

Panasonic

CO₂ incubators

Optimising cell culture productivity
MCO-170AIC



Optimum cell growth

Panasonic MCO-170AIC CO₂ 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 CO₂ incubator that offers the highest levels of precision, security and ease of use.

Our latest MCO-170AIC CO₂ 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 CO₂ concentration and temperature, while remaining easy to operate and maintain. The MCO-170AIC CO₂ 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 Improved insulation performance and lower running costs

- Delivers improved culture conditions and a reduction in electricity costs.¹

PID Control of CO₂ and temperature

- Precise control guarantees exceptional performance and optimum results.

Dual IR CO₂ sensor

- Minimises the effect of temperature and humidity changes during and after door openings for outstanding CO₂ 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.²

NEW Optional electric door lock

- Provide enhanced security for your cultures and their conditions with an optional automatic electric door lock with password.



1) Compared to previous Panasonic 170 litre CO₂ incubators measured under equivalent operating conditions. (AT 20°C-23°C)

2) Compared to previous Panasonic 170 litre CO₂ incubators.

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

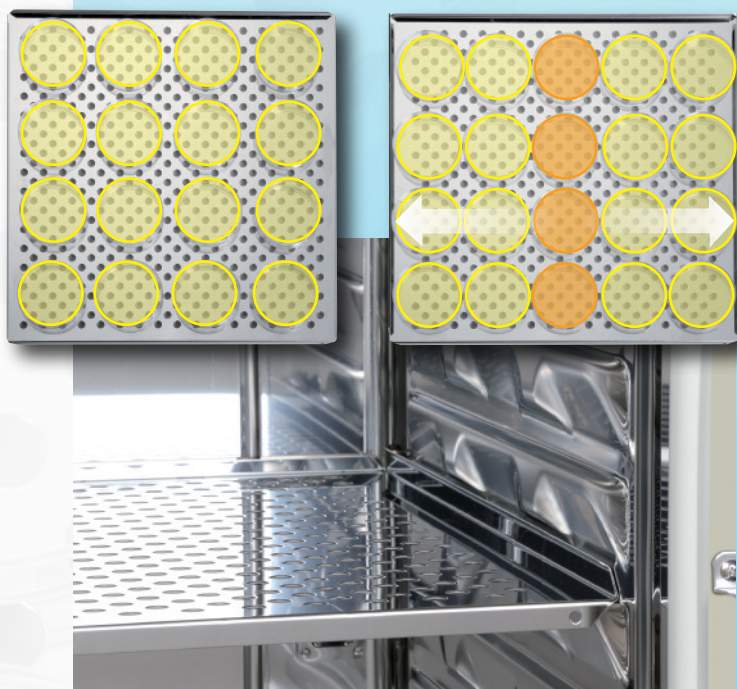
- In a laboratory environment it is important to make the most of all the space available. With new integrated shelf supports, the Panasonic MCO-170AIC CO₂ incubators provide space for up to 25% more culture vessels³.

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.

Rapid sterilisation cycle

- Panasonic's H₂O₂ vapour sterilisation cycle reduces downtime to less than 3 hours for complete, validatable decontamination for increased productivity.



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.

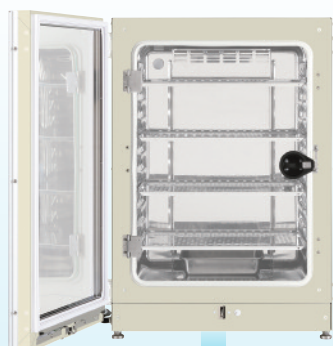
NEW USB port

- 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, CO₂ level, door open status and alarms.



³ The MCO-170AIC CO₂ incubators can accommodate 25% more 90mm dishes per shelf compared to previous Panasonic 170 litre CO₂ incubators.

Specifications and options



- The MCO-170AIC 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		Upper unit
		MCO-170AIC
Lower unit	MCO-170AIC	MCO-170PS-PW
	MCO-19AIC(M)	MCO-170SB-PW
	MCO-18AC	
	MCO-20AIC	MCO-170SB-PW

MCO-170AIC CO ₂ incubators				
Characteristics PUF = Rigid polyurethane foamed insulation V = Visual alarm B = Buzzer alarm R = Remote alarm				
MODEL		MCO-170AIC-PE (standard)	MCO-170AICUV-PE (standard + UV)	MCO-170AICUVH-PE (standard + UV + H ₂ O ₂)
Dimensions				
External dimensions (W x D x H)	mm	620 x 710 x 900		
Internal dimensions (W x D x H)	mm	490 x 523 x 665		
Volume	litres	165		
Shelves	qty	4		
Net weight (approx)	kg	80		
Technical Data				
Power supply	V	230		
Frequency	Hz	50		
Noise level ¹⁾	dB	29		
Insulation material		PUF		
Performance				
Temperature sensor		Thermistor		
CO ₂ sensor		Dual IR		
Temperature control range	°C	+5 above ambient to 50°C (in a 5°C to 35°C ambient)		
Temperature fluctuation	°C	±0.1		
Temperature uniformity	°C	±0.25 ²⁾		
CO ₂ control range and fluctuation	%	0 ~ 20, ±0.15 ²⁾		
Humidity level	%RH	95, ±5		
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		
Options				
Safe Cell UV® system		MCO-170UVS-PE	standard	standard
H ₂ O ₂ Decontamination board		MCO-170HB-PE	MCO-170HB-PE	standard
Electric door lock with password		MCO-170EL-PW	MCO-170EL-PW	standard
H ₂ O ₂ vapour generator		MCO-HP-PW		
H ₂ O ₂ reagent		MCO-H202-PE		
Double stacking bracket *		MCO-170PS-PW		
Stacking plate *		MCO-170SB-PW		
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-170ST-PW		
InCu saFe® half tray system		MCO-25ST-PW		
Roller base		MCO-170RB-PW		
Optional communication systems ³⁾				
Ethernet interface (LAN)		MTR-L03-PW		
Digital interface (RS232C/RS485)		MTR-480-PW		
Analogue interface (4-20mA)		MCO-420MA-PW		

* If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used. (see options and double stacking table)

Notes: 1) Nominal value
2) Ambient temp 23°C, setting 37°C, CO₂ 5%, no load
3) MCO-170AIC can only be fitted with one communications interface



The MCO-170AIC 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.

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for more information:

www.biomedical.panasonic.eu

Appearance and specification are subject to change without notice.