

# **HFsafe LC series**

**Biological safety Cabinet** 







# **Feature**

- Ergonomical & compact design
- Optimum protection from risk
- Low Energy and Low Noise
- A state-of-the-art system
- Adaptability to individual situation





#### **Exhaust Duct**

The extraction of exhaust air from the Biosafety cabinet is usually achieved by either a dedicated or "share" exhaust duct. Bringing expertise in biological safety cabinet, Heal Force offers a broad portfolio of exhaust accessories which can be combined to match a customer's specific design and budget requirements.

### Worry-free UV light

Incorporating a 24-hour clock for programming UV light timer when the laboratory is unattended, i.e. at lunch break or during the night time, extending bulb life and saving energy. It is interlocked and activated to work when fluorescent lamp and blower are turned off and front window is closed

## Air flow velocity monitoring

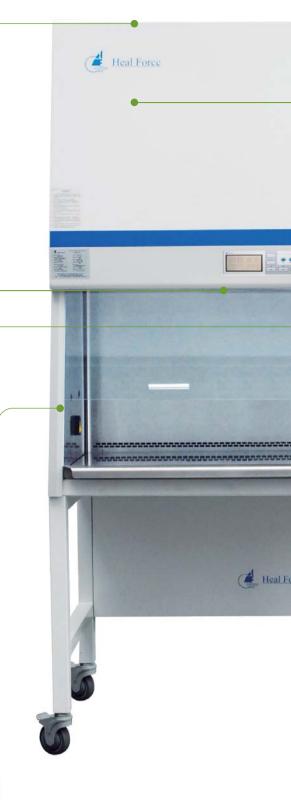
- Airflow are constantly monitored via the sensors to ensure safe operating conditions are maintained.
- Alarm is activated in case velocity fluctuating over 20%

## **Ergonomic Structure**

- Fully-closing, tempered safety glass sash with counter-balanced mechanism for effortless operation
- 10 ° sloped front window for more comfortable head and elbow position, reducing fatigue
- Standard 200mm±5mm sash opening for easier access into the work zone and safety

## Control panel

Advanced microporcessor control panel with large LCD display supervises operation of all cabinet functions and is conveniently palced for easy viewing and operation from either seated or standing position. The intuitive interface delivers a constant read-out of downflow and inflow velocities and overall cabinet performance status. Programmable PIN restricts unauthorized cabinet access.







#### Self-induced blower

- Synchronously communicates with the microprocessor, there is no need for manual speed control
- Automatically compensates for normal power line variations, air disruption and filter loading
- Precise airflow and constant air volume prevent performance degradation
- Motor consumes less energy, reduces heat output and operates more quietly.

# Filtration system

- Because filters remove microorganisms and airborne particulates from the air, the quality, performance and useful life supply and exhaust filters are critical biosafety considerations
- HFsafeLC biosafety cabinets are equipped with 2 long-life ULPA filters
- Supply and exhaust filters provide 99.999% typical efficiency for particle size of 0.1 to 0.2 microns
- Leak-free performance is guaranteed through structural stability and scan test conducted prior to shipping

## Waterproof socket & extensible valve port

2 waterproof receptacles are located in the left and right sidewall, for optimum convenience of using small devices inside the cabinet. 4 access ports are available for extensive functions, compatible with liquid, gas and vacuum service valves.

#### Compact Design

0

ALARM -

(M)

BLOWER

LAMP

AUX

- Slim, compact design and dimensions allows for easy positioning and location in the laboratory.
- Low cabinet height ... .metres allows the choice of bench top location or mounting on a support stand.
- The overall dimesions of the HFsafeLC allows for easy positioning and relocation without the need for diassembly, can be easily transport through standard 800mm doorways.



# True Laminar Airflow

HfsafeLC employs a unique airflow system that raises safety and containment to a new level. Unidirectional airflow moving along parallel flow lines at a constant velocity minimizes air turbulence within the work zone.





KI-discus containment test 1

KI-discus containment test 2

# Strict test for your safety

Every HfsafeLC model manuactuered by Heal Force is individually tested, documented by serial number and validated with the following test methods

- Inflow/downflow velocity
- PAO aerosol challenge for filter integrity
- Airflow pattern vidualization
- Electrical safety to IEC60601-1
- KI-Discus containment and microbiological testing is performed





**HFsafeLC Biosafety Cabinet Technical data** 

Model	Hfsafe-900LC	Hfsafe-1200LC	Hfsafe-1500LC
Nonimal Size	0.9 meters (3')	1.2 meters (4')	1.5 meters (5')
Safety Class	ClassII Type A2	ClassII Type A2	ClassII Type A2
Control system	Microprocessor	Microprocessor	Microprocessor
Dimensions			
Exterior Dimensions(W×D×H)(mm)	1040×790×2130	1340×790×2130	1640×790×2130
Interior Dimensions(W×D×H) (mm)	950×575×625	1250×575×625	1550×575×625
Working height of front window (mm)	200	200	200
Maximum opening height of front window (m	nm) 460	460	460
Shipping dimensions (W×D×H) (mm)	1125×945×1655	1425×945×1655	1725×945×1655
Ventilation System			
Air mode 709	% air recirculation; 30% air exhaust	70% air recirculation; 30% air exhaust	70% air recirculation; 30% air exhau
Downflow velocity(m/s)*	0.35±0.025	0.35±0.025	0.35±0.025
Inflow velocity(m/s)*	0.53±0.025	0.53±0.025	0.53±0.025
Downflow Volume(m3/s)	718	945	1172
Exhaust Volume(m3/s)	363	477	591
Filter Specification			
Supply/exhaust filter	ULPA	ULPA	ULPA
Filter life indicator	LCD diplay	LCD diplay	LCD diplay
Filter performance	For particulate≥0.1~0.2μm at 99.999%; Output air quality class 10		
Performance			
Working Surface Vibration Shift ( RMS ,µm)	≤3µm	≤3µm	≤3µm
Illumination(lux)	≥1000	≥1000	≥1000
Noise(dB)	≤60	≤63	≤65
Electrical Data			
Voltage (V)	220	220	220
Frequency (Hz)	50	50	50
Maximum power (W)	1600	1600	2000
Supply management	AC220~240, 50Hz standard supply		
Supply requirement			
Receptacles	The receptacles have a load capacity of up to 5 A and are protected with T 5 A fuses. When all receptacles are in use simultaneously, they must not exceed the maximum total load capacity of 5 A		
Accessories			
Receptacles	2 (1 right sidewall,1 left sidewall)		
Access ports (21 mm diameter)	4 (2 right sidewall,2 left sidewall)		
Service valves	Up	to 4 (installed through access po	orts)

<sup>\*</sup>Please contact us for more optional power supply information \*\*External dimensions include floor stand (Optional accessory)



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