

## IncuSafe

CO<sub>2</sub> Incubators

230 L



MCO-230AIC-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 actively prevent contamination. The Direct Heat and Air Jacket System regulates the temperature whilst the Dual IR sensor controls the CO<sub>2</sub> level.

#### Time-Saving Decontamination

The high-speed decontamination system uses vaporised hydrogen peroxide and UV light. It cleans the chamber of the incubator safely in less than three hours, achieving a minimal 6 log reduction of major contaminants.

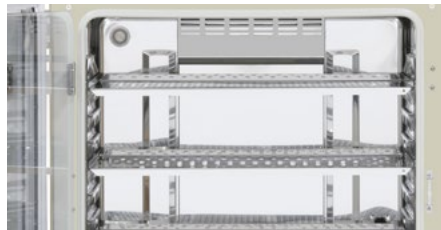
#### Ease of Use & Increased Capacity

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 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

Complete laboratory procedures and experiments more efficiently with less incubator downtime. Ideal for commercial applications.



#### Scale-up experiments

The increased capacity offers the possibility to utilise the incubator from R&D to clinical trials and manufacturing.

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



## Direct Heat and Air Jacket System

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

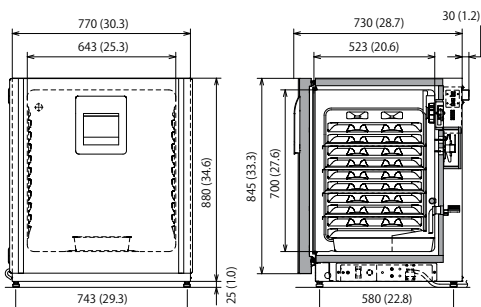
The incubator's Dual IR sensor and P.I.D control enables ultra-fast CO<sub>2</sub> recovery, without overshoot, even following multiple door-openings.

## Active Background Decontamination

The exclusive 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.

## Condensation Management

With a unique antibacterial coating, the 'dew stick'—controlled by Peltier technology—condenses water on its surface, which then drips into the humidifying pan, preventing unwanted condensation in the chamber and possible contamination.



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.



PHC Europe B.V.

| Model Number   | MCO-230AIC-PE | MCO-230AICUV-PE                               | MCO-230AICUVH-PE       |
|--|---------------|---|------------------------|
| External Dimensions (W x D x H) <sup>1)</sup>                        | mm            | 770 x 730 x 905                               |                        |
| Internal Dimensions (W x D x H)                                      | mm            | 643 x 523 x 700                               |                        |
| Volume   | liters        | 230   |                        |
| Net Weight   | kg            | 90  |                        |
| <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   |               | H <sub>2</sub> O <sub>2</sub> Decontamination |                        |
| <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  |               | Extruded polystyrene                          |                        |
| Heating Method   |               | Direct Heat & Air Jacket System               |                        |
| Outer Door   | qty           | 1   |                        |
| Outer Door Lock  |               | Optional                                      | Optional      Standard |
| Field Reversible Door  |               | Included                                      |                        |
| Inner Door   | qty           | 1 gastight - made of tempered glass           |                        |
| Shelves  | qty           | 4 x Stainless Steel Copper-enriched Alloy     |                        |
| Shelf Dimensions (W x D x H)   | mm            | 620 x 450 x 12                                |                        |
| Max. Load per Shelf  | kg            | 7   |                        |
| Max. Shelf Capacity  | qty           | 10  |                        |
| Access Port  | qty           | 1   |                        |
| Access Port Position   |               | Rear  |                        |
| Access Port Diameter   | ∅ mm          | 30  |                        |
| <b>Alarms</b> (R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm) |               |   |                        |
| 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-170UVS-PE <sup>4)</sup>                   | Standard               |
| H <sub>2</sub> O <sub>2</sub> Decontamination Board                  |               | MCO-170HB-PE <sup>4)</sup>                    | Standard               |
| Electric Door Lock with Password                                     |               | MCO-170EL-PW <sup>4)</sup>                    | Standard               |
| H <sub>2</sub> O <sub>2</sub> Vapor Generator                        |               | MCO-HP-PW <sup>4)</sup>                       |                        |
| H <sub>2</sub> O <sub>2</sub> Reagent, pack of 6 bottles             |               | MCO-H202-PE                                   |                        |
| 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-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                                  |                        |
| <b>Optional communication systems<sup>5)</sup></b>                   |               |   |                        |
| Ethernet interface (LAN)   |               | MTR-L03-PW                                    |                        |
| Digital interface (RS232C/RS485)                                     |               | MTR-480-PW                                    |                        |
| Analogue interface (4-20mA)  |               | MCO-420MA-PW                                  |                        |

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections

<sup>2)</sup> Ambient temp 23°C, setting 37°C, CO<sub>2</sub> 5%, no load

<sup>3)</sup> Nominal value

<sup>4)</sup> MCO-230AIC series requires MCO-170HB-PE, MCO-170EL-PW, MCO-HP-PW and SafeCell UV option for H<sub>2</sub>O<sub>2</sub> decontamination

<sup>5)</sup> 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.



# WolfLabs

**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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