

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.



Optional part adjustable stand fits customer's need.



HR1200-IIA2-S



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.



Adjustable stand fits a customer's need.



Drop-down glass door is easy to clean.



Compartmented working surface is easy to be sterilized and cleaned.

Biological Safety Cabinet

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.

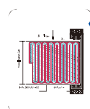
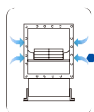
Biological Safety Cabinet

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.



EN 12469

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 with the safety cabinet by adjustment of the fan speed via the microcomputer system.

304 Stainless Steel Operation Platform and Internal Wall

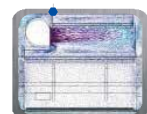
- Stainless steel work surface without screws ensures no accumulation of contaminant
- Dismountable air in-flow plate is easy to clean and disinfect
- Concave work surface, waste liquid easily collected



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 <math><62\text{dB(A)}</math>.



V-shaped Air Inlet Design



Swivel Castor and Self-levelling Feet



HR1200-IIA2

Biological Safety Cabinet

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 <math><62\text{dB(A)}</math>.

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 CFDAY-0569, China	ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA	EN-1822 (H14) Europe EST-RP-CC001.3, USA EST-RP-CC007, USA EST-RP-CC034.1, USA	EN61010

Biological Safety Cabinet



HR40-IIA2

- 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

Biological Safety Cabinet

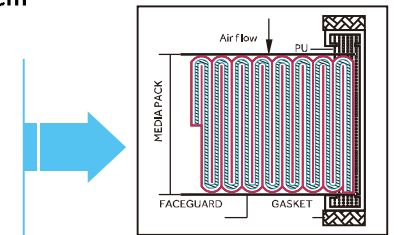
304 Stainless Steel Operation Platform and Internal Wall

- 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



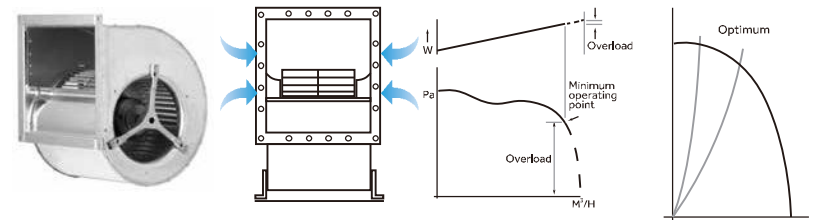
Ultra Low Penetration Air Filtration System

- 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
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Biological Safety Cabinet



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
Alarm		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	HR50-IIA2	HR40-IIA2	HR50-IIA2	HR40-IIA2
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
	lbs	518.5/567.1	646.5/697.3	772.3/845.1
Interior Dimensions(W*D*H)	mm	900*610*680	1167*610*680	1585*610*680
	in	35.4*24.0*26.8	45.9*24.0*26.8	62.4*24.0*26.8
Exterior Dimensions(W*D*H)	mm	1100*790*2200	1360*790*2200	1780*790*2200
	in	43.3*31.1*86.6	53.5*31.1*86.6	70.1*31.1*86.6
Packing Dimensions(W*D*H)	mm	1155*905*1720	1415*905*1720	1835*905*1720
	in	45.5*35.6*67.7	55.7*35.6*67.7	72.2*35.6*67.7
Supporter	680	680	680	680
Container load (20/40/40H)	10/20/20	8/16/16	6/12/12	8/16/16
Alarm	Sound and Flash	Sound and Flash	Sound and Flash	Sound and Flash
Certificate	CFDA	CFDA,CE,EN12469	CFDA	CFDA,CE,EN12469

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