# F

# **Fume Hoods**

## **Clean Benches**



#### Please visit JEIOTECH.com

For further information on Jeio Tech's Fume Hood products Information is readily available on our website.



## BC-11H with optional Stand

Included Accessories

- HEPA Filter, Pre-Filter
- see page 32
- Electrical Socket





## **BC-11E** with optional Stand

Included Accessories

• HEPA Filter, Pre-Filter

see page 32

\* Product design subject to change without notice.

## Fume Hoods

## **Clean Benches**

## Vertical laminar flow clean benches!

ISO Class 4 air cleanliness as per ISO 14644-1. (equivalent to Class 10 as per US Federal Standard 209E) Nominal downflow velocity. (0.45 m/sec for BC-H, 0.3 m/sec for BC-E) High-quality pre-filter and main HEPA filter. Ergonomically sloped front.

#### Filtration Features

- ISO Class 4 (US Class 10) HEPA filter for optimal protection against cross-contamination.
- 0.3 µm and larger particulates removed with 99.99% efficiency, leak-tight HEPA filter, and meets class 10. (US Federal Standard 209E)
- Comfortable front access for inspection of HEPA filter and easy validation. - Standard gas detector hole for easy checking of HEPA filter leak performance test.
- High-quality polyester fiber pre-filter (with minimal pressure loss and 85% arrestance on the A.F.I. test) for trapping larger particles and increasing the life of the main HEPA filter. \* The HEPA filters life span depending on the test room conditions has a life span about 3 years.

### Safety & Constructional Features

- UV-blocking and impact-resistant tempered glass door.
- If the sash is opened during UV-lamp operation, UV lamp automatically turns OFF to protect users.
- Lighting mode selection by a 3-position toggle switch (UV/OFF/Fluorescent) preventing harmful UV exposure. (BC-E model)
- Highly durable, rust-free, and easy-to-clean grade 304 stainless steel work surface.
- Smoothly sliding front door stoppable at any height for user's safety and easy transport of equipments into the workspace.
- Adjustable blower control knob located next to the front blower switch. (BC-E model)

#### Additional BC-H Features

- Interlocking Smart Door System
- Simply open the door while UV-lamp is ON. Interlocking smart door system will automatically turn OFF UV-lamp, turn ON Fluorescent lamp and Blower instead of your manual control.
- If the sash is opened more than the recommended sash height level, during operation, warning alarm will activate and alarm users to lower the window to the recommended sash level to prevent contamination of samples.
- When UV light intensity is lower than 80%, UV warning lamp is automatically ON to let users know when to change UV-lamp.
- Digital differential pressure sensor allows for easy verification of HEPA filter condition great for knowing when to change HEPA filter.
- Digital airflow rate sensor (Microprocessor) for automated airflow speed control.
  - Offers continual airflow speed of same velocity and extends the HEPA filter life span.
- Exclusive diffusing muffler structure forms high quality laminar flow.
- Using a BLDC motor in the blower provides a quiet and comfortable working environment. (less than 65dB)
- Two digital displays for the best convenience.
  - Even if any test is ongoing inside of the chamber, unit conditions such as velocity, temperature and humidity can be easily checked and controlled by inner display.
- The inner left side magnetic board allows some memos and small tools.

#### Control Panel



: BC-H



∴ BC-E

#### Service Fixtures (optional)





∴ Vacuum



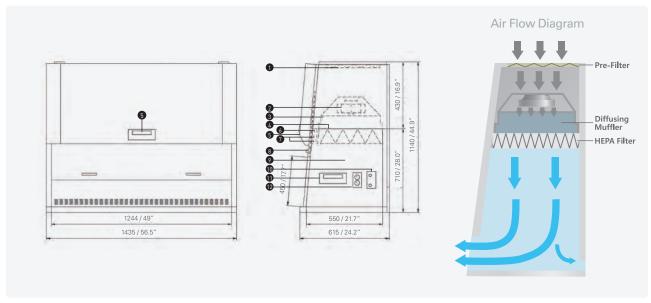
∴ Air

# F

# **Fume Hoods**

## **Clean Benches**

## Dimension (Model: BC-11H)



1. Pre Filter 2. Blower

3. Diffusing Muffler

4. HEPA Filter

5. Control Panel

6. UV Lamp

7. Fluorescent Lamps

8. Sliding Front Sash Window

9. Inner Magnetic Board(left side)

10. Service Fixture

11. Inner Control Panel

12. Electrical Outlet socket

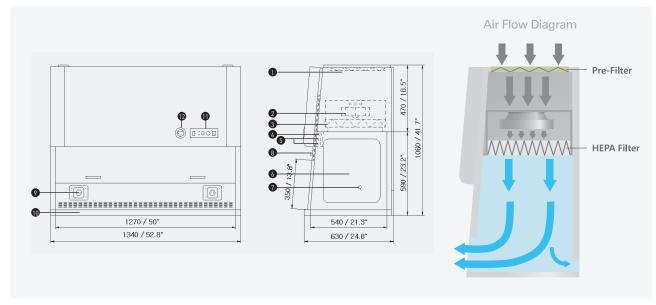
## Specifications & Ordering Information

Model		BC-	01H	BC-	11H	BC-	21H
Air FlowType		Vertical laminar flow					
Air Volume (Minimum / Maximum)		0 to 1020 cmh / 0 to 600 cfm 0 to 2040 cmh / 0 to 1200 cfm					
Laminar Air-		0.3 / 59		0.45 / 89		0.3	3 / 59
Air Cleanliness within Work space		ISO 14644-1 Class 4, US Federal Standard 209E Class 10					
Filters	HEPA Filter	Typical efficiency of 99.99% on 0.3μm (US MIL-STD-282); Micro glass fiber Media, Particle board, AL separator, Neoprene gaskets					
	Pre Filter	Polyester fib	ers with an filter e	um frame, Polyes	m frame, Polyester fiber media		
Noise Level				Typically < 65dB a	t initial blower spe	ed	
	Main Body	Steel powder coating					
Materials	Work Surface	Stainless steel grade 304, Hairline treatment					
	Windows (Front / Side)	Colorless and transparent UV absorbing 5mm te				empered glass	
	Intensity (lux)	> 650					
	Fluorescent lamp (W)	30Wx2ea			32Wx2ea		
Illumination		Electronically ballasted Fluorescent La					
	UV lamp (W)	25Wx1ea 30Wx1ea 25Wx2ea					
' ' '		electronically ballasted UV Lamp					
Electric Socket Outlets		230V socket					
	Internal (mm / inch)	944×550×670 / 37.2×21.7×26.4		1244x550x670 / 49.0x21.7x26.4		1844x550x670 / 72.6x21.7x26.4	
Dimension	External without Stand (mm / inch)	1135×615×1140 / 44.7×24.2×44.9		1435×615×1140 / 56.5×24.2×44.9		2035×615×1140 / 80.1×24.2×44.9	
(W×D×H)	External with Stand (mm / inch)	1135×615×1832 / 44.7x24.2x72.1		1435×615×1832 / 56.5x24.2x72.1		2035×615×1832 / 80.1×24.2×72.1	
	Net Weight (Body) (kg / lbs)	140 / 308.6		185 /407.9		225 / 496	
	Net Weight (Body+Stand) (kg / lbs)	170 / 374.8		215 / 474		255 / 562.2	
Electrical Requirements (230V, 1ph)		60Hz / 2.0 A	50Hz / 2.2 A	60Hz / 2.46 A	50Hz / 2.66 A	60Hz / 3.0 A	50Hz / 3.2 A
Cat. No.		AAHA5011K	AAHA5012K	AAHA5021K	AAHA5022K	AAHA5031K	AAHA5032K
Electrical Requirements (120V, 1ph)		60Hz / 3.38 A		60Hz / 4.26 A		60Hz / 5.34 A	
Cat. No.		AAHA5013U		AAHA5023U		AAHA5033U	

# **Fume Hoods**

## **Clean Benches**

## Dimension (Model: BC-11E)



- Pre Filter
  Blower
  HEPA Filter
  UV Lamp
  Fluorescent Lamps
  Tempered Glass Side Panel
  Service Fixture
  Sliding Front Sash Window
  Electrical Outlet socket
  Stainless Steel Grade 304 Work Surface
- 11. Blower Speed Controller 12. Differential Pressure Gauge

## Specifications & Ordering Information



Model		BC-01E		BC-11E		BC-21E	
Air FlowType		Vertical laminar flow					
Air Volume (Minimum / Maximum)		274 to 914 cmh / 119 to 399 cfm					
Laminar Airflow Velocity (m / s / fpm)		0.3 / 59					
Air Cleanliness within Work space		ISO 14644-1 Class 4, US Federal Standard 209E Class 10					
Filters HEPA Filter		Typical efficiency of 99.99% on 0.3µm (US MIL-STD-282); Micro glass fiber Media, Particle board, AL separator, Neoprene gaskets					
	Pre Filter	Polyester fibers with an filter efficiency of 85% (A-F-ITEST); Aluminum frame, Polyester fiber media					
Noise Level				Typically < 67dB a	t initial blower spe	ed	
Materials	Main Body	steel grade 304 & Steel powder coating					
	Work Surface	Stainless steel grade 304					
	Windows (Front / Side)	Colorless and transparent UV absorbing 5mm tempered glass					
	Intensity (lux)	> 650					
Illumination	Fluorescent lamp (W)	30W×2ea electronically ballasted Fluorescent Lamp					
	UV lamp (W)	30W electronically ballasted UV Lamp					
Electric Socket Outlets		230V socket or 120V socket x 2					
	Internal (mm / inch)	970×540×570 / 38.2×21.3×23.2		1270×540×570 / 50×21.3×23.2		1870×540×570 / 73.6×21.3×23.2	
Dimension	External without Stand (mm / inch)	1040×630×1060 / 40.1×24.8×42.7		1340×630×1060 / 52.8×24.8×42.7		1940×630×1060 / 76.4×24.8×42.7	
(W×D×H)	External with Stand (mm/inch)	1040×630×1780 / 40.1×24.8×70.1		1340×630×1780 / 52.8×24.8×70.1		1940×630×1780 / 76.4×24.8×70.1	
	Net Weight (Body) (kg / lbs)	110 / 242.5		127 / 280		163 / 359.4	
	Net Weight (Body+Stand) (kg / lbs)	130 / 286.6		150 / 330.7		190 / 418.9	
Electrical Requirements (230V / 1ph)		60Hz / 1.7A	50Hz / 1.82A	60Hz / 1.7A	50Hz / 1.82A	60Hz / 1.7A	50Hz / 1.82A
Cat. No.		AAHA4011K	AAHA4012K	AAHA4021K	AAHA4022K	AAHA4031K	AAHA4032K
Electrical Requirements (120V / 1ph)		60Hz / 3.48A		60Hz / 3.48A		60Hz / 3.48A	
Cat. No.		AAHA4013U		AAHA4023U		AAHA4033U	



## **Fume Hoods**

## **Accessories & Options**

### for Clean Benches



: HEPA Filter (1EA included)

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



- : Electrical Socket (optional-only for BC-E)
- For equipments used inside the workspace.
- 120V or 230V outlets available.



Pre Filter (1EA included)

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



- : Service Fixture (optional)
- For convenient hooking up with a gas/air/ vacuum source inside the workspace.



- CSA limited (Canadian Standards Association)



- : Basic Stand (optional) Stand with Casters (optional)
- Basic Stand: Economical basic stand without casters made of powder coated steel.
- Stand with Casters : Mobile stand made of powder-coated steel ideal for easy relocation.



: Differential Pressure Gauge (optional-only for BC-E)

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



Cat. No.	Description	Suitable for
AAAB1601		BC-01H
AAAB1602	HEPA Filter	BC-11H
AAAB1603		BC-21H
AAAB1611	Pre-Filter	BC-01H
AAAB1612		BC-11H
AAAB1613		BC-21H
AAAB1621		BC-01H
AAAB1622	Stand with Casters	BC-11H
AAAB1623		BC-21H

Cat. No.	Description	Suitable for
AAAB1631		BC-01H(230V)
AAAB1632		BC-01H(120V)
AAAB1633	IN/Laran	BC-11H(230V)
AAAB1634	UV Lamp	BC-11H(120V)
AAAB1635		BC-21H(230V)
AAAB1636		BC-21H(120V)
AAAB1561	Gas cock	BC-01/11/21H



Cat. No.	Description	Suitable for
AAAB1501		BC-01E
AAAB1502	HEPA Filter	BC-11E
AAAB1503		BC-21E
AAAB1511		BC-01E
AAAB1512	Pre Filter	BC-11E
AAAB1513		BC-21E
AAAB1521		BC-01E
AAAB1522	Basic Stand	BC-11E
AAAB1523		BC-21E
AAAB1531	Stand with Casters	BC-01E

Cat. No.	Description	Suitable for
AAAB1532	Stand with Casters	BC-11E
AAAB1533	Stand with Casters	BC-21E
AAAB1541		BC-01E (230V)
AAAB1542		BC-01E (120V)
AAAB1543	LIVLomp	BC-11E (230V)
AAAB1544	UV Lamp	BC-11E (120V)
AAAB1545		BC-21E (230V)
AAAB1546		BC-21E (120V)
AAAB1551	Electrical Socket	BC-01/11/21E
AAAB1561	Gas Cock	BC-01/11/21E
AAAB1571	Differential Pressure Gauge	BC-01/11/21E

<sup>\*</sup> In addition to standard accessories, we can provide customized accessories to meet your specific needs. Please contact your local dealer for details.

