BioLAB

PRODUCT CATALOG

CO2 INCUBATOR AIR JACKETED BFN1F1

CE ISO9001 CERTIFIED

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CO2 INCUBATOR

It represents a new era in advanced incubator design for your most demanding and highly critical applications like stem and primary cells in leading research, pharmaceutical and clinical laboratories.
By combining advanced technology advancements, It delivers the reliable performance, enhanced simplicity, and complete contamination control required to support an optimal cell growth from basic research to demanding, leading-edge applications.

Why we choose hot-air sterilization
Hot-air sterilization is carried out under 160~180° C.The incubator's sterilization program consists of three phases:
I. heat up to maximum temperature,
II. expose at maximum temperature and
III. cool down to incubation
CO2 incubators provide an optimal cell growth environment by maintaining a humidified atmosphere with temperature and carbon dioxide control. These conditions not only promote cell growth, but also the growth of contaminants, like bacteria, yeast, molds and other fungi. The contamination-reducing features of an incubator's functional design and the effectiveness of its
A self-decontamination system must be considered in choosing an instrument.

Airflow distribution:
In-chamber fan gently and evenly distributes clean, humidified air throughout the chamber ensuring all cell experience the same conditions without the threat of desiccation.
Airflow design is incorporated to deliver faster recovery and uniformity for consistent results, avoiding unwanted sample variation. Incoming air first travels over a direct heated water reservoir resulting in 50% faster humidity recovery than with a standard water pan
design.
Complete contamination control required to support an optimal cell growth from basic research to demanding, leading-edge applications.
Drift-free CO2 sensor:

SPECIFICATIONS

Model	BFN1F1
Construction	
--Chamber Volume (Liter/cu.ft)	185
--Net Weight	80kg (176 lbs)
--Interior Material	Stainless steel, type 304, mirror finish
--Exterior Material	Cold-rolled steel, powder coated
Temperature	
--Temp. Control method	Direct heat & air jacket (DHA)
--Temp. Control Sensor	Pt1000
--Temp. Control (°C)	±0.1
--Temp. Range (°C)	Ambient +3 to 55
--Temp. uniformity (°C)	±0.3
De-contamination	
--Cycle Temp.	180°C dry heat disinfection on all internal surfaces

CO2	
--CO2 Control (% CO2)	±0.1%
--Inlet Pressure (MPa)	0.1
--CO2 Sensor	TCD or IR
--CO2 Range (% CO2)	0~20
Humidity	
--Humidifying System	Special designed water reservoir
--Relative Humidity (% RH)	≥95%
--Water Reservoir Volume (L)	3
Shelves	
--Shelf Dimensions (WxD, mm)	453x433
--Standard/Maximum Quantity	3, 10
--Shelf Construction	Stainless steel, type 304, mirror finish, perforated, adjustable
--Max. Load per Shelf	10 kg (22.05 lbs)
Rated Power	≤650VA±10%
Power Supply	220V/50Hz(Standard), 110V/60Hz (Optional)
Alarm System	Power interruption, High/low temperature, Deviation of CO2, RH, Door ajar, Independent overheat protection
Data Output	RS232, remote alarm contacts, USB
Alt Name	CO2 Incubator

FEATURES

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Drift-free CO2 sensor:
CO2 sensors are positioned in the chamber to respond quickly to any deviations in desired conditions. Robust design improves stability and reliable service life, eliminating the need for removal during sterilization and separate cleaning. On-demand auto-start, auto-zero and auto-cal facilitates easy start-up and calibration.

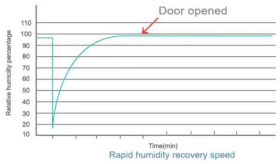
Variable oxygen control:
Oxygen controlled models are equipped with advanced zirconium oxide sensor
Hypoxic: For primary cell, stem cell and embryo research applications.
Hyperoxic: For research in lung, retina and other sensitive tissues.

Oxygen levels in Human Tissues	
Lungs	14%

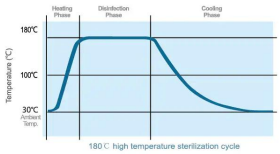
Arteries	12%
Liver, Heart, kidneys	4-12%
Eyes	1-5%
Brain	0.5-7%
Bone Marrow	0-4%

Condensation-free humidification system:
Integrated 3 liter reservoir provides stable, high relative humidity levels, allowing faster recovery and more space for samples than traditional pan designs Water reservoir maximizes relative humidity without condensation ensuring a dry inner chamber, preventing contaminants.

Condensation-free water Reservoir System



Contamination control:
180°C high temperature sterilization cycle offers simplified cleaning protocols to protect your valuable cultures, eliminate the loss of time and resources while providing convenient added security for your research work. The simple routine protects the incubator air, all chamber surfaces and humidification water from biological contaminants and eliminates the need for separate autoclaving of parts.



HEPA air filtration for air purity:
Airborne particulates are a primary source of contamination in most lab settings.
The in-line HEPA filter cleans the airstream of microbes and particles protecting cultures from contamination.
Entire chamber air volume is filtered every 60 seconds to achieve ISO class 5 cleanliness.

Simple operation:
Main screen with a bright LCD display provides at-a-glance monitoring even from a distance.
The intuitive interface provides complete data visibility to monitor all incubator interaction, featuring door-mounted position for easy access, on-screen menu prompts, error and usage logs, data logging, performance trend graphing.
'On-demand data and error logs provide a downloadable history of activity and conditions including parameter changes and alarms.

Optimized chamber design:
Easy-to-clean, coved-corner interior with convenient access port.
No special tools required for assembly and disassembly of interior components

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