BioLAB

PRODUCT CATALOG

AIR-JACKETED MULTI GAS INCUBATOR BIMA-102

CE ISO9001 CERTIFIED

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AIR-JACKETED MULTI GAS INCUBATOR BIMA-102

TRI-GAS INCUBATOR

Tri-gas incubator, providing precise temperature, CO2, O2 control as well as high humidity, is widely used in scientific research to grow and maintain cell cultures. Typical fields of application include tissue engineering, in vitro fertilization, neuroscience, cancer research and other mammalian cell research.

A. Stainless steel chamber with easy-to-clean coved corners reduces contamination-prone surface.
B. The turbulence-free chamber ventilation improves CO2, O2, humidity and temperature uniformity.
C. Easy-removable,replaceable shelves make chamber cleaning a rapid and efficient process.
D. Standard three inner glass doors minimize recovery time and the risk of contamination.
E. The design of water reservoir replacing water tray, allows rapid recovery of optimal humidity.
F. Water level alarm(audible and visible) alerts users when the water reservoir needs to be refilled.
G. Integrated electric siphon pump facilitates drainage operation.

Contamination prevention:
90°C disinfection routine decontaminates the entire interior of the chamber while causes less damage to electronic components
In independent tests, a routine disinfection circle is proven to completely eliminate a variety of contaminants including mycoplasma
A completely smooth inner casing with rounded corner reduces the possibility of hidden contamination. Easy-removable, replaceable shelves make chamber cleaning a rapid and efficient process.
90° moist heat decontamination
Condensation control
Temperature control:
Direct heating enables rapid temperature recovery while air jacket provides isol

SPECIFICATIONS

Model	BIMA-102
Temp. Control Method	Direct heat & air jacket
Temp. Control sensor	Pt1000
Temp. Range (°C)	Amb. +3 to 55°C
Temp. Accuracy (°C)	±0.1
Recovery Time	≤7 mins (After 30 sec. Door opening)
CO_2 control system	Microprocessor PID
CO_2 range (% CO_2)	0-20
CO_2 accuracy (% CO_2)	±0.1 (at 37°C)
CO_2 sensor	IR standard or TC optional
O_2 range (% O_2)	1.0%-20% or 3.0%-85.0%
O_2 accuracy (% O_2)	±0.2 (at 37°C)
O_2 sensor	Zirconium
Humidity range (% RH)	≥90%±3%R
Interior Volume	151 L
External Dimensions (mm) (WxDxH)	637x768x869
Interior Dimensions (mm) (WxDxH)	470x530x607
Net Weight	75 kg
Standard Quantity of Shelves	3
Maximum Quantity of Shelves	10
Shelf Dimensions (mm) (WxD)	423x445
Max. Load per Shelf (Kg)	10
Available Electrical configuration	220V±10% / 50Hz (standard)

Rated Power	≤650VA±10%
Interior material	Stainless steel, type 304
Alt Name	Tri-Gas Incubator

FEATURES

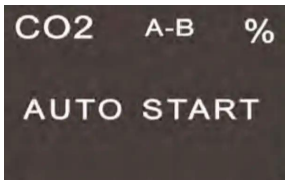
Contamination prevention:
90°C disinfection routine decontaminates the entire interior of the chamber while causes less damage to electronic components
In independent tests, a routine disinfection circle is proven to completely eliminate a variety of contaminants including mycoplasma
A completely smooth inner casing with rounded corner reduces the possibility of hidden contamination. Easy-removable, replaceable shelves make chamber cleaning a rapid and efficient process.

90° moist heat decontamination

Condensation control

Temperature control:
Direct heating enables rapid temperature recovery while air jacket provides isolation against ambient temperature fluctuations
PT1000 temperature sensor ensures stable temperature control with little gradient and prompt temperature recovery without overheat
Three temperature control settings (main heater, outer door heater and overheat protection) minimize condensation and yield precise temperature uniformity.

CO2 control:
Drift free IR CO2 sensor responds extremely fast to gas concentration changes
Auto-zero runs automatically to recover the indicator to 'zero' every 24 hours
HEPA filter of CO2 inlet port can remove impurities and contaminants with efficiency 99.998% @ 0.2um
Standard CO2 cylinder auto changer alerts users and ensures continuous CO2 supply.

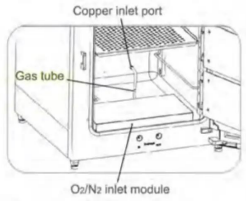


AUTO START

Access port

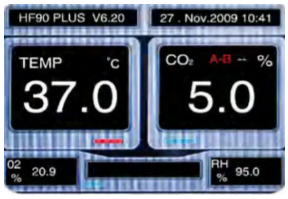
Gas Guard Set

O2 control:
Maintenance-free zirconium oxide sensor: long life, good linearity and high precision
Oxide sensor is calibrated automatically(auto-cal) and stays in the incubator during the 90°C decontamination routine
Well designed O2/N2 inlet module improves humidity stability in chamber.

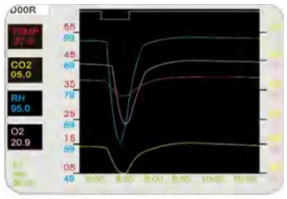


Constant humidity
Larger water surface area provided by water reservoir with inclined and rounded corners
A new water level alarm(audible and visible) alerts users when the water reservoir needs to be refilled.
Standard humidity sensor ensures a constant high level of humidity to prevent cultures from drying out.

User-friendly interface:
Microprocessor with soft-touch control panel for optimum operation
Large-size TFT-LCD display for temperature, CO2, O2 concentration and RH
Comprehensive visual and audio alarms for all parameters
Diagnostic interface provide comprehensive solutions to frequently encountered problems.
RS8232 port standard for communication and external instrument logging.



Large-size TFT-LCD


Real-time monitoring system

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