

# MBINCOS-228R Stackable CO2 Shaking Incubator

4 to 65 °C • CO2 0–20 % • Humidity up to 95 % • 10–300 rpm • Stackable, up to 3 layers

**MBINCOS-228R** is a stackable CO2 shaking incubator: a shaking incubator and a CO2 incubator in one layer with a 930 × 530 mm tray. Up to three layers can be stacked, and each layer has its own temperature, CO2 and speed. The chamber holds 4 °C to 65 °C and CO2 from 0 to 20 %, with natural humidity up to 95 %, while the tray shakes from 10 to 300 rpm.

4 to 65 °C • CO2 0–20 % • IR CO2 SENSOR • HUMIDITY UP TO 95 % • 10–300 RPM • 7-INCH TOUCH SCREEN • UV LAMP • STACKABLE (228R)

Document type: **Technical Specification Sheet**

Product: **MBINCOS-228R CO2 shaking incubator**

Order code (SKU): **PRO7364**

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 **STACKABLE • PER LAYER**

**MBINCOS-228R • PRO7364**

4 to 65 °C • CO2 0–20 % • 10–300 rpm



MBINCOS-228R • three stacked layers, each with its own control

CO2  
0–20 %

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# MBINCOS-228R • technical specification

4 to 65 °C • CO2 0–20 % • Humidity up to 95 % • 10–300 rpm • Stackable, up to 3 layers

4–65 °C • CO2 0–20 % • 10–300 RPM • 95 % RH • TOUCH SCREEN — Shaking incubator and CO2 incubator in one unit

## Product Overview

### Application profile

**Cell culture:** suspension cells in shake flasks under CO2 — CHO, HEK, insect cells.

**Microbiology:** aerobic and microaerophilic cultures, fermentation and seed cultures.

**Static and shaken:** one unit runs as a CO2 incubator or as a CO2 shaker.

**Large series:** stack up to three MBINCOS-228R layers, each with its own conditions.

### Core technical summary

| Parameter         | Specification                  |
|-------------------|--------------------------------|
| Model             | MBINCOS-228R                   |
| Design            | Stackable, per layer (up to 3) |
| Temperature range | 4 to 65 °C                     |
| Uniformity        | ±0.5 °C at 37 °C               |
| CO2 range         | 0–20 % • IR sensor             |
| Humidity          | natural, up to 95 % RH         |
| Speed             | 10–300 rpm • ±1 rpm            |
| Orbit             | Ø26 mm • Ø50 mm optional       |
| Supply            | 220 V ±10 %, 50/60 Hz          |

### Key features

**CO2:** imported infrared sensor, 0–20 %, 0.1 % resolution; solenoid valve and inlet filter (99.99 % at 0.3 µm).

**Temperature:** 4 °C to 65 °C, ±0.5 °C at 37 °C; inverter cooling without frost.

**Humidity:** natural humidification tray, up to 95 % RH.

**Shaking:** servo motor, 10–300 rpm, ±1 rpm; orbit Ø26 mm (Ø50 mm optional); forward, reverse and stop program.

**Control:** 7-inch true-colour touch screen; fixed value or program; three user levels.

**Data:** history and curves of temperature, speed, humidity and CO2 up to one year; USB export, printer option.

**Door:** double tempered glass window, heated door against condensation; shaking stops when the door opens.

**Safety:** over-temperature alarm and cut-off, fault self-diagnosis, power-failure memory; UV lamp and light.

TEMPERATURE

4 to 65 °C

CO2

0–20 %

SPEED

10–300 rpm

HUMIDITY

up to 95 %

Values measured without load at 20 °C ambient and 50 % RH. Working ambient temperature 5–25 °C. Suitability for a specific method is confirmed in the COLO.Science quotation.

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 Model data • MBINCOS-228R

| Parameter             | MBINCOS-228R                                            |
|-----------------------|---------------------------------------------------------|
| Order code (SKU)      | PRO7364                                                 |
| Design                | Stackable, per layer (up to 3)                          |
| Tray size             | 930 × 530 mm                                            |
| Flask capacity (max.) | 250 ml × 65 · 500 ml × 45 · 1000 ml × 24 · 2000 ml × 15 |
| Exterior W × D × H    | 1500 × 920 × 600 mm per layer                           |

 Technical Specifications

| Temperature, CO2 and control | Value                                       | Shaking and construction | Value                                                                 |
|------------------------------|---------------------------------------------|--------------------------|-----------------------------------------------------------------------|
| Temperature range            | 4 °C to 65 °C                               | Shaking                  | orbital, servo motor                                                  |
| Resolution                   | 0.1 °C                                      | Speed                    | 10–300 rpm, ±1 rpm                                                    |
| Uniformity                   | ±0.5 °C at 37 °C                            | Orbit                    | Ø26 mm standard, Ø50 mm optional                                      |
| CO2 range / resolution       | 0–20 % · 0.1 %                              | Chamber                  | mirror stainless steel, rounded corners                               |
| CO2 sensor                   | far-infrared (IR)                           | Door                     | double tempered glass window, heated door                             |
| Humidity                     | natural, up to 95 % RH                      | Safety                   | over-temperature alarm and cut-off, door switch, power-failure memory |
| Control                      | 7-inch touch screen, fixed value or program | Ambient                  | 5–25 °C                                                               |
| Timer                        | 0–999 h 59 min, scheduled start             | Supply                   | 220 V ±10 %, 50/60 Hz                                                 |

Flask capacity with standard clamps; other clamps and a universal spring tray on request. Values measured without load. Dimensions W × D × H.

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MBINCOS-228R • three stacked layers, each with its own control

### Ordering information

| Item                                                                           | SKU        |
|--------------------------------------------------------------------------------|------------|
| MBINCOS-228R • CO2 shaking incubator • stackable, per layer (up to 3)          | PRO7364    |
| Options: printer, RS485 remote control, mobile app, Ø50 mm orbit, other clamps | on request |

### Configuration checklist

**Volume:** number and size of flasks per run → tray size and model.

**Space:** up to three stacked layers with different conditions, 1500 × 920 mm floor area.

**CO2:** CO2 gas supply with pressure regulator at the installation site.

**Room:** ambient 5–25 °C, separate earthed 220 V socket.

### Other design

For one compact floor-standing unit with two trays see [MBINCOS-200R vertical CO2 shaking incubator](#).

#### SUPPLIER AND SUPPORT

### COLO Lab Experts

Polje ob Sotli 4, SI-3255, Slovenia

**Selection guidance:** Send the culture, the flasks per run, the temperature, CO2 and speed. COLO.Science will confirm the model, the clamps and the delivery time.

#### QUICK CONTACT

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#### Ask us:

Price and current discount, delivery time, installation, CO2 connection and service — write to [sales@colo.si](mailto:sales@colo.si) or call us.

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