

## IncuSafe

CO<sub>2</sub> Incubators



MCO-170AICD-PE

### Optimising cell culture outcomes and reproducibility

IncuSafe 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 SafeCell UV lamp work continuously to prevent contamination.

#### Precise & Regulated Environment

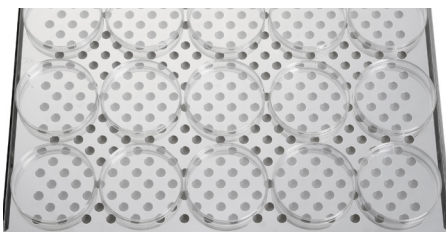
InCu-saFe and SafeCell UV both function to prevent contamination. The direct heat system and melamine foam insulation ensure optimal temperature distribution throughout the chamber whilst the Dual IR sensor controls the CO<sub>2</sub> level.

#### Dual Heat Sterilisation

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

#### Ease of Use & Maintenance

A full colour LCD touch-screen 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

Outstanding quality and performance for successful cell growth, optimal results and reproducibility. Perfect fit for the strictest and most sensitive protocols.



#### Efficient Workflows

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



#### Intuitive Usability

Control and visibility of the internal conditions, such as CO<sub>2</sub> level and temperature, is easy with the MCO-170AICD CO<sub>2</sub> incubator.

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



## Melamine Foam Insulation and Direct Heat

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

## Dual IR CO<sub>2</sub> Sensor

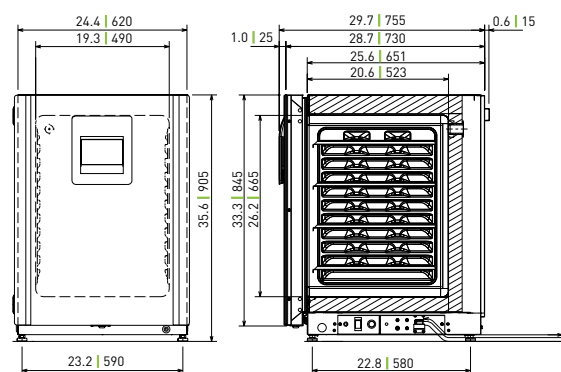
The incubator's Dual IR sensor and P.I.D control enables ultra-fast CO<sub>2</sub> recovery without overshoot, even following multiple door-openings.

## Active Background Decontamination

The inCu-saFe copper-enriched stainless steel alloy interior offers the germicidal properties of copper 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.

## 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 with those actively running sterilisation.



EEA, Switzerland and Turkey only



### For medical use

The MCO-170AICD series is certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC). Applicable countries: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Liechtenstein, Luxembourg, Malta, the Netherlands, Spain, Switzerland and the United Kingdom only



### For laboratory use

Applicable countries: EEA countries, Switzerland and Turkey

| Model Number   | 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   | liters         | 165                                       |
| Net Weight   | kg             | 79   80                                   |
| <b>Performance</b>   |                |   |
| Temperature Control Range & Fluctuation                              | °C             | AT +5 ~ +50, ±0.1                         |
| Temperature Uniformity <sup>2)</sup>                                 | °C             | ±0.25                                     |
| CO <sub>2</sub> Control Range & Fluctuation                          | %              | 0 ~ 20, ±0.15                             |
| Humidity Level & Fluctuation   | %RH            | 95, ±5                                    |
| Sterilisation Method   |                | Dry heat sterilisation, 180°C, 11 hours   |
| <b>Control</b>   |                |   |
| Temperature Sensor   |                | Thermistor                                |
| CO <sub>2</sub> Sensor   |                | Dual IR                                   |
| Display  |                | LCD Touch Screen                          |
| <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                             |
| Outer Door   | qty            | 1   |
| Outer Door Lock  |                | Standard                                  |
| Field Reversible Door  |                | Included                                  |
| Inner Door   | qty            | 1   |
| Shelves  | qty            | 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   |
| Max. Shelf Capacity  | qty            | 10  |
| Access Port  | qty            | 1   |
| Access Port Position   |                | Rear Upper Left                           |
| Access Port Diameter   | ∅ mm           | 30  |
| <b>Alarms [R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm]</b> |                |   |
| Power Failure  |                | R   |
| Out of Temperature Setting   |                | V-B-R                                     |
| High Temperature   |                | V-B-R                                     |
| Out of CO <sub>2</sub> Setting                                       |                | V-B-R                                     |
| Door open  |                | V-B                                       |
| <b>Electrical and Noise Level</b>                                    |                |   |
| Power Supply   | V              | 230                                       |
| Frequency  | Hz             | 50  |
| Noise Level <sup>3)</sup>  | dB             | 25  |
| <b>Options</b>   |                |   |
| SafeCell UV® System  | MCO-170UVSD-PE | Standard                                  |
| Electric Door Lock with Password                                     |                | Standard                                  |
| Multiple Inner Doors   |                | N/A                                       |
| CO <sub>2</sub> Gas Pressure Regulator                               |                | MCO-010R-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*   |                | MCO-170PS-PW                              |
| Stacking Plate*  |                | MCO-170SB-PW                              |
| Roller Base  |                | MCO-170RB-PW                              |
| <b>Optional communication systems<sup>4)</sup></b>                   |                |   |
| Analogue interface (4-20mA)  |                | MCO-420MA-PW                              |

Appearance and specifications are subject to change without notice.

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings on website for full details.

<sup>2)</sup> ±0.25°C; ambient temp 23°C, setting 37°C, CO<sub>2</sub> 5%, no load

<sup>3)</sup> Nominal value

<sup>4)</sup> MCO-170AICD 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.

# PHC Europe

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