



## CO<sub>2</sub> Incubators

165 L



### Optimising cell culture outcomes and reproducibility

InCu-saFe CO<sub>2</sub> Incubators provide precise control of CO<sub>2</sub> concentration and accurate, uniform, and highly responsive temperature control within the chamber. During cell culturing, the inCu-saFe germicidal interior and optional SafeCell UV lamp continuously prevent contamination.

#### Precise & Regulated Environment

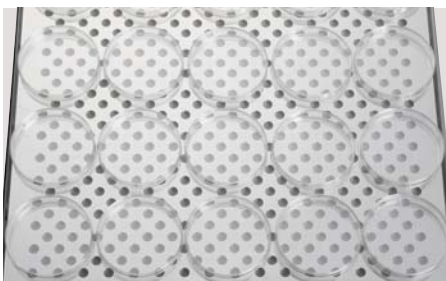
InCu-saFe and SafeCell UV both function to prevent contamination. Direct Heat System and melamine foam insulation ensure optimal temperature distribution throughout the chamber while the Dual IR sensor controls the CO<sub>2</sub> level.

#### Dual Heat Sterilisation

Dual heat sterilisation utilises the incubator's two heaters during the 180°C sterilisation process, which takes 11 hours. Because there is no effect on temperature inside stacked incubators due to low heat dissipation, cell culturing can continue uninterrupted.

#### Improved Use & Maintenance

A colour LCD touchscreen panel allows full control, even with gloved hands. Transfer of data is easy via a USB port. The easy-to-clean incubator interior features fully rounded corners and integrated shelf supports.



#### Optimum cell growth

Optimal results and reproducibility make these incubators ideal for tissue research, genomic expression, antibody production and transfection- and transduction procedures.



#### Efficient workflows

No need to remove inner parts or recalibrate after sterilisation, therefore laboratory processes are more efficient with less incubator downtime.



#### Intuitive Usability

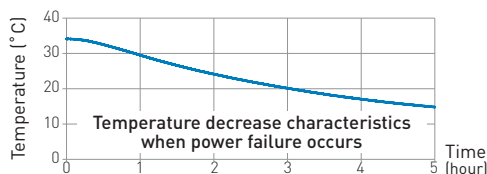
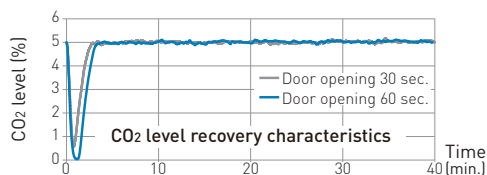
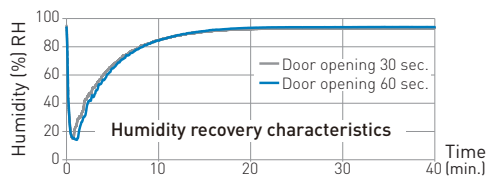
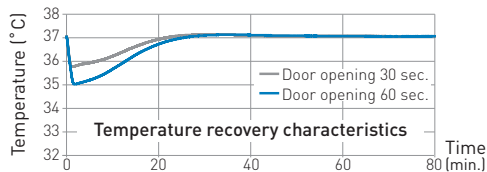
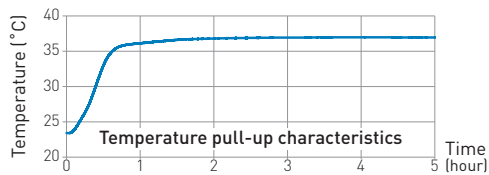
Easy control and visibility of the internal conditions such as CO<sub>2</sub> level and temperature.

**Dual IR CO<sub>2</sub> Sensor** The incubator's PID controlled Dual IR Sensor enables ultra-fast CO<sub>2</sub> recovery without overshoot even following multiple door-openings.

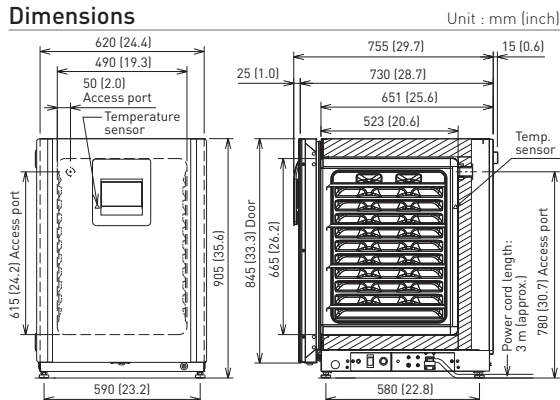
**Active Background Decontamination** The inCu-saFe copper-enriched stainless steel alloy interior offers the germicidal properties of copper as well as the corrosion resistance of stainless steel. The optional, isolated, SafeCell UV lamp decontaminates circulating air and water in the humidifying pan, without harming cultured cells.

**Simultaneous use of stacked units** The melamine foam insulation limits heat dissipation during dry heat sterilisation. This means that cell culture can continue uninterrupted in incubators stacked on those actively running sterilisation.

## Performance Data



## Dimensions



Model Number	MCO-170AICUVDL-PA	MCO-170AICD-PK MCO-170AICUVD-PK	MCO-170AICD-PE MCO-170AICUVD-PE
External dimensions (W x D x H) <sup>1)</sup>	mm	620 x 755 x 905	
Internal dimensions (W x D x H)	mm	490 x 523 x 665	
Volume	litres	165	
Net weight	kg	79 [MCO-170AICD] / 80 [MCO-170AICUVDL/MCO-170AICUVD]	
<b>Performance</b>			
Temperature control range & fluctuation	°C	AT +5 to +50, ±0.1	
Temperature uniformity <sup>2)</sup>	°C	±0.25	
CO <sub>2</sub> control range & fluctuation <sup>2)</sup>	%	0 to 20, ±0.15	
Humidity level & fluctuation	% RH	95, ±5	
<b>Control</b>			
Temperature sensor		Thermistor	
CO <sub>2</sub> sensor		Dual IR	
Display		Colour LCD touchscreen	
<b>Construction</b>			
Exterior material		Painted steel (rear cover not painted)	
Interior material		Stainless steel copper-enriched alloy	
Insulation material		Melamine resin foam	
Heating method		Heater jacket	
Sterilisation method <sup>3)</sup>		Dry heat sterilisation, 180°C, 11 hours	
Outer door	qty	1	
Electric door lock with password		Standard	
Field reversible door		Included	
Inner door		1	
Shelves		4 x Stainless steel copper-enriched alloy	
Shelf dimensions (W x D x H)	mm	470 x 450 x 12	
Max. load per shelf	kg	7	
Access port	qty	1	
Access port position		Rear upper left	
Access port diameter	∅ mm	30	
<b>Alarms</b> (V = Visual Alarm, B = Buzzer Alarm, R = Remote Alarm)			
Power failure		R	
Temperature deviation		V-B-R	
High temperature		V-B-R	
CO <sub>2</sub> deviation		V-B-R	
Door open		V-B	
<b>Electrical and Noise Level</b>			
Power supply	V	110-120	220
Frequency	Hz	60	60
Noise level <sup>4)</sup>	dB [A]	25	
<b>Options</b>			
SafeCell UV system		MCO-170UVSD-PE (MCO-170AICUVD Standard equipment)	
CO <sub>2</sub> gas pressure regulator		MCO-100L-PW	
Automatic CO <sub>2</sub> 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	
Double stacking bracket <sup>5)</sup>		MCO-170PS-PW	
Stacking plate <sup>5)</sup>		MCO-170SB-PW	
Roller base		MCO-170RB-PW	
<b>Optional Communication Systems<sup>6)</sup></b>			
Ethernet interface (LAN)		MTR-L03-PW	
Digital interface (RS232C/RS485)		MTR-480-PW	
Analogue interface (4-20 mA)		MCO-420MA-PW	

1) Exterior dimensions of main cabinet only, excluding handle and other external projections. 2) Ambient temperature 23°C, setting 37°C, CO<sub>2</sub> 5%, no load. 3) Dry heat sterilisation can be performed only for the chamber and inner attachments with standard specifications, not for any other objects. 4) Nominal value. 5) If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used. 6) Only for the Data acquisition system MTR-5000 user. MCO-170AICD series can only be fitted with one communications interface.  
**Caution:** Panasonic Healthcare Co., Ltd. guarantees this product under certain warranty conditions. However, please note that Panasonic Healthcare Co., Ltd. shall not be responsible for any loss or damage to the contents of the product.

## Preservation, Culturing, Drying, and Sterilization Equipment



The management of the design, development, production, sales support, and servicing of the above.

Panasonic Healthcare Co., Ltd. Biomedical Division

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Panasonic Healthcare Co., Ltd. Biomedical Division, the producer of Incubators, is certified by TÜV SÜD for the product quality management system.



Panasonic Healthcare Co., Ltd. Biomedical Division is certified for:

**Environmental management system: ISO14001**

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