Optimising cell culture outcomes and reproducibility

IncuSafe CO₂ Incubators provide precise control of CO₂ 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.

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<th>Precise &amp; Regulated Environment</th>
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<tr>
<td>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 CO₂ level.</td>
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<th>Time-Saving Decontamination</th>
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<td>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.</td>
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<th>Ease of Use &amp; Increased Capacity</th>
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<td>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.</td>
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<th>Optimum Cell Growth</th>
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<td>Outstanding quality and performance for successful cell growth, optimal results and reproducibility. Perfect fit for the strictest and most sensitive protocols.</td>
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<th>Efficient Workflows</th>
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<td>Complete laboratory procedures and experiments more efficiently with less incubator downtime. Ideal for commercial applications.</td>
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<th>Scale-up experiments</th>
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<td>The increased capacity offers the possibility to utilise the incubator from R&amp;D to clinical trials and manufacturing.</td>
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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 CO₂ Sensor

The incubator’s Dual IR sensor and P.I.D control enables ultra-fast CO₂ 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.

Model Number | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE
---|---|---|---
External Dimensions (W x D x H) | mm | 770 x 730 x 905 | 643 x 523 x 700
Internal Dimensions (W x D x H) | mm | 527 x 283 x 383
Volume | liters | 230
Net Weight | kg | 90

Performance

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Temperature Control Range & Fluctuation | °C | AT +5 ~ +50, ±0.1 | 
Temperature Uniformity | °C | ±0.25 |
CO₂ Control Range & Fluctuation | % | 0 ~ 20, ±0.15 |
Humidity Level & Fluctuation | %RH | 95, ±5 |
Sterilisation Method |  | H₂O₂ Decontamination |

Control

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Temperature Sensor | Thermistor | 
CO₂ Sensor | Dual IR | 
Display | LCD Touch Screen | 

Construction

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Exterior Material | Painted Steel (rear cover not painted) | 
Interior Material | Stainless Steel Copper-Enriched Alloy | 
Insulation Material | Extruded polyisocyanurate | 
Heating Method | Direct Heat & Air Jacket System | 
Outer Door qty | 1 | 
Outer Door Lock | Optional | Optional | Standard |
Inner Door qty | 1 gas tight | made of tempered glass |
Shelves qty | 4 | 
Max. Load per Shelf | kg | 7 |
Max. Shelf Capacity | qty | 10 |
Access Port qty | 1 | 
Access Port Position | Rear | 
Access Port Diameter | Ø mm | 38 |

Alarms (R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Power Failure | R | 
Out of Temperature Setting | V-B-R | 
High Temperature | V-B-R | 
Out of CO₂ Setting | V-B-R | 
Door open | V-B | 

Electrical and Noise Level

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Power Supply V | 230 |
Frequency Hz | 50 |
Noise Level | dB | 25 |

Options

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
SafeCell UV® System | MCO-170UVS-PE | Standard |
H₂O₂ Decontamination Board | MCO-170HB-PE | Standard |
Electric Door Lock with Password | MCO-170EL-PW | Standard |
H₂O₂ Vapor Generator | MCO-HP-PW | 
H₂O₂ Reagent, pack of 6 bottles | MCO-H2O2-PE | 
CO₂ Gas Pressure Regulator | MCO-010R-PW | 
Automatic CO₂ Cylinder Changeover System | MCO-21GC-PW | 
Semi-automatic one point Gas Calibration Kit | MCO-21GC-PW | 
InCu-saFe® Shelf | MCO-170ST-PW | 
InCu-saFe® Half Tray System | MCO-25ST-PW | 
Double Stacking Bracket* | MCO-21PF-PW | 
Stacking Plate* | MCO-21SB-PW | 
Roller Base | MCO-230RB-PW | 

Optimum communication systems**

| Feature | MCO-230AIC-PE | MCO-230AICUV-PE | MCO-230AICUVH-PE |
---|---|---|---
Analogous interface (±0-20mA) | MCO-420MA-PW | 

Appearance and specifications are subject to change without notice.

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For medical use: The MCO-230AIC series is certified as a Class Ila 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.

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1) Exterior dimensions of main cabinet only, excluding handle and other external projections.
2) Ambient temp 23°C, setting 37°C, CO₂, 5%, no load
3) Nominal value
4) MCO-230AIC series requires MCO-170HB-PE, MCO-170EL-PW, MCO-HP-PW and SafeCell UV option for H₂O₂ decontamination
5) MCO-230AIC series can only be fitted with one communications interface.
6) If stacking two incubators, make sure the double-stacking dedicated securing hardware and spacer are used.
7) **These models are supplied as MCO-230AIC-PE with required options installed. **