# CO2 Incubator 40-240 L, IR CO2 Sensor 0-20%, RT+5 to 55°C, HEPA Filter, 90°C Sterilization

Model MSICB-CO2-40YSWISS,MSICB-CO2-80YSWISS,MSICB-CO2-150YSWISS,MSICB-CO2-190YSWISS,MSICB-CO2-240YSWISS |
Brand Master Science





The Master Science CO2 Incubator with IR Sensor holds cell and tissue cultures at a steady temperature, CO2 level and humidity. An infrared sensor reads CO2 quickly and is not thrown off by changes in temperature or humidity, so the chamber gets back to 5% CO2 within about 3 minutes after the door has been open for 30 seconds.

### KEY HIGHLIGHTS

- Fast CO2 recovery
- Stable, even temperature
- Clean chamber air
- Built-in decontamination

### AT A GLANCE

| | |
|---|---|
| **RT+5 to 55°C**<br>TEMPERATURE RANGE | **0-20%**<br>CO2 RANGE |
| **40 / 80 / 155 / 190 / 240 L**<br>CAPACITY | **350 / 500 / 750 / 750 / 950 W**<br>POWER CONSUMPTION |

**Request a Quotation**
Contact us for pricing, configuration options and delivery details.

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## Overview

Heating is air-jacketed under PID control, and a fan with automatic speed control keeps temperature within ±0.3°C across the chamber at 37°C. A HEPA filter cleans the internal air and a 0.3 µm filter on the CO2 inlet removes particles from the gas supply. A 90°C moist heat cycle sterilizes the chamber. Five sizes run from 40 to 240 litres, and the smaller units can be stacked two high.

For a water- and air-jacketed alternative, see our CO2 incubator for cell culture, another option beside the Master Science CO2 Incubator with IR Sensor.

Unstable conditions and contamination ruin cultures. The Master Science CO2 Incubator with IR Sensor addresses:

## Key Benefits

**Fast CO2 recovery**
The IR sensor in the Master Science CO2 Incubator with IR Sensor restores 5% CO2 within 3 minutes of a door opening.

**Stable, even temperature**
±0.1°C fluctuation and ±0.3°C uniformity at 37°C.

**Clean chamber air**
HEPA and CO2 inlet filters keep out microbes and dust.

**Built-in decontamination**
A 90°C moist heat cycle sterilizes the chamber.

## Technical Specifications

| GENERAL | |
|---|---|
| General | Specifications of the Master Science CO2 Incubator with IR Sensor range: |
| Brand | Master Science |
| Model Number | MSICB-CO2-40YSWISS,MSICB-CO2-80YSWISS,MSICB-CO2-150YSWISS,MSICB-CO2-190YSWISS,MSICB-CO2-240YSWISS |
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| Capacity | **40 / 80 / 155 / 190 / 240 L** |
| Circulation | Forced convection |
| Temperature range | **RT+5 to 55°C** |
| Temperature fluctuation | ±0.1°C |
| Temperature resolution | 0.1°C |
| Uniformity | ±0.3°C at 37°C |
| Temperature recovery | ≤8 min to 37°C after 30 s door opening |
| CO2 range | **0-20%** |
| CO2 resolution | 0.1% |
| CO2 sensor | Infrared (IR) |
| CO2 recovery | ≤3 min to 5% after 30 s door opening |
| Heating | Air-jacketed, PID control |
| Chamber | 304 stainless steel |
| Exterior | Cold-rolled steel |
| Shelves (standard / max) | 2/4, 2/4, 3/6, 3/6, 3/6 |
| Test port | Ø25 mm |
| Sterilization | 90°C moist heat |
| Humidity | >90%, natural vaporization |
| Display | LCD |

| DIMENSIONS & WEIGHT | |
|---|---|
| Internal dimensions (W×D×H) | 400 × 286 × 350 / 400 × 450 × 500 / 480 × 530 × 610 / 520 × 530 × 690 / 600 × 630 × 670 mm |
| External dimensions (W×D×H) | 590 × 440 × 576 / 590 × 687 × 790 / 670 × 767 × 880 / 708 × 710 × 1030 / 788 × 837 × 940 mm |
| Net / gross weight | 50/70, 64/90, 85/112, 90/134, 95/148 kg |

| POWER | |
|---|---|
| Power supply | AC 220/110 V, 50/60 Hz |
| Power consumption | 350 / 500 / 750 / 750 / 950 W |

| CULTURE PROBLEMS THE MASTER SCIENCE CO2 INCUBATOR WITH IR SENSOR SOLVES | |
|---|---|
| Slow CO2 recovery after door opening | IR sensing gets back to setpoint within 3 minutes. |
| Condensation on the glass door | A heated door keeps the glass dry. |
| Airborne contamination | HEPA filtration and inlet gas filtering keep the chamber clean. |
| Time-consuming cleaning | The 90°C moist heat cycle decontaminates automatically. |

## Applications

**The Master Science CO2 Incubator with IR Sensor is used for**
Mammalian cell culture Tissue and organ culture IVF and embryo research Virology and vaccine development Microbial culture needing CO2 atmosphere

## CO2 and humidity control

- Infrared CO2 sensor, 0-20%
- 0.3 µm high-efficiency filter on CO2 inlet
- Humidity above 90% by natural evaporation

## Temperature and airflow

- Air-jacketed heating with PID control
- Circulation fan with automatic speed control
- Heated door to prevent condensation on the glass

## Safety and usability

- High, low and over-temperature alarms
- High and low CO2 alarms; door-open alarm
- UV sterilization status reminder
- Large LCD above the door; stackable two high

## Standard Accessories Included

- CO2 incubator
- Shelves (2 or 3 depending on size)

## Optional Accessories

- Humidity display system
- Additional shelves
- UV sterilization