



Laboratory Equipment

Main Uses

Specialized local air purifying equipment. These are standard Class II microbiological safety cabinets suitable for basic cell biology, microbiology, biomedicine, biosafety laboratories and other laboratories. It is the most basic protection and isolation equipment for biosafety.



EBM DC fan, energy consumption as low as 112W, low noise to 58dB.



With the third generation computer board, the program is more intelligent and the wind speed self-regulation is more sensitive.



HR1200-IIA2-S



Optional part: adjustable stand fits customer's need.



Drop-down glass door is easy to clean.



Standard water-proof socket, water valve and air valve interface.



Debris screen can prevent paper scraps and other debris entering into and damaging the negative pressure zone.



Partitioned workbench is easy to sterilize and clean.

Biological Safety Cabinet

Product Advantages

- HR1200-IIA2-S is the latest biosafety cabinet developed and manufactured to European Standard EN12469.
- With improved energy efficiency the HR1200-IIA2-S is equipped with two EC fans which also lowers noise output.
- A highly efficient HEPA output filter provides protection for the samples, operators and environment.
- Side glass windows allow more natural light, reducing optical stress caused by artificial lighting.
- Additional features include height adjustable stand with wheels and levelling feet, air valve and vacuum valve ports.

Features

- Certified to EN12469.
- Damp-proof, fire-proof glass fibre HEPA filter with a filtering efficiency for $\geq 0.3\mu\text{m}$ particulate matter is $\geq 99.995\%$ provides cleaner air and safer samples.
- Dual EC fans allow for better air flow uniformity and operate with lower noise.
- LCD screen displays various parameters and clear operational conditions.
- UV lamp can be set with one single key to activate/deactivate automatically at specified sterilization intervals from 0min to 24hrs, to minimize the waiting time.
- The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when the illuminating lamp is off. This failsafe removes the risk of incorrect operation.
- Multiple audible and visual alarms: hardware malfunction alarm, operating parameter overrun alarm, filter/UV lamp lifecycle ending alarm, etc.
- Two patented IP44 rated water-proof sockets with timed on/off function for improved safety and energy conservation.

Ergonomic Design

- 10° angled front window provides a comfortable work space for operators.
- Adjustable height stand with hidden mechanism to avoid contamination.
- Universal castor for convenient moving.
- Drop-down front window design for easier cleaning of the upper edge of glass.
- Removable hand rest reduces arm fatigue and does not interfere with air inflow.
- Optional accessories include water valve (manual/electric), air valve and VHP sterilizer.

Main Uses

Energy efficient Class II microbiological safety cabinet with two EC fans, dual exhaust HEPAs and long lasting LED lights. Suitable for microbiology, biomedicine, biosafety laboratories and other laboratories. It offers three levels of protection – operator, product and environment.



Pluggable Power Cable: Power cable can be changed according to a user's need.



Standard water-proof socket, water valve and air valve interface.



LCD screen displays real time operating parameters, filters lifecycles and other critical parameters.



HR1200-IIA2-D



Debris grid catches debris such as paper scrap to damage negative pressure zone.



Compartmented working surface is easy to be sterilized and cleaned.



Drop-down glass door is easy to clean.



Adjustable stand fits a customer's need.

Product Advantages

The HR1200-IIA2 double exhaust filtered biological safety cabinet utilises two highly efficient HEPA exhaust filters and one ULPA downflow filter to provide three levels of protection; operator, product and environment. As there is no need for external ducting, this is a cost-effective solution.

The unit is certified to the EN 12469 standard. It uses energy efficient EC fans, as well as LED lights to ensure for optimal performance with a low noise output and reduced energy consumption. The ergonomic design ensures maximum comfort and alleviates operator fatigue.

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air thus reducing the risk of contamination. The compartmented working surface can easily be removed for sterilization and cleaning purposes.

Features

- E.U. EN12469 Standard Certification.
- The main filter uses a damp-proof, fire-proof glass fibre ULPA filter, the filtering efficiency for $\geq 0.12\mu\text{m}$ particulate matter is $\geq 99.9995\%$ which provides cleaner air and safer samples.
- EC fan operates with lower noise and better uniformity air flow.
- LCD screen displays various parameters and clear operational conditions.
- Ultraviolet light can be set with one single key to for automate on/off time, and sterilization time interval from 0 to 24 hours reducing downtime.
- The product features an interlocking function between the ultraviolet sterilization, fluorescent lamp, front window and fan motor meaning the UV lamp can only come on when illuminating lamp is off. This failsafe removes the risk of incorrect operation.
- Multiple alarm functions with clear and easy to understand alarm with visual and sound alert functions. Alarms include filter and UV end-of-life alerts, fan turned-off after door opening alert and door open alarm.
- Two patented IP44 rated waterproof sockets with timed on/off function to improve safety and conserve energy.

Ergonomic Design

- 10° angled front window provides a comfortable work space for operators.
- Adjustable height stands with hidden mechanism to avoid contamination.
- Universal castors with self-levelling feet for convenient moving.
- Drop-down front window design for easier cleaning of the upper edge of glass.
- Removable hand rest reduces arm fatigue and does not interfere with air inflow.
- Optional accessories include water valve (manual/electric), air valve and VHP sterilizer.

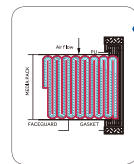
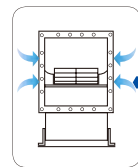
Alarm Functions

- Fan turn-off alarm after door opening.
- Abnormal door height alarm.
- Door open more than limit.
- Blocked filter alarm.
- Damaged filter alert.
- Filter and UV end-of-life alert.
- Front glass blocks ultraviolet .

The Haier Biomedical Biological Safety Cabinet is designed to protect the operator, laboratory environment and samples from being exposed to the infective aerosol produced from samples with bacteria strains, diagnostic materials, and other infective substances. It provides the operator with comfortable and safer working conditions. It is widely used in medical health, disease prevention, food safety, biological pharmacy and environment monitoring.



Ultra Low Penetration Air Filter System



Intelligent Constant Air Velocity Patent Technology



The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity to keep the air speed constant within the safety cabinet by adjustment of the fan speed via the microcomputer system.

304 Stainless Steel Operation Platform and Internal Wall

- Stainless steel work surface without screws ensures no accumulation of contaminant
- Dismountable air in-flow plate is easy to clean and disinfect
- Concaved work surface, waste liquid easily collected



Digital Microprocessor Control System



- LCD display
- Real-time display of key parameters: downflow velocity, inflow velocity, airflow volume, static pressure, negative pressure, accumulative running time of fan and UV lamp and remaining life of filter
- Sound & light alarming function
- UV sterilization reservation setting function



Patented Safe Air Flow Distribution Design

The professional air flow distribution design, provides more uniform airflow, reduced contamination and noise to <62dB(A).



V-shaped Air Inlet Design



Swivel Castor and Self-levelling Feet



HR1200-IIA2

Features

Patent Intelligent Constant Air Velocity

The professional hot-bulb air velocity transducer performs real-time monitoring on the air velocity of the working area, compares it with the standard air velocity and maintains a constant velocity by adjustment of the fan speed by microcomputer system.

Low Noise Safety Energy-saving Mode

When the human body sensor module detects under the intelligent mode that the person is outside and away from the operating area for over 15 minutes, the microcomputer program will automatically switch the safety cabinet to Low Noise Safety Energy Conservation mode, which reduces noise, conserves energy and improves the service life of the filter.

Professional Air-flow Distribution Module

Through the professional air flow distribution design, the safety cabinet provides a more uniform airflow, reduced contamination and noise to <62dB(A).

Ultra Low Penetration Air Filter System

American AAF (ULPA) filter is tested to a typical efficiency of > 99.9995% for 0.12 micron particles. ULPA filter provides vertical laminar flow to the worktable to protect samples from pollution.

Patented Air Flow Disruption Technology

The units utilise side air design on the upper edge and on both sides of the front window to eliminate 'blind spots'. This prevents crossflow between inside and outside air, reducing contamination (Patent No. ZL200520125549.X).

Unique Drop-down Front Glass Window

The unique drop-down front glass window can be removed in seconds to enable quick and efficient cleaning of upper sections, limiting downtime.

Removable Arm Rest

Removable arm rest reduces user fatigue and does not interfere with air inflow.

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	EN 12469, Europe CFDA YY-0569, China	ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	EN61010

Biological Safety Cabinet



American AAF ULPA filter is tested to a typical efficiency of >99.9995% for 0.12 micron particles

Reverse centrifugal fan allows double side air inflow, decreasing noise and saving energy

Digital microprocessor control system for easy operation

Intelligent alarming system

Multiple interlocking functions, a failsafe that removes the risk of incorrect operation

Removable stainless steel work surface makes cleaning easier

Ergonomic angled design to improve comfort

Adjustable foot

HR40-IIA2

Biological Safety Cabinet

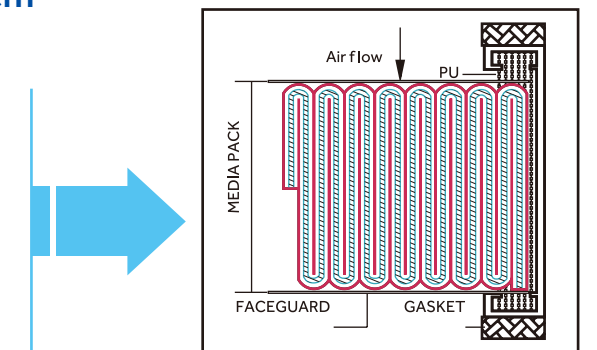
304 Stainless Steel Operation Platform and Internal Wall

- Stainless steel work surface without screws ensures no accumulation of contaminant
- Removable air in-flow plate is easy to clean and disinfect
- Internal wall is constructed of a single piece stainless steel, with 12mm arc angle corners which allows for more effective cleaning
- The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintenance
- Concaved work surface, waste liquid easily collected
- Adjustable stand (0-75mm) without exposed screw thread, reduces risk of contamination



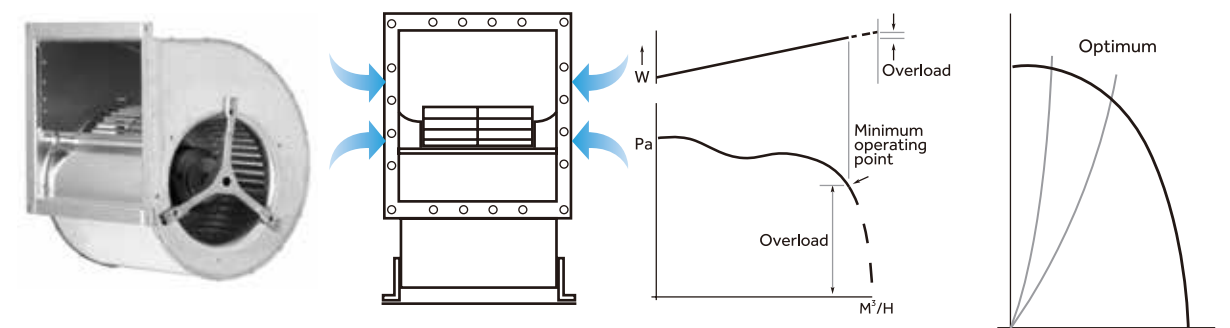
Ultra Low Penetration Air Filtration System

- American AAF ULPA filter
- Tested to a typical efficiency of 99.9995% for 0.12 micron particles
- Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
- The exhaust ULPA filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personnel and environmental protection



High Efficiency Blower System

- The blower system is designed for high performance operation, maximum energy efficiency and minimal maintenance
- Self cooling system reduces energy consumption while enhancing reliability



Reverse centrifugal fan

Double-side air inflow design decreases running noise

Air velocity auto-compensation function guarantees stable wind speed

Provide uniform airflow by adjusting working voltage of fan



Specifications

Model		HR900-IIA2	HR1200-IIA2	HR1500-IIA2	HR1200-IIA2-D	HR1200-IIA2-S
Working Voltage&Frequency(V/Hz)		220V 50Hz	220V 50Hz	220V 50Hz	220V 50/60Hz	220V 50/60Hz
Power(VA)		1400	1500	1600	1600	1600
Power of Blower(W)		AC-L=330W,M=465W,H=735W	AC-L=330W,M=465W,H=735W	AC 650W	EC 190W, EC 170W	EC 120W, EC 112W
Airflow Circulation		70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust
Main Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um
Exhaust Filter Typical Efficiency		ULPA,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	TWO HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um
Filter's Brand		AAF	AAF	AAF	AAF	AAF
Downflow Velocity(m/s)		0.33	0.34	0.31	0.30	0.30
Inflow Velocity(m/s)		0.55	0.55	0.55	0.45	0.45
Fluorescent Lamp Intensity(Lux)		≥900	≥900	≥900	≥1000	≥1000
Net/Gross Weight(approx)	kg	270/293	320/339	360/393	320/339	320/339
	lbs	595.3/646	705.5/747.4	793.7/866.4	705.5/747.4	705.5/747.4
Interior Dimensions(W*D*H)	mm	920*620*650	1220*620*650	1520*620*650	1310*620*630	1310*620*630
	in	36.2*24.4*25.6	48.0*24.4*25.6	59.9*24.4*25.6	51.6*24.4*24.8	51.6*24.4*24.8
Exterior Dimensions(W*D*H)	mm	1080*845*2160	1380*845*2160	1680*845*2160	1380*780*2160	1380*780*2160
	in	42.5*33.3*85.0	54.3*33.3*85.0	66.1*33.3*85.0	54.3*30.7*85.0	54.3*30.7*85.0
Packing Dimensions(W*D*H)	mm	1145*920*1690	1470*920*1690	1755*920*1690	1470*920*1690	1470*920*1690
	in	45.1*36.2*66.5	57.9*36.2*66.5	69.1*36.2*66.5	57.9*36.2*66.5	57.9*36.2*66.5
Supporter		680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height	680-900mm adjustable height
Container load (20'/40'/40'H)		12/24/24	8/16/16	6/12/12	8/16/16	8/16/16
Alam		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate		CFDA,CE,EN12469	CFDA,CE,EN12469	CFDA,CE,EN12469	CE,EN12469	CE,EN12469

Product appearance and specifications are subject to change without notice

Specifications



Model		HR30-IIA2	HR40-IIA2	HR50-IIA2	HR40-IIB2
Working Voltage&Frequency(V/Hz)		220V 50Hz	220V 50/60Hz	220V 50Hz	220V 50/60Hz
Power(VA)		1300	1300	1300	1700
Power of Blower(W)		AC-L=330W,M=465W,H=735W	AC 540/625W	AC 650W	AC 115W
Airflow Circulation		70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	70% Downflow,30% Exhaust	100% Exhaust
Main Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um	ULPA ,U15,99.9995%@0.12um
Exhaust Filter Typical Efficiency		ULPA ,U15,99.9995%@0.12um	HEPA ,H14,99.995%@0.3um	HEPA ,H14,99.995%@0.3um	HEPA,H14,99.995%@0.3um
Filter's Brand		AirePlus	AAF	AirePlus	AAF
Downflow Velocity(m/s)		0.31	0.28	0.28	0.28
Inflow Velocity(m/s)		0.55	0.55	0.55	0.55
Fluorescent Lamp Intensity(Lux)		≥1200	≥1200	≥1100	≥1200
Net/Gross Weight(approx)	kg	235/257	293/316	350/383	252/298
	lbs	518.5/567.1	646.5/697.3	772.3/845.1	555.6/657.5
Interior Dimensions(W*D*H)	mm	900*610*680	1167*610*680	1585*610*680	1167*610*680
	in	35.4*24.0*26.8	45.9*24.0*26.8	62.4*24.0*26.8	45.9*24.0*26.8
Exterior Dimensions(W*D*H)	mm	1100*790*2200	1360*790*2200	1780*790*2200	1360*790*2400
	in	43.3*31.1*86.6	53.5*31.1*86.6	70.1*31.1*86.6	53.5*31.1*94.5
Packing Dimensions(W*D*H)	mm	1155*905*1720	1415*905*1720	1835*905*1720	1415*905*1910
	in	45.5*35.6*67.7	55.7*35.6*67.7	72.2*35.6*67.7	55.7*35.6*75.2
Supporter		680	680	680	680
Container load (20'/40'/40'H)		10/20/20	8/16/16	6/12/12	8/16/16
Alam		Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate		CFDA	CFDA,CE,EN12469	CFDA	CFDA,CE ,EN12469

Product appearance and specifications are subject to change without notice

Main Uses

Featuring many patented technologies and certified to ISO146644.1 Class 5 standard, Haier Biomedical's clean bench laminar flow units are suitable for a wide range of clean air applications within various sectors including pharmaceutical, clinical, life science research, photoelectric or microelectronics manufacturing.

Clean Bench

Product Advantages

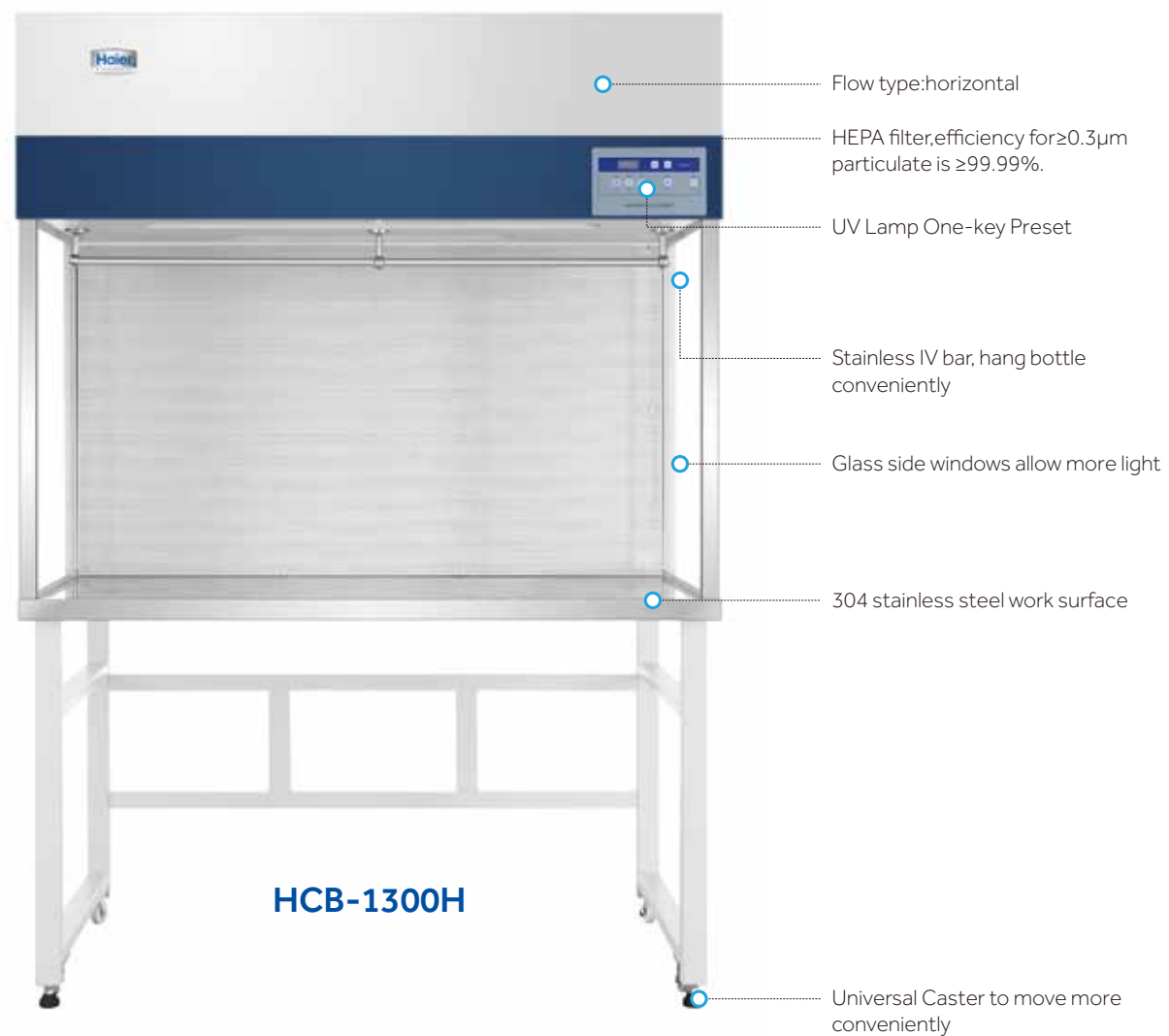
- Use efficient damp-proof and fire-proof glass fibre HEPA filter, typical efficiency of $\geq 99.99\%$ for $\geq 0.3\mu\text{m}$ particulate.
- ISO14644.1 Class 5 Standard, air cleanliness is better than 100 Class cleanliness requirement.
- The industry's first innovated pre-cleaning function pre-cleans the working area before sample handling to further improve sample/product protection.
- UV lamp start-up delay time prevents operators from being exposed to potentially harmful ultraviolet light. The pre-set function for the ultraviolet sterilization improves user's operation efficiency.

Features

- Recessed internal lighting reduces eye fatigue.
- One-touch UV lamp operation, Ultraviolet light can be set with one single key to automate on/off time and sterilisation time interval from 0 to 24 hours, reducing downtime. Audible and visual alarms remind users to leave, protecting them from UV injury.
- Inter-lock function provides a safer operation. The fluorescent light and ultraviolet light interlock with each other. The ultraviolet light can only be switched on when the fluorescent light is turned off. When the fluorescent light is on, the ultraviolet light is powered off immediately to minimize any risks.

Ergonomic Design

- The working surface is 800mm above the floor and suitable for an operator to stand or sit, allowing for flexible working through the day to reduce operator fatigue and make operations comfortable.
- The delay to start function of the ultraviolet sterilization prevents operators exposure to harmful lighting. When ultraviolet light is switched on, the sound and light alarms will notify operators to leave immediately. The light will come on after 10 seconds to prevent operators from being harmed by the ultraviolet light.
- The pre-set sterilization function improves productivity. The product has a ultraviolet sterilization pre-set timer function which provides more rest to users and improves work efficiency.
- The detachable chassis makes installation and moving convenient. It is equipped with universal casters and adjustable stand with levelling feet for convenient moving and cabinet placement.



- Featuring many patented technologies and authoritative testing certification for reliability
- Microcomputer intelligent control panel with durable touch buttons
- Multiple safety protection functions including UV delay start
- Interlocking function to put an end to incorrect operation
- Various personalized design to ensure comfortable operation
- Perfect memory function to avoid repeat setting
- Combined under-frame structure with universal truckle design



High-Efficiency Filter HEPA

High-efficiency HEPA filter with efficiency of 99.99%@0.3 μ m, provides ISO14644.1 Class V standard clean air, safer and reliable clean air.

304 Stainless Work Surface

The durable and corrosion-resistant 304 stainless steel work table without fixing screws reduces the accumulation of dirt, reducing the risk of contamination.

Ergonomic Design

Recessed internal lighting reduces eye fatigue.

Patented Technology

- Patented UV sterilization start-up delay technology prevents injury by UV light. After the UV lamp switch is pressed down, the audible and visual alarm will be activated to remind the operator to leave in time;
- Pre-set function: This technology includes a pre-set UV sterilization start-up delay function to provide improved working efficiency.

Interlocking Function

There is an interlocking function between illuminating lamp and UV lamp, the UV lamp only works when the illuminating lamp is off. If the UV lamp is on, it can be turned off by pressing the daylight lamp, reducing the risk of incorrect operation.

Memory Function

The UV lamp start-up delay time, sterilization duration, pre-set start time, fan position can be set and saved by user on request for the convenient and quick cabinet start-up.

One-key Operation

- After the UV lamp switch is pressed, the time function can be activated automatically. The default sterilization time is 30min, which can be adjusted by user within 0-99min on request;
- Sterilization pre-set, when pressing the UV lamp, the pre-set lamp will light to remind user that the sterilization pre-set function has been activated and that the sterilization pre-set can be conducted.

Pre-cleaning Function

The pre-cleaning function can further improve the protection of samples.



Specifications

Model		HCB-900V	HCB-1300V	HCB-1300H	HCB-1600H
Flow Type		Vertical	Vertical	Horizontal	Horizontal
Voltage/Frequency		220/50	220/50	220/50/60	220/50/60
Power(W)		1200	1200	350	350
Vibration Amplitude (UM)		2	2	2	2
Exhaust Filter Typical Efficiency		H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um	H13 HEPA,99.99%@0.3um
Average Velocity (M/S)		0.2-0.4	0.2-0.4	0.2-0.4	0.2-0.4
Fluorescent Lamp Intensity(Lux)		≥300	≥300	≥1000	≥1000
Net/Gross Weight(approx)	kg	115/145	145/171	145/175	165/214
	lbs	254/319	320/376	319/385	363.7/471
Sound Level(dB(A))		58	58	61	61
Internal Dimension(W*D*H)	mm	900*530*520	1300*530*520	1310*550*750	1710*550*750
	in	35.4*20.9*20.5	51.2*20.9*20.5	51.6*21.7*29.6	67.3*21.7*29.6
External Dimesion (W*D*H)	mm	970*630*1730	1370*630*1730	1380*792*1960	1780*790*1960
	in	38.2*24.8*68.1	53.9*24.8*68.1	54.4*31.2*77.2	70.1*31.1*77.2
Packing Dimensions(W*D*H)	mm	1105*745*1280	1505*745*1280	1465*940*1350	1865*940*1370
	in	43.5*29.3*50.4	59.3*29.3*50.4	57.7*37*53.2	73.4*37.0*53.9
Supporter		755mm high chassis	755mm high chassis	765mm high chassis	765mm high chassis
Cleanliness Classification		ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5	ISO 14644.1 Class 5
Container Load(20'40'40'H)		15/33/33	10/25/25	8/16/16	6/12/12
Certification		CE,CFDA	CE,CFDA	CE	CE,CFDA

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