

CO₂ Incubator IG-C Series



IGENE LABSERVE

Innovative • Interactive • Intuitive

ABOUT THE COMPANY

iGene Labserve Pvt. Ltd. is gaining recognition by offering resilient, innovative solutions in laboratory instrumentation across healthcare, genomics, drug discovery, biopharma, and food & beverage sectors. We strive to enhance lab efficacy and reduce challenges through advanced technologies and a diverse product portfolio tailored to our customers' needs.

IG-CO2 SERIES INCUBATOR

The IG-CO2 Series Incubators are expertly crafted to create a controlled environment that mimics natural conditions for growing cells and tissues. Featuring advanced 6-side direct heat technology, they provide consistent and uniform heating throughout the chamber. Coupled with precise temperature control and CO2 level regulation, these incubators ensure a stable and ideal atmosphere for cell culture.


KEY FEATURES

6-side direct heat chamber

- Spacious 180L chamber provides an ideal environment for cell cultures.
- Air-jacketed for maintaining the internal temperature. Six-sided high-performance heating ensures consistent temperature distribution throughout the incubator, achieving a uniform temperature field of $\pm 0.2^{\circ}\text{C}$ after stabilization.
- Non-segmented single piece glass door, opens on the right, with options for left or right opening based on requirements.
- Electro-polished stainless steel interior with rounded corners for easy cleaning and outer chamber powder coated steel with 1.0 mm thickness.
- Flexible setup with detachable shelves and an independent humidity pan that can be removed as needed.
- Equipped with fan-assisted airflow circulation, enabling rapid recovery. Our airflow pattern is specifically designed for uniform distribution of some key environmental conditions (temperature, gas exchange and humidity).
- Durable stainless-steel shelves and brackets can be removed in under a minute without tools.
- Temperature probe and gas sensors, located inside the chamber to allow precise monitoring of conditions as the cells. (1 inside chamber and 1 to standard door temperature and over temperature protection).

304 stainless steel water pan for humidification

- Easy-to-clean 304 stainless steel water pan holds up to 4L, creating a high humidity environment.
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- Protects cell and tissue cultures by preventing condensation, even at high humidity and room temperature.
 - Turbulence-free ventilation maintains a stable and uniform environment.
 - water level sensor and alarm to alert user when humidification water refill is required.

180°C high heat sterilization

- On-demand 180°C sterilization simplifies cleaning, eliminating the need for autoclaving and reassembly of components.
- Effectively removes bacteria, mold, yeast, and mycoplasma from the chamber surface

ISO Class 5 HEPA filtered airflow system

- Built-in HEPA filtration continuously cleans air within the chamber, reaching ISO Class 5 air quality within 5 minutes of door closure.
- Provides continuous protection against airborne contaminants


Infrared (IR) CO₂ sensor for accurate monitoring

- Infrared CO₂ sensor ensures stable monitoring in varying humidity and temperature conditions, reducing errors from frequent door openings.
- Ideal for sensitive applications and allows remote monitoring, with over temperature protection.

Active airflow technology

- Fan-assisted airflow circulation ensures rapid recovery and even distribution of temperature, gas, and humidity.
- An internal fan circulates filtered, moist air throughout the chamber, ensuring uniform environmental conditions for all cells.

5 inch LCD touch screen

- Intuitive controls with instant display of run curves and historical data.
 - Conveniently placed above the door for easy access, with capacitive touch sensitivity. Features audible and visual alarms with on-screen prompts for easy navigation.
 - Historical Data Monitoring and Export.
 - Historical data can be monitored, viewed, and exported via USB, ensuring data integrity and traceability without modification
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SPECIFICATIONS

Cat. No.	IG-CO2185HT
Control Interface	5-inch LCD touch screen
Temperature Control Mode	PID control mode
Temperature Control Range	Ambient +4 to 60°C, control 0.2°C
Temperature Display Resolution	0.1°C
Temperature Field Uniformity	±0.2°C at 37°C
Max. Power	900W
Timing Function	0 to 999.9 hours
Internal Dimensions	L535×W526×H675 mm
External Dimensions	L660×W652×H1000 mm
Volume	180L
CO₂ Measurement Principle	Infrared (IR) detection
CO₂ Control Range	0 to 20%, Control ±0.2%
CO₂ Display Resolution	0.1%
CO₂ Supply Pressure	0.05 to 0.1MPa is recommended
Relative Humidity	Ambient humidity ~95% at 37°C, natural process recovery
Shelves	3 nos,
Max. load per shelve	10 kg
HEPA Filtration	ISO 5 level, 5 minutes
Sterilization Method	180°C High heat sterilization (12 hours)
Temperature Recovery Time	≤5 min
CO₂ Concentration Recovery Time	≤6 min (open door 30 sec, set value 5%)
Historical Data Storage	250,000 messages
Data Export Interface	USB interface
User Management	3 levels of user management: Administrator, Tester, Operator
Scalability	Up to 2 units can be stacked
Working Environment Temperature	10°C to 30°C
Power Supply	115/230V±10%, 50/60Hz
Weight	112 kg

