-PW		

Notes:

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections
- See dimensions drawings on website for full details

[2] Ambient temp 23°C, setting 37°C, CO_2 5%, no load

[3] Nominal value

[4] MCO-230AIC series requires MCO-170HB-PE, MCO-170EL-PW, MCO-HP-PW and SafeCell UV option for H_2O_2 decontamination

[5] MCO-230AIC 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. (please see double stacking table)

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for more information:

www.biomedical.panasonic.eu