

Clean Bench

Advanced type

Easy to use with dual controller and smart system

Structural Functional Features

- Dedicated controller and digital airflow sensor allow for operation at set wind speed even with fluctuations in sash height, minimizing power consumption and dramatically increasing HEPA filter life.
- Polyester fiber pre-filter extends the life of the HEPA filter.
- High-performance HEPA filter provides a clean environment. (99.99% removal of 0.3 μm particles, Class H14 according to EN 1822)
- Formation of reliable and uniform laminar flow through application of specialized diffusing muffler system.
- Easy to replace the filter on the front panel.
- Easy to move and fix the device.

Use Convenience Features

- Displays the temperature and humidity inside the workspace.
- Warning provided when the sash door is opened over the recommended height during operation.
- Easy and smooth sash door operation.
- Provides a quiet environment with minimal noise.
- Easy to operate with clear VFD and touch keys.
- UV lamp, fluorescent lamp, blower-dedicated button.
- Easy to check wind speed, temperature and humidity.

Outstanding Safety

- Smart door system protects the experimenter from UV light exposure.
- Toughened glass sash door blocks UV light.
- Protected from overcurrent.

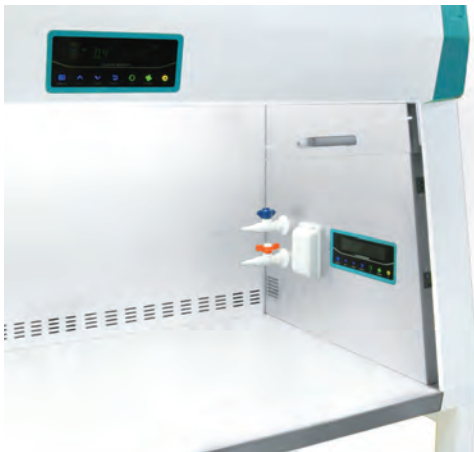


BC-11H

with Stand, HEPA filter, gas cock (option)
Pre filter, UV Lamp, Fluorescent lamp Electrical socket (standard)

Completed internal cleanliness evaluation and microbiological testing compatibility test.

- Internal cleanliness rating (ISO 14644-1 standard)
Equivalent to ISO Class 2
(Experiment with sterile environment can be carried out from ISO Class 5, US Federal Class 100)
- Microbiological testing (ISO 14698 standard)
ISO Class 5 rating, satisfies the microbiological testing standards



Product Configuration For Easy Use

Easy operation during use with dual controller

- Equipped with the same controller inside and outside, it is convenient to operate the equipment even during work.

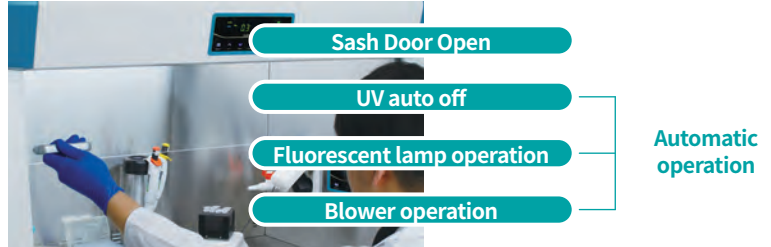
Built-in gas and air connection valves and power outlet

- Valves for gas and air use inside.
- Built-in electrical outlet with cover provided.



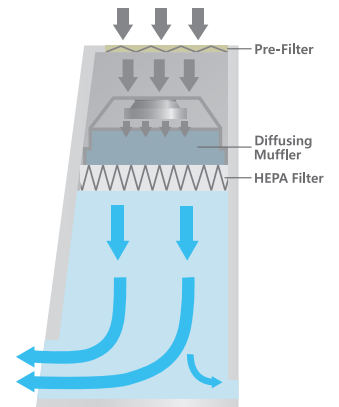
Smart Door System (patent registered)

- When the sash door is opened during UV sterilization, the UV lamp is automatically turned off to protect against UV exposure, and the fluorescent lamp and blower are automatically operated. (registration KR 10-1451382)



Smart Maintenance

- HEPA filter status checking**
Self-checking of HEPA filter status with a digital differential pressure sensor.
- UV lamp replacement notification**
UV irradiation intensity is monitored by a UV sensor, and an automatic replacement notification is provided when irradiation intensity drops below 80%.



Specification

Model		BC-01H	BC-11H	BC-21H
Air	Air flow type	Vertical Laminar Flow	Vertical Laminar Flow	Vertical Laminar Flow
	Airflow velocity (m/sec/fpm)	0.3 / 59	0.45 / 89	0.3 / 59
	Main filter	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)
	Pre-filter	Polyester Fibers	Polyester Fibers	Polyester Fibers
Illumination	U.V. lamp (254 nm, W)	25 x 1ea	30 x 1ea	25 x 2ea
	Fluorescent lamp (W)	30 x 2ea	30 x 2ea	32 x 2ea
	Fluorescent lamp intensity (Lux)	More than 650	More than 650	More than 650
Dimensions	Exterior with stand (W x D x H, mm / inch)	1135 x 620 x 1860 / 44.7 x 24.4 x 73.2	1435 x 620 x 1860 / 56.5 x 24.4 x 73.2	2035 x 620 x 1860 / 80.1 x 24.4 x 73.2
	Exterior without stand (W x D x H, mm / inch)	1135 x 620 x 1150 / 44.7 x 24.4 x 45.3	1435 x 620 x 1150 / 56.5 x 24.4 x 45.3	2035 x 620 x 1150 / 80.1 x 24.4 x 45.3
	Interior (W x D x H, mm / inch)	945 x 585 x 670 / 37.2 x 23.0 x 26.4	1245 x 585 x 670 / 49.0 x 23.0 x 26.4	1845 x 585 x 670 / 72.6 x 23.0 x 26.4
	Net weight (kg / lbs)	140 / 308.6	185 / 407.9	225 / 496
	Net weight (body + stand) (kg / lbs)	170 / 374.8	215 / 474	255 / 562.2
Noise level (dB)		Less than 65	Less than 65	Less than 65
Electrical requirements (230V, 50/60Hz, 1ph, A)		1.38	1.73	2.30
Cat. No.		AAHA5012K	AAHA5022K	AAHA5032K
Electrical requirements (120V, 60Hz, 1ph, A)		2.62	3.27	4.36
Cat. No.		AAHA5013U	AAHA5023U	AAHA5033U

Accessories **Page 187** HEPA Filter, Pre-filter, Stand, Gas Cock

Clean Bench

Basic type



Vertical laminar flow clean benches offer quick operation by simple adjustable analog control

Structural Functional Features

- High-performance HEPA filter provides a clean environment. (99.99% removal of 0.3 μm particles, Class H14 according to EN 1822)
- Polyester fiber pre-filter extends the life of the HEPA filter.
- Formation of reliable and uniform laminar flow through application of specialized diffusing muffler system.
- Easy to replace the filter on the front panel.
- Easy to move and fix the device.
- Internal cleanliness rating (ISO 14644-1 standard) Equivalent to ISO Class 2, Microbiological testing (ISO 14698 standard) ISO Class 5 rating, satisfies the microbiological testing standards (Experiment with sterile environment can be carried out from ISO Class 5)

Use Convenience Features

- Determines when to replace the filter with the built-in differential pressure gauge.
- Easy operation and wind speed control.
- Built-in gas and air connection valves and power outlet.
- Easy and smooth sash door operation.
- Provides a quiet environment with minimal noise.
- Height-adjustable caster for easy vertical installation.

Outstanding Safety

- When the sash door is opened in when UV is ON, UV is automatically turned off for user protection.
- Toughened glass sash door blocks UV light.
- Protects against UV exposure through three modes of illumination. (UV/Fluorescent/Off)



BC-11B

with stand, HEPA filter (option)
Pre filter, UV Lamp, Fluorescent lamp, Electrical socket
Differential pressure gauge (standard)



Controller



Differential pressure gauge

Specification

Model		BC-01B	BC-11B	BC-21B
Air	Air flow type	Vertical Laminar Flow	Vertical Laminar Flow	Vertical Laminar Flow
	Airflow velocity (m/sec/fpm)	0.3 / 59	0.45 / 89	0.3 / 59
	Main filter	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)
	Pre-filter	Polyester Fibers	Polyester Fibers	Polyester Fibers
Illumination	U.V. lamp (254 nm, W)	25 x 1ea	30 x 1ea	25 x 2ea
	Fluorescent lamp (W)	30 x 2ea	30 x 2ea	32 x 2ea
	Fluorescent lamp intensity (Lux)	more than 650	more than 650	more than 650
Dimensions	Exterior with stand (W x D x H, mm / inch)	1135 x 620 x 1860 / 44.7 x 24.4 x 73.2	1435 x 620 x 1860 / 56.5 x 24.4 x 73.2	2035 x 620 x 1860 / 80.1 x 24.4 x 73.2
	Exterior without stand (W x D x H, mm / inch)	1135 x 620 x 1150 / 44.7 x 24.4 x 45.3	1435 x 620 x 1150 / 56.5 x 24.4 x 45.3	2035 x 620 x 1150 / 80.1 x 24.4 x 45.3
	Interior (W x D x H, mm / inch)	945 x 585 x 670 / 37.2 x 23.0 x 26.4	1245 x 585 x 670 / 49.0 x 23.0 x 26.4	1845 x 585 x 670 / 72.6 x 23.0 x 26.4
	Net weight (kg / lbs)	140 / 308.6	185 / 407.9	225 / 496
	Net weight (body + stand) (kg / lbs)	170 / 374.8	215 / 474	255 / 562.2
Noise Level (dB)		Less than 65	Less than 65	Less than 65
Electrical requirements (230V, 50/60Hz, 1ph, A)		1.38	1.73	2.30
Cat. No.		AAHA6012K	AAHA6022K	AAHA6032K
Electrical requirements (120V, 60Hz, 1ph, A)		2.62	3.27	4.36
Cat. No.		AAHA6013U	AAHA6023U	AAHA6033U

Accessories [Page 187](#) HEPA Filter, Pre-filter, Stand, Gas Cock, Differential Pressure Gauge

Specially designed to minimize the sample contamination during PCR

Structural Functional Features

- High-performance HEPA filter provides a clean environment. (99.99% removal of 0.3 μm particles, Class H14 according to EN 1822)
- Convenient for use by mounting on an existing bench.
- Fluorescent lamp is included to make it convenient for conducting experiments.
- Fluorescent lamps are installed on the inside of the front to reduce eye fatigue.
- Effective sterilization with 254nm UV lamp. (replacement cycle: approx. 8,000 hours)
- Polyester fiber pre-filter extends the life of the HEPA filter.

Use Convenience Features

- Easy to replace the filter on the front panel.
- Front cover opening structure at the front for convenient inspection and maintenance.
- Convenient shelf with pipette holder to place pipette tip or vial rack
- Includes a hole on the right side to take out a power cable when using small device inside.
- Easy control of wind speed using the controller.
- Three model sizes depending on the bench size.
- UV timer function. (up to 30 minutes)

Outstanding Safety

- PC work surface blocks UV by 99.9%.
- When the door is opened with UV light is on, the UV light is turned off automatically to protect the user.
- Protection from overcurrent.

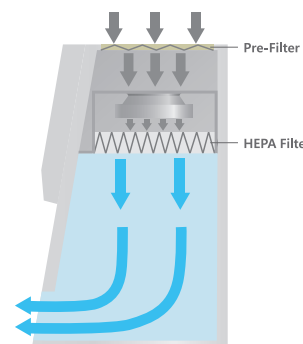


PW-21

with Pre filter, HEPA filter, UV lamp, Fluorescent lamp (standard)

Completed internal cleanliness evaluation and microbiological testing compatibility test.

- Internal cleanliness rating (ISO 14644-1 standard) **Equivalent to ISO Class 4** (Experiment with sterile environment can be carried out from ISO Class 5, US Federal Class 100)
- Microbiological testing (ISO 14698 standard) **ISO Class 5 rating, satisfies the microbiological testing standards**



Hood & Clean Bench

Specification

Model		PW-01	PW-11	PW-21
Air	Air flow type	Vertical	Vertical	Vertical
	Airflow velocity (m/sec/fpm)	0.4 / 78.7	0.4 / 78.7	0.4 / 78.7
	Main filter	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)	HEPA (99.99% at 0.3 μm)
	Pre-filter	Polyester Fibers	Polyester Fibers	Polyester Fibers
Illumination	U.V. lamp (254 nm, W)	15	20	30
	Fluorescent lamp (W)	15	20	30
	Fluorescent lamp intensity (Lux)	More than 1,000	More than 1,000	More than 1,000
Material	Window (Front, Sides, Rear)	Polycarbonate (Clear)	Polycarbonate (Clear)	Polycarbonate (Clear)
	U.V. protection	99.90%	99.90%	99.90%
	Working table	Polycarbonate (Clear)	Polycarbonate (Clear)	Polycarbonate (Clear)
Dimensions	Exterior (W x D x H, mm / inch)	720 x 605 x 964 / 28 x 24 x 38	900 x 605 x 964 / 35.4 x 24 x 38	1200 x 605 x 964 / 47.2 x 24 x 38
	Interior (W x D x H, mm / inch)	700 x 585 x 602 / 27.5 x 23 x 23.7	880 x 585 x 602 / 34.6 x 23 x 23.7	1180 x 585 x 602 / 46.5 x 23 x 23.7
	Net weight (kg / lbs)	56.2 / 123.9	64.2 / 141.5	77.8 / 171.5
Noise level (dB)		Less than 60	Less than 60	Less than 60
Electrical requirements (230V, 50/60Hz, 1ph, A)		1.3	1.4	1.5
Cat. No.		AAHB3002K	AAHB3012K	AAHB3022K
Electrical requirements (120V, 60Hz, 1ph, A)		2.2	2.7	2.9
Cat. No.		AAHB3003U	AAHB3013U	AAHB3023U

Accessories Page 187 Pre-filter, HEPA Filter

UV Sterilization Cabinet



Clean environment due to sterilization and removal of sources of contamination with UV light

Structural Functional Features

- Built-in fluorescent lamp makes it easy to see inside.
- Compact design makes installation and movement convenient.
- VFD display allows for easy checking of operation status.

Use Convenience Features

- Convenient handling of equipment due to convenient front opening.
- Three sizes of models according to the cabinet size.
- Digital-type UV timer function.
(up to 59 minutes and 59 seconds)

Outstanding Safety

- Block UV 99.9% on the front/ left / right side with polycarbonate material.
- When the door is opened, the UV light is turned off automatically to protect the user and the fluorescent lamp is operated, making it convenient to use.
- Protection from overcurrent.



UVC-11

with UV lamp, Fluorescent lamp (standard)



Specification

Model		UVC-01	UVC-11	UVC-21
Illumination	U.V. Density ($\mu\text{W}/\text{cm}^2$)	300 \pm 10%	350 \pm 10%	300 \pm 20%
	U.V. lamp (254 nm, W)	8	15	20
	Fluorescent lamp (W)	8	15	20
	Fluorescent lamp intensity (Lux)	More than 800	More than 900	More than 1,000
Material	Window (Front, Sides)	Polycarbonate (Clear)	Polycarbonate (Clear)	Polycarbonate (Clear)
	Window (Rear)	Powder coated steel	Powder coated steel	Powder coated steel
	U.V. protection	99.9%	99.9%	99.9%
	Working table	Stainless steel	Stainless steel	Stainless steel
Dimensions	Exterior (W x D x H, mm / inch)	450 x 509 x 610 / 17.7 x 20 x 24	600 x 509 x 610 / 23.6 x 20 x 24	900 x 509 x 610 / 35.4 x 20 x 24
	Interior (W x D x H, mm / inch)	433 x 500 x 468 / 17.0 x 19.7 x 18.4	583 x 500 x 468 / 23 x 19.7 x 18.4	880 x 500 x 468 / 34.6 x 19.7 x 18.4
	Net weight (kg / lbs)	15 / 33.1	17.5 / 38.6	20 / 44.1
Electrical requirements (230V, 50/60Hz, 1ph, A)		0.1	0.2	0.3
Cat. No.		AAHB4002K	AAHB4012K	AAHB4022K
Electrical requirements (120V, 60Hz, 1ph, A)		0.2	0.4	0.6
Cat. No.		AAHB4003U	AAHB4013U	AAHB4023U

Accessories



HEPA Filter (option)

- 99.99% efficient HEPA filter, industry standard size for economical replacement.



Electrical Socket

- For equipments used inside the workspace.



Pre Filter (1EA included)

- Easy-to-replace pre-filter for trapping larger particles and extending the life of HEPA filters.



Service Fixture (option)

- For convenient hooking up with a gas/air/vacuum source inside the workspace.



Stand with Casters (option)

- Stand with Casters : Mobile stand made of powder-coated steel ideal for easy relocation.



Differential Pressure Gauge (option-only for BC-B)

- Magnehelic differential pressure gauge measuring pressure drop across the HEPA filter to monitor its efficiency.

Filters

Description		BC-01H/B	BC-11H/B	BC-21H/B	PW-01	PW-11	PW-21
Cat. No.	HEPA Filter	AAAB1601	AAAB1602	AAAB1603	00EDA0009219	00EDA0009220	00EDA0009221
	Pre Filter	AAAB1611	AAAB1612	AAAB1613	AAAB3511	AAAB3512	AAAB3513

Others

Description		BC-01H/B	BC-11H/B	BC-21H/B
Cat. No.	Stand with Casters	AAAB1621	AAAB1622	AAAB1623
	Gas Cock	AAAB1561	AAAB1561	AAAB1561
	Differential Pressure Gauge (Only BC-B)	AAAB1571	AAAB1571	AAAB1571