

Healforce CO₂ Incubators



Heal Force leads you to healthier life



Direct Heat CO₂ Incubators HF90 & HF240

IncuClean — Contamination control for ideal culturing

90°C moist heat disinfection

HF90 and HF240 are equipped with 90°C moist heat disinfection system. All accessories inside the chamber such as CO₂ sensor, fan and shelves can be disinfected during the 90°C moist heat disinfection routine. In independent tests, the routine was proven to completely eliminate mycoplasma.

Coved corners & quick clean shelves

Interior chamber with 100% coved corner is easy to clean, and the sturdy shelves can be removed without tools for easy cleaning or adjustment.

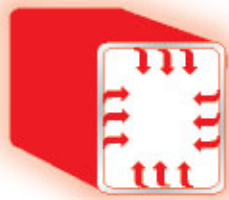
Gas supply line filter

The gas will pass a HEPA filter and enter the chamber after the grain larger than 0.3µm being sieved. The sieving ratio is 99.998%, and the blower mixes the inputting gas and air inside.

Highly reliable TC CO₂ sensor CO₂ sensor “auto-start”

The TC CO₂ sensor baseline is reset to ensure accuracy without manual adjustments. This ensures the system works with stability and maximum accuracy.

Advanced heating system



A unique direct heat system combined with a Pt1000 temperature sensor ensures a stable temperature control with minimal gradient and prompt temperature recovery with no overheat.

Heating elements and fiberglass insulation surround all sides of the outer chamber wall to provide uniform heating and fast recovery times after door closings. The directed airflow ensures optimum temperature uniformity.



Heal Force HF90



Heal Force HF240

Direct Heat CO₂ Incubators HF90 & HF240

Efficient humidity system

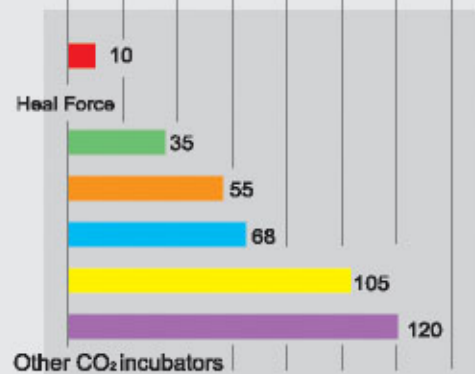


Heal Force
Unique water reservoir

A new type of water reservoir replaces the standard water tray. This new system provides a high relative humidity and also allows rapid humidity recovery times.

The heated floor underneath the water reservoir provides humidity recovery times faster than comparable water tray incubators.

Humidity recovery times [min]



Heal Force compared with other CO₂ incubators

Inner small glass door

The separate inner small glass doors allow for selective chamber openings. This feature helps to minimize the introduction of airborne contaminants to the chamber since the size of the access portal is minimized.



Heal Force HF90 with 3 inner small glass doors

SPECIFICATIONS, HF90 & HF240

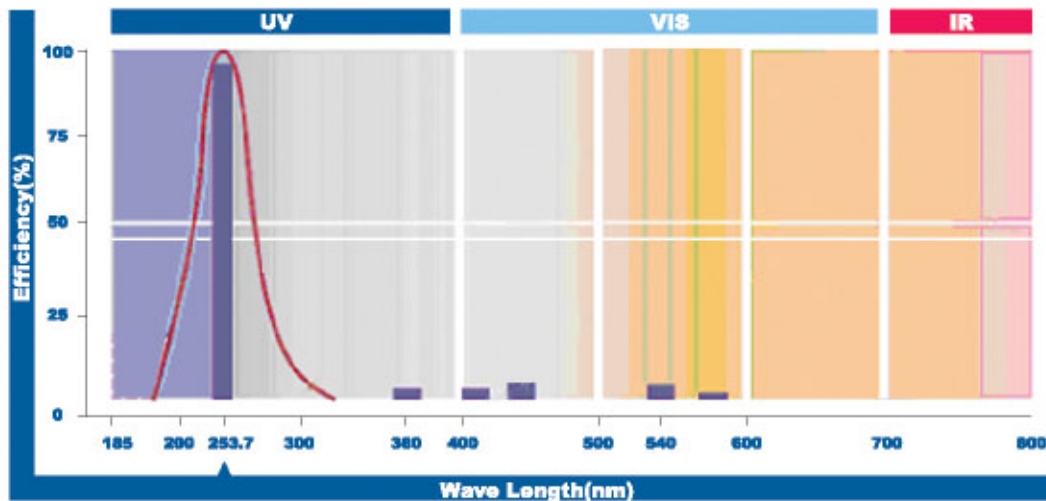
	HF90	HF240
Inner volume (L)	151	240
Dimensions (D × W × H) mm	762 × 637 × 909	820 × 780 × 944
Inner dimensions (D × W × H) mm	530 × 470 × 607	583 × 607 × 670
Shelves (D × W) mm	445 × 423	503 × 554
Number of shelves (standard/Max.)	3/10	3/12
Temperature control range (°C)	ambient +5–50	ambient +5–50
Temperature control accuracy (°C)	±0.1	±0.1
Temperature sensor	PT1000	PT1000
90°C disinfection time (h)	9	9
Disinfection duration (h)	about 25	about 25
CO ₂ control range (%)	0–20	0–20
CO ₂ deviation (%)	±0.1	±0.1
CO ₂ sensor	Thermal Conductivity	Thermal Conductivity
Humidity (%)	≥95	≥95
Water reservoir volume (L)	3	3
Inner small glass doors	3	6 (optional)
Net weight (kg)	80	98
Rated power (W)	600	735
Rated voltage	230V/50Hz 110V/60Hz(optional)	230V/50Hz 110V/60Hz(optional)



Direct Heat CO₂ Incubators HF151UV & HF212UV

Ultraviolet contamination control

A long-life UV lamp is installed at the back of the chamber of HF151UV & HF212UV to eliminate the contaminant inside the chamber. Unlike typical germicidal lamps, the long-life Heal Force UV lamp is designed to deliver straight line performance at approximately 254nm for maximum germicidal efficiency and long life.



Ultraviolet light affects DNA by causing Pyrimidine dimers to form when adjacent Pyrimidine bases on the DNA strand become covalently linked. The dimer disrupts the normal replication of the DNA or transcription to make protein.

Microorganisms deactivated by UV light

Bacteria	UV Dose
Bacillus anthracis	8,700
Bacillus paratyphosus	6,100
Bacillus subtilis	11,000
Bacillus subtilis Spores	22,000

Bacteria	UV Dose
Pseudomonas aeruginosa	3,900
Salmonella enteritidis	7,600
Escherichia coli	6,600
Salmonella typhi	7,000

Direct Heat CO₂ Incubators

HF151UV & HF212UV

The Heal Force UV lamp is an instrument grade bulb specifically fitted with UV resistant boots to protect seals from breakdown. The bulb is easily replaced when required; no tools are needed.

- Ultraviolet contamination control
- Efficient humidity system
- Programmable CO₂ sensor auto-start
- Separate over-temperature cutout
- Built-in system diagnostics
- Advanced chamber circulation
- Alarm system
- Coved corners & quick clean shelves
- Two Pt1000 temperature sensors



Heal Force HF212UV



Heal Force HF151UV

SPECIFICATIONS, HF151UV & HF212UV

	HF151UV	HF212UV
Inner volume (L)	151	212
Dimensions (D × W × H) mm	680 × 615 × 865	763 × 910 × 795
Inner dimensions (D × W × H) mm	530 × 470 × 607	588 × 600 × 600
Shelves (D × W) mm	445 × 423	510 × 590
Number of shelves (standard/Max.)	3/10	3/10
Temperature control range (°C)	ambient +5–50	ambient +5–50
Temperature control accuracy (°C)	±0.1	±0.1
Temperature sensor	PT1000	PT1000
CO ₂ control range (%)	0–20	0–20
CO ₂ deviation (%)	±0.1	±0.1
CO ₂ sensor	Thermal Conductivity	Thermal Conductivity
Humidity (%)	≥95	≥95
Water reservoir volume (L)	4	6
Net weight (kg)	75	95
Rated power (W)	600	700
Rated voltage	230V/50Hz 110V/60Hz(optional)	230V/50Hz 110V/60Hz(optional)

Water-Jacketed CO₂ Incubators

HF160W

HF160W water-jacketed CO₂ incubator with precise CO₂ control, elevated RH, and a choice of TC (thermal conductivity) or IR (infrared) sensor is the first choice for many researchers in academy, government, clinic, biotech, and R&D labs.

HEPA filter system

Heal Force Water-Jacketed CO₂ incubators include a HEPA filter to maintain a high quality environment. The HEPA filter's performance is rated a minimum 99.97% efficient for 0.3µm particulates with greater efficiency for particles larger than 0.3µm. HEPA filter efficiency does not decrease greatly for particle sizes below 0.3µm. The system continuously filters the entire chamber volume every 60 seconds, and allows you to attain and maintain process integrity within your incubator at Class 100 air quality or better.

Unique airflow system

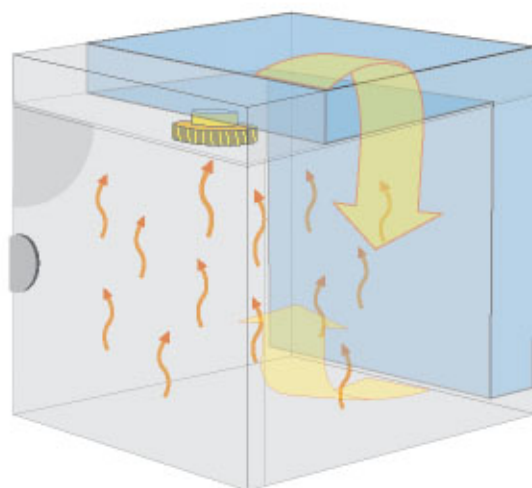
Heal Force water-jacketed CO₂ incubator is equipped with a patented airflow system, which can mostly guarantees the uniformity of temperature and CO₂ in incubator.

Three independent temperature control systems

Three independent temperature control systems (main chamber, overheat control, surrounding temperature monitor) ensure HF160W CO₂ incubators provide a consistent culture temperature.



Heal Force HF160W



HEPA filter and air flow

Water-Jacketed CO₂ Incubators

HF160W

CO₂ sensor "AUTO-ZERO"

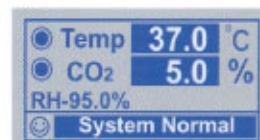
"AUTO-ZERO" function guarantees the accuracy of the CO₂ measurement, it plays automatically every 24 hours.

Heated outer door according to the surrounding temperature

Heal Force water-jacketed CO₂ incubator is equipped with a heated outer door, which can adjust its heat power according to the change of surrounding temperature.

High humidity and relative humidity display

Heal Force water-jacketed CO₂ incubator operates under high relative humidity with a humidity pan. A humidity sensor enables our water-jacketed incubators to display the RH value. RH display, readable in 0.1% increment, includes low RH program mable alarm (alerts you of need to add water to humidity pan).



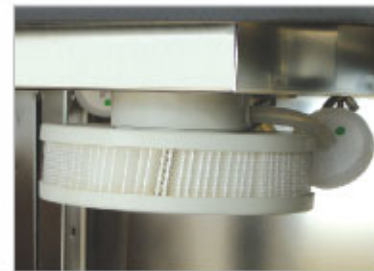
LCD display



Coved corners



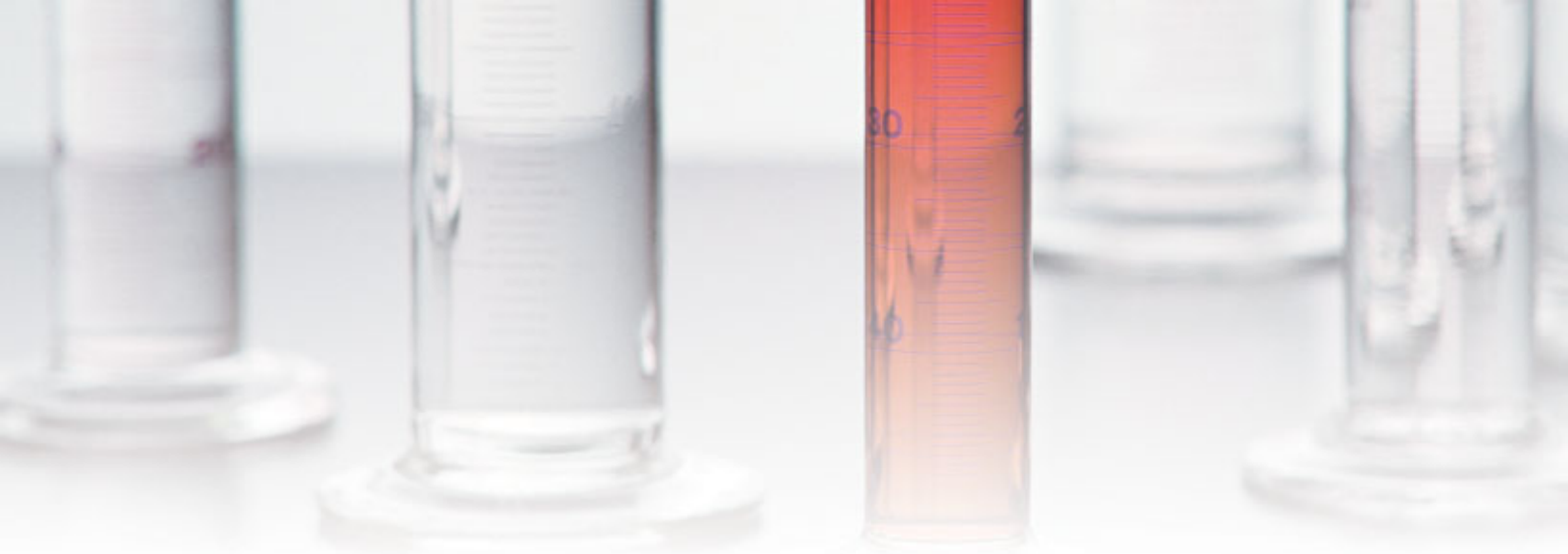
Gas supply line filter



Main HEPA filter

SPECIFICATIONS, HF160W

Chamber capacity (L)	185
Water jacket volume (L)	43.5
Dimensions (D × W × H) mm	626 × 656 × 1030
Inner dimensions (D × W × H) mm	502 × 554 × 681
Shelves (D × W) mm	440 × 466
Number of shelves (standard/Max.)	3/11
Temperature control range (°C)	ambient +5~55
Temperature control accuracy (°C)	±0.1
Temperature sensor	PT1000
CO ₂ control range (%)	0~20
CO ₂ deviation (%)	±0.1
CO ₂ sensor	Infrared or Thermal Conductivity
Humidity (%)	≥95
Plate volume (L)	3
Net weight (kg)	110
Rated power (W)	430
Rated voltage	230V/50Hz 110V/60Hz (optional)



About the company

Heal Force is a highly focused manufacturer of developing and producing laboratory instrument and medical equipment since 1993. Heal Force has already certified with ISO 13485:2003 and ISO 9001:2000 Quality Assurance System certificates by TUV (Germany). A network of international distributors and partners allows us to provide quick and responsive local service and support.



Centrifuge



Freezer



Biological Safety Cabinet



Ultrapure Water System



Nison Instrument (Shanghai) Limited

International Sales Office: Floor 15th, No.2 Hua Shan Road, Shanghai 200040, PR China

Tel: +86 21 62728646 Fax: +86 21 62710529

E-mail: export@hf.healoo.com Website: www.healforce.com