



MCO-170AICUVD

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

165 L



\*Standard for Model No. including UV

### 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

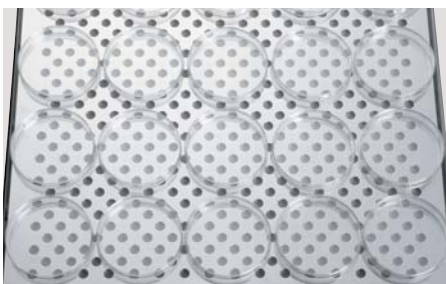
InCu-saFe and SafeCell UV both function to prevent contamination. Direct Heat System and melamine foam insulation ensure optimal temperature distribution throughout the chamber while the Dual IR sensor controls the CO<sub>2</sub> level.

#### 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

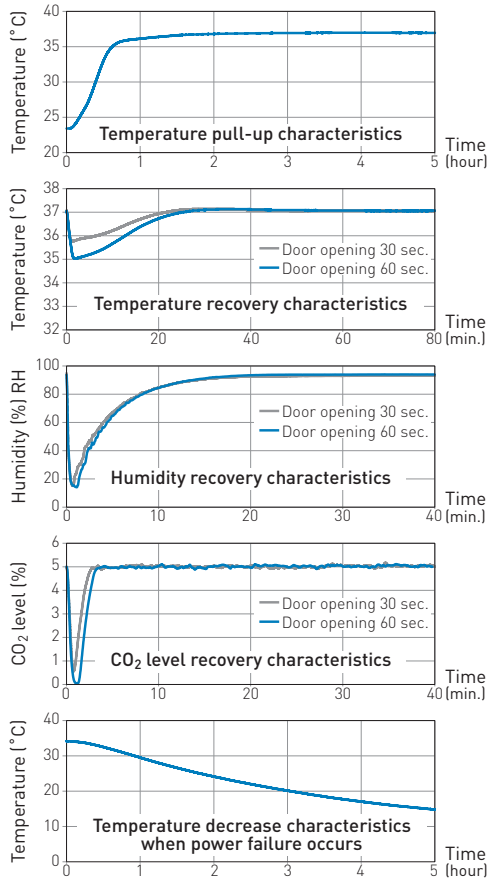
Easy control and visibility of the internal conditions such as CO<sub>2</sub> level and temperature.

**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.

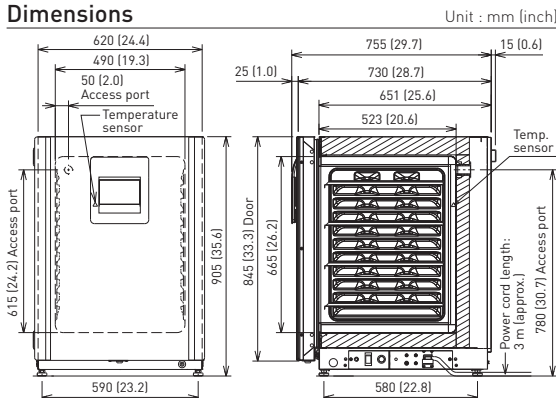
**Active Background Decontamination** The inCu-saFe copper-enriched stainless steel alloy interior offers the germicidal properties of copper as well as the corrosion resistance of stainless steel. The optional, isolated, SafeCell UV lamp decontaminates circulating air and water in the humidifying pan, 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-170AICDL-PE MCO-170AICUVDL-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-170AICUVD/MCO-170AICUVDL]			
<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	475 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>		MCO-170AICUVDL-PA	MCO-170AICD-PK MCO-170AICUVD-PK	MCO-170AICD-PE MCO-170AICDL-PE MCO-170AICUVDL-PE
Power supply	V	110-120	220	220-240
Frequency	Hz	60	60	50 / 60
Noise level <sup>4)</sup>	dB [A]	25		
<b>Options</b>				
UV system set	MCO-170UVSD-PE (MCO-170AICUVD/MCO-170AICUVDL Standard equipment)			
Gas regulator	MCO-010R-PW			
Gas auto changer	MCO-21GC-PW			
STD gas auto calibration kit	MCO-SG-PW			
Tray	MCO-170ST-PW			
Half tray	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</b>				
Ethernet interface (LAN) <sup>6)</sup>	MTR-L03-PW			
Digital interface (RS232C/RS485) <sup>6)</sup>	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:** PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents of the product.



### Preservation (freezers, refrigerators) and Culturing (incubators) Equipment

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

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PHC Corporation, Biomedical Division is certified for:

**Environmental management system: ISO14001**

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