

# CO<sub>2</sub> Incubator

## Percival® model B36

General Purpose CO<sub>2</sub> Incubator 29.5 ft<sup>3</sup> (840 liters)

### Applications

- Designed for medical, pharmaceutical, animal, cosmetic, food and agricultural research applications, including mammalian cell and tissue culture, large volume anaerobic bacterial growth and sample testing, microbial production of bioactive compounds (enzymes, antibiotics) and many more applications

*Please compare your own requirements to the specifications listed below.*

### Temperature Range

- 5°C above ambient 70°C (±0.5°C) throughout the chamber
- Temperature control accuracy: +/- 0.1°C

### CO<sub>2</sub>

- Range: Above ambient up to 10% CO<sub>2</sub>
- Accuracy at 5% CO<sub>2</sub> and 25°C = 0.1% CO<sub>2</sub>
- Sensor type: Vaisala GMP251, CARBOCAP
- Feature: Automatic CO<sub>2</sub> supply shutoff when chamber door is open

### Humidification

- Three levels: Off, medium, high
- Electronic %RH sensor with digital readout
- Audible/Visual alarm and alarm silence
- Water pan humidifier with adjustable lid
- Automatic water fill
- Humidifier type: Pan-type
- Humidifier water supply: Deionized or RO

### Airflow/Circulation

- Air circulation inside chamber is from a specifically designed CFD air diffuser (conditioned air travels along the entire back wall, over the shelves and returns to the ceiling fans through an opening between the light fixtures and the doors)



### Percival's IntellusUltra Controller

The IntellusUltra (C8) control system adapts to nearly any programming style with a large range of options for optimal control over experiments.

- Robust and reliable, industrial-grade integrated hardware design
- Highly flexible programming capabilities for customized configurations and expansion
- Precise, simultaneous control of up to 7 environmental parameters
- Industry-leading experiment protection and system diagnostics
- SCADA/LIMS Port available to provide CFR21 Part 11 or EU GMP Annex 11 compliance

### IntellusUltra Touchscreen Interface

This high-resolution touchscreen displays advanced settings and data for fine-tuning experiments, including graphs and charts.

- 10.1" IPS, high-resolution display with 10-point multi-touch sensitivity
- Tabular and graphical presentation of chamber programs and parameters
- Highly visible process values and alarm notifications
- Enhanced user feedback menus

*Please visit [percival-scientific.com](http://percival-scientific.com) for more information on our control systems.*

### B36 specifications (subject to change without notice)

Temp Range	Relative Humidity	CO <sub>2</sub>	Work Area		Exterior Dimensions						Shelving Size		Tiers
					width		depth		height				
°C		°CO <sub>2</sub>	ft <sup>2</sup>	m <sup>2</sup>	in	cm	in	cm	in	cm	in	cm	
5 above ambient-70±0.5	off, medium, high	up to 10%	32.3	3	33.5	85.1	33.6	85.4	77.2	196.1	28.8 x 27	73 x 68.6	6

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## Insulation

- Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 93% closed cell, R-value of 12.5, K-value of 0.16 and density of 2.2 lbs/ft<sup>3</sup>

## Cabinet Construction

- 26-gauge smooth galvanized white side walls and top reinforced with 24-gauge backer plates
- Interior constructed of 24-gauge #304-4 stainless steel
- 24-gauge smooth white galvanized exterior
- NSF-compliant seam design
- Overall wall thickness is 2" (5.1 cm)
- Foamed-in-place non-CFC insulation (refer to insulation section)
- One 1¼" diameter access port on right hand wall
- Integrated floor drain
- Contains casters assembly and adjustable leveling legs to compensate for uneven flooring
- Exterior painted with highly reflective, environmentally friendly, high temperature baked white powder coating

## Door

- One door opening 29.3" x 57.5" (74.3 cm x 146.1 cm) provides full access to the chamber interior
- Magnetic gasket provides a tight seal to door frame
- Door and frame heaters with drip deflector

## Interior Space

- 29.7 ft<sup>3</sup> (0.8 m<sup>3</sup>) with work area of 32.3 ft<sup>2</sup> (3 m<sup>2</sup>) provided on six tiers

## Shelving

- Six tiers of stainless steel wire shelving (each shelf is 27"D x 28.8"W [68.6 cm x 73 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 8" (20.3 cm) per tier with all six shelves installed

## Temperature Safety Limit Controls

- Experiment protection (adjustable high/low temperature control, audible alarms and visual indicators)
- Controls shut down all power to the chamber, activating alarms
- System automatically resets when temperature returns to normal range

## Options (most popular)

- Refrigeration (down to -2°C)
- IntellusUltra Connect (C9)
- Glass door
- Door with observation window and cover (Q2)
- Dry alarm contacts
- LED working light (Q24)
- Door lock
- Non-tiltable slidable shelves in rails. Six stainless steel rails per each side wall in lieu of pilasters and shelves clips.
- Solid stainless-steel shelving in lieu of stainless-steel wire shelving

Contact [info@percival-scientific.com](mailto:info@percival-scientific.com) with questions or for additional information about chamber options.

## Electrical Service Requirements

- 120/1/60 with NEMA 5-15P plug provided (with standard chamber)
- RLA=3.6A (MCA=4.5A)

## Regulatory Standards

- Electrical Safety: UL-508A, certified and labelled by Percival Scientific under UL file number E340161
- Quality System: ISO 9001:2015, certified under DQS, Inc. under certification number 10017261

## Helping You Create Better Science

Percival Scientific controlled environment systems are the culmination of over 60 years of design and manufacturing experience. Our high-quality products have been developed through direct partnerships with the scientific community and offer platforms that are highly customizable and provide superior performance. We understand that scientific innovation comes from creativity, passion, technical expertise and attention to detail, and we are proud to help you create better science.



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