Heal Force

Heal Force Laboratory Equipment

CO_2 Incubator

CE 0123

Heal Force leads you to healthier life

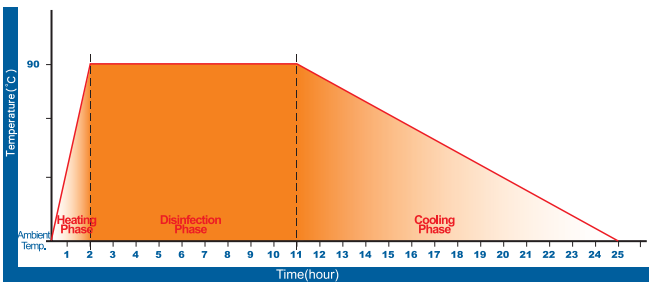
HF90/HF240/HF151UV

Features

- Air-jacketed and direct heat
- 90℃ moist heat (HF90 & HF240) or ultraviolet (HF151UV & HF212UV) disinfection
- Efficient humidity system
- Programmable CO_2 sensor “AUTO-START”
- Separate over-temperature cutout
- Built-in system diagnostics
- Advanced chamber circulation
- Alarm system
- Coved corners & quick clean shelves
- 2 indepedent Pt1000 temperature sensors

90℃ moist heat disinfection (HF90 & HF240)

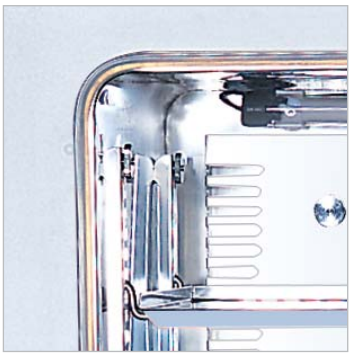
HF90 and HF240 are equipped with 90℃ moist heat disinfection system. All accessories and parts inside the chamber such as CO_2 sensors, fans and shelves are disinfected effectively. Mycoplasma is 100% eliminated in a routine disinfection circle.



90°C moist heat disinfection pattern

Ultraviolet disinfection (HF151UV & HF212UV)

A long-life ultraviolet lamp is equipped at the inner back of the chamber of HF151UV and HF212UV to eliminate contaminant. To take maximum effect of disinfection, the wavelength of UV light is maintained at 254nm.



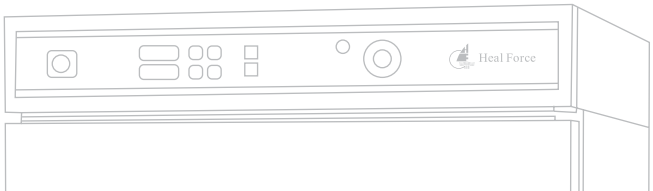
Coved corners

Easy-to-clean structure design

All parts and structure inside the chamber are designed for cleaning convenience. All the interior corners are coved without dead corners. The shelves are removable to clean without tools.

Inlet filter for CO_2 supply

CO_2 gas passes through a HEPA filter before entering the chamber. The HEPA filter is able to filter particles larger than 0.3μm at 99.998%.



/HF212UV Air-jacketed CO_2 Incubator

AUTO-START

The thermal conductivity CO_2 sensor has its baseline automatically reset without manual adjustment. The function ensures a stable and accurate working system.

Control panel

Heating system

A unique direct heating system combined with a PT1000 temperature sensor ensures stable temperature control with little gradient and prompt temperature recovery without overheat. Direct airflow ensures optimum temperature uniformity and insulating fiberglass reduce both the temperature fluctuation caused by door open and time to recovery after closed.

Humidity system

An innovative design of water reservoir is applied in Heal Force air-jacketed CO_2 incubators. Comparing with the ordinary water tray, the reservoir enlarges volume and expands surface area, which leads to remarkable efficiency in humidity maintenance and recovery, and reduces recovery time dramatically.

Water reservoir

Relatively independent space

Besides the main door, 3 inner glass doors (HF90 only) are equipped in the chambers, and make the chamber into relatively independent space together with the shelves. The design helps preventing other space in the chamber from fluctuation of environment parameters and introduction of contaminants in maximum extent in case a inner door is open. A structure of 6 half-size inner glass doors and shelves is optional for model HF240.

HF90 with 3 inner glass doors(standard)

HF240 with 6 half-size inner glass doors and shelves(optional)

HF90

HF240

HF212UV

HF151UV

Specifications

Model	HF90	HF240	HF151UV	HF 212UV
Interior volume	151 litres	240 litres	151 litres	212 litres
Outer dimensions (D*W*H)	762mm*637mm*909mm	820mm*780mm*944mm	768mm*615mm*865mm	763mm*910mm*795mm
Interior dimensions (D*W*H)	530mm*470mm*607mm	583mm*607mm*670mm	530mm*470mm*607mm	588mm*600mm*600mm
Shelf dimensions (D*W)	445mm*423mm	503mm*554mm	445mm*423mm	510mm*590mm
Standard quantity of shelves	3	3	3	3
Maxium quantity of shelves	10	12	10	12
Temperature setting range	Ambient +5~50℃	Ambient +5~50℃	Ambient +5~50℃	Ambient +5~50℃
Temperature setting deviation	±0.1℃	±0.1℃	±0.1℃	±0.1℃
Temperature sensor	PT1000	PT1000	PT1000	PT1000
Heating system	Air-jacketed, direct heating			
CO_2 concentration setting range	0~20%	0~20%	0~20%	0~20%
CO_2 concentration setting deviation	±0.1%	±0.1%	±0.1%	±0.1%
Recovery time of CO_2 concentration to 5% @37℃	Less than 3 minutes	Less than 3 minutes	Less than 3 minutes	Less than 3 minutes
CO_2 concentration sensor	TCD (thermal conductivity detector)			
Humidity	≥95%	≥95%	≥95%	≥95%
Water reservior volume	3 litres	3 litres	4 litres	6 litres
Interior structure	3 standard shelves with 3 inner glass doors	3 standard shelves with a glass door 6 half-size shelves with 6 mini glass doors*	3 standard shelves with a glass door	3 standard shelves with a glass door
Disinfection & time	Moist heat 9 hours @90℃ (disinfection duration: about 25 hours)		UV lamp for 30 minutes	
Net weight	80kg	98kg	75kg	95kg
Rated power	600w	735w	600w	700w
Power supply		220V±10% / 50Hz (standard)		
		110V / 60Hz (optional)		

*optional for model HF240

HF160W Water-Jacketed CO_2 Incubator

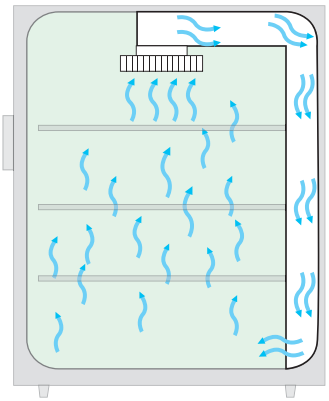
Water-jacketed

Appling the water-jacked system, the temperature is more stable and insusceptible in accidents like power supply cut off.

HEPA filter

HF160W applies HEPA filter for disinfection. The filter is very efficient to prevent particulates larger than 0.3μm at 99.97%. The filter system filter runs continuously and within every 60 seconds, the volume of entire chamber is disinfected. With help of HEPA filter, the air quality reaches Class 100.

HEPA filter



HEPA filter and air flow pattern

Airflow system

HF160W is equipped with a patented airflow system, which ensures the temperature and CO_2 concentration to be stable and uniform all over the chamber.

Triple temperature controls

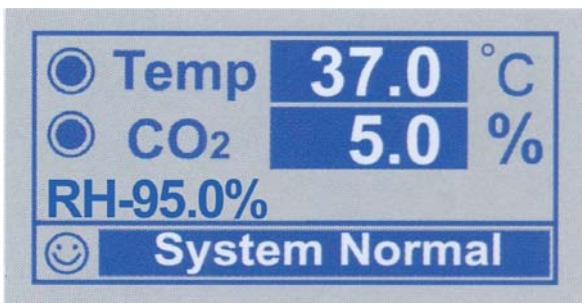
Three temperature control systems are applied in the incubator. The independent systems are for main chamber control, overheat protection and surrounding temperature inspection respectively.

AUTO-ZERO/AUTO-START

The infrared type is equipped with Auto-zero, which runs automatically to recover the indicator to 'Zero'every 24 hours. Auto-start function for TCD type ensures CO_2 concentration sensor's baseline automatically reset without manual adjustment. Both functions ensure a stable and accurate working system.

Outer door heated according to surrounding temperature

The surrounding temperature control system continuously monitors the temperature and is able to control the power supply of outer door heating to avoid overheat and keep the temperature inside the chamber stable.



LCD display

Humidity display and alarming system

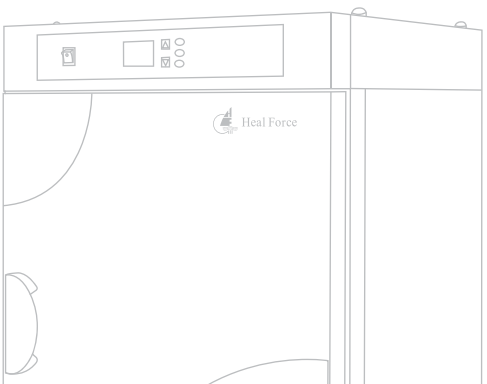
HF160W is able to create a high humidity environment and the relative humidity (RH) is displayed on the panel. The indicator alarms in case of following conditions: RH level below threshold, overheated, low water level in reservior and HEPA filter expired.

HF160W

CO_2 cylinder auto changer (optional)

When CO_2 pressure drops to a minimal level, the system automatically switches to an alternative cylinder and ensures continuous CO_2 supply.

CO_2 cylinder auto changer(optional)



Specifications

Model	HF 160W
Interior volume	185 litres
Outer dimensions (D*W*H)	656mm×655mm×1030mm
Interior dimensions (D*W*H)	504mm×544mm×681mm
Shelf dimensions (D*W)	440mm×466mm
Standard quantity of shelves	3
Maxium quantity of shelves	11
Temperature setting range	Ambient +5~55℃
Temperature setting deviation	±0.1℃
Temperature sensor	PT1000
Heating system	Water-jacketed
Water jacket volume	43.5 litres
CO_2 concentration setting range	0~20%
CO_2 concentration setting deviation	±0.1%
Recovery time of CO_2 concentration to 5% @37℃	Less than 3 minutes
CO_2 concentration sensor	Infrared or TCD (optional)
Humidity	≥95%
Water reservoir volume	3 litres
Interior structure	3 standard shelves with a glass door
Disinfection	HEPA filter
Net weight	110kg
Rated power	430w
Power supply	220V±10% / 50Hz (standard)
	110V / 60Hz (optional)

Heal Force Laboratory Equipment

Laboratory Centrifuge

Water Purification System

CO_2 Incubator

Biological Safety Cabinet

Heal Force Bio-Meditech Holdings Group
Nison Instrument (Shanghai) Limited
International Sales Office: Floor 15, No.2 Hua Shan Road, Shanghai 200040, P.R. China
Tel: +86 21 62728646
Fax: +86 21 62710529
E-mail: export@healforce.com
Website: www.healforce.com