CLEAN AIR SOLUTIONS

ANTECH | AIRTECH

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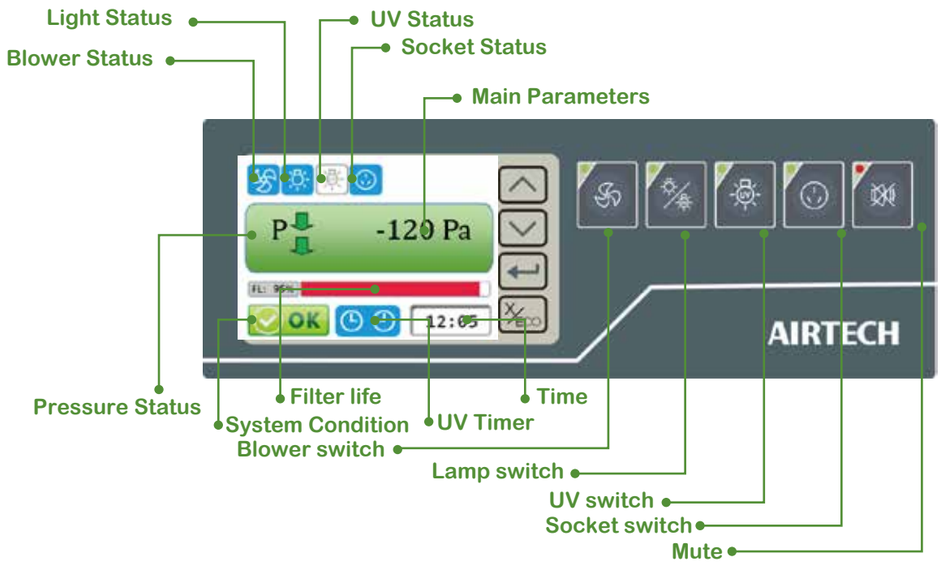
AIRTECH

AIRTECH Intelligence Controlling system

The Biological Safety Cabinet Class III is designed to provide the highest level of containment when working with hazardous materials involving highly infectious microbiological agents in BSL-4 Cabinet laboratories. These gas-tight enclosures protect the operator, the environment as well as the work in progress.

Microprocessor Control System, Programmable



ULPA/HEPA Filter

- HV brand filter, US imported
- ULPA filter, efficiency ≥99.9995%@0.12μm micron
- HEPA filter, efficiency ≥99.995%@0.3μm micron
- Removable uniform-flow film to protect filter from liquor

Velocity Meter:

- SHIBAURA brand (Japan imported) velocity meter for down flow
- E+E brand (Austria imported) velocity meter for exhaust airflow

Biological safety cabinet Class III is 100% exhaust type, it ensures that there is no contamination on the samples and no air leakage to laboratory environment. It is the necessary equipment in BSL-4 laboratory.

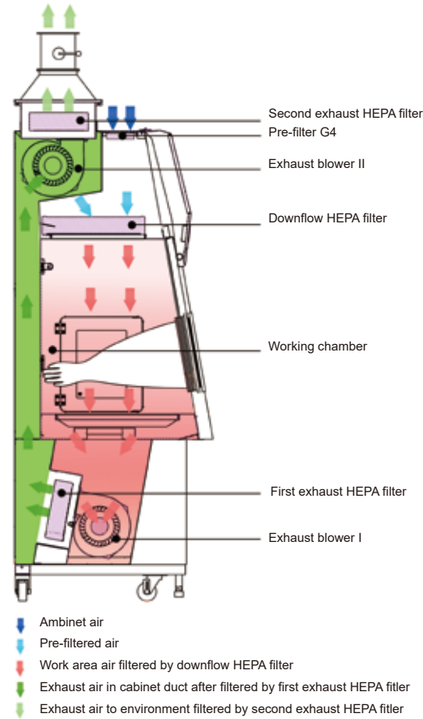
Excellent Filtration System

1.Ambient air is pulled into the cabinet through a **pre-filter G4** which can trap larger particles and prolong the main filter service life.

2.Air is passed through the **downflow HEPA filter** into the work zone as a vertical laminar flow air stream. The uniform non-turbulent air stream protects the samples against cross contamination in work area.

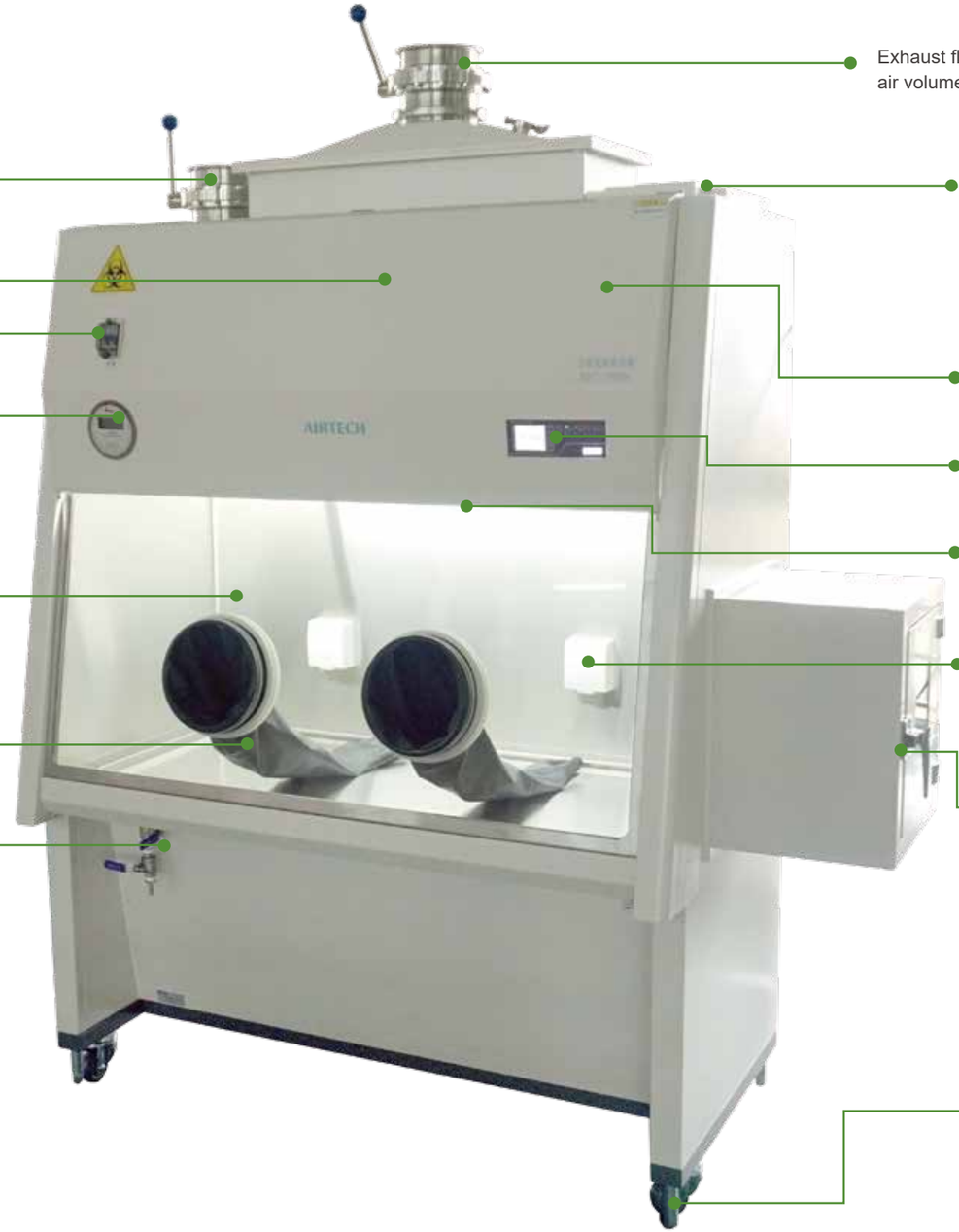
3.The downflow air stream near the work surface splits and exits the chamber through perforations around work zone.

4.Air from work zone passes through the **first exhaust HEPA filter** below the work surface, before traveling through internal Ducting. Then the filtered air passing through the **second exhaust HEPA filter** located above the cabinet's main chamber to outside environment.



Adjustable Air supply valve and exhaust valve

Antech Biosafety cabinet class III can automatically adjust the air volume by Air supply valve collar and exhaust valve collar and can protect dust and particles entering into the cabinet through room and ducting line.



Exhaust flange are adjustable for air volume

Air Supply flange is adjustable for air volume

PAO Test port and Sterilization gas inlet and outlet port

Three High-Efficiency HEPA filters ≥99.995%@0.3μm, optional for ULPA filter ≥99.9995%@0.12μm

World-class brushless DC motor with automatic air volume compensation system

Overload protection switch with water-proof cover for safety

Color LCD display with touchpad

Dwyer differential gauge digital LCD display (USA brand)

UV lamp for sterilization

SUS304 single piece wall and work table

Two electrical outlet sockets on each side of the wall

Honeywell rubber gloves (USA brand)

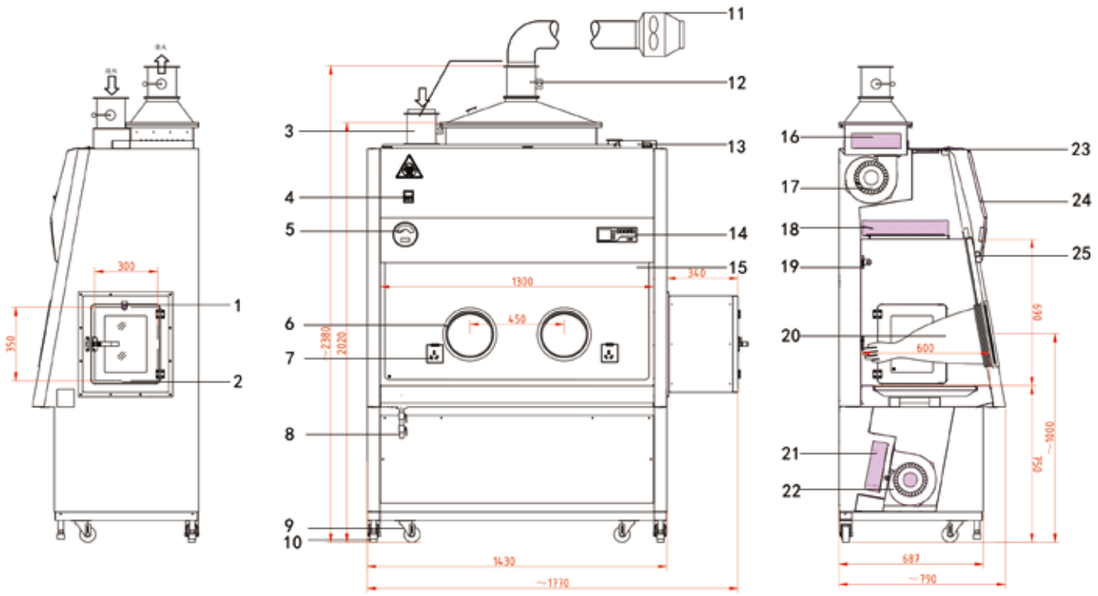
Pass box with SUS304 interior and UV lamp

Double security drain valve for easy cleaning

4 castor and leveling feet for easy moving and fixing

International Standards				
Standard Compliance	Biosafety cabinet	For Air Quality	For Filtration	For Electrica safety
	NSF/ANSI 49	ISO 14644.1 Class 3, Worldwide IEST-G-CC1001, USA IEST-G-CC1002, USA	IEST-RP-CC034.1, Worldwide IEST-RP-CC007.1, Worldwide IEST-RP-CC001.3, Worldwide EN 1822 (H14), Europe	IEC 61010-1, Worldwide EN 61010-1, Europe UL 61010-1, USA CAN/CSA-22.2, No. 61010-1

Class III Type Biological Safety Cabinet Engineering Drawing



1.Pass box UV light
2.Pass box
3.Air supply valve
4.Main power switch
5.Differential gauge
6.Glove port
7.Socket
8.Drain valve
9.Leveling foot
10.Mobile castor
11.External blower
12.Exhaust valve
13.Test port
14.Control panel
15.Viewing window
16.Second Exhaust HEPA filter
17.Second Exhaust Blower
18.Downflow HEPA filter
19.UV lamp
20.Glove
21.First Exhaust HEPA filter
22.Second Exhaust Blower
23.Pre-filter G4
24.Front cover
25.LED lamp

Remarks:
The drawing is according to biosafety cabinet class III modell BSC-1300III.
The biosafety cabinet class III must work together with the laboratory ventilation system or with the external blower and ducting. The external blower and ducting are optional accessories.

General Specification

Model	BSC-1000III	BSC-1300III	BSC-1600III	BSC-1800III
Normal size	3 feet	4 feet	5 feet	6 feet
Internal Dimension (W*D*H,mm)	1000*600*690	1300*600*690	1600*600*690	1800*600*690
External dimension (W*D*H,mm)	1470*790*2100	1770*790*2100	2070*790*2100	2270*790*2100
Internal work area	0.60 ㎡	0.78 ㎡	0.96 ㎡	1.08 ㎡
Number of glove port	2	2	3	4
Glove type	HONEYWELL Butyl gloves 8"			
Intial air volume	250m3/h	350m3/h	450m3/h	500m3/h
Airvolume processing	≥0.05m/s			
Negetive work zone pressure	-120PA			
Prefilter	G4 Filter			
ULPA Filter Typical Efficiency(Downflow, 1st Exhaust, 2nd Exhaust)	Standard HEPA filter, ≥99.995%(@0.3μm) Optional for ULPA fitler, ≥99.9995%			
Production standard	NSF/ANSI 49			
Noise level (NSF/ANSI 49)	≤ 65dB(A)			
Main body material	Electrostatic Powder Spraying Cold Rolled Steel			
Work Zone	Stainless steel Type 304			
LED lamp	24.5W	31W	36W	36W
UV Lamp (Work Zone)	20W	30W	40W	40W
UV Lamp (Pass Box)	8W			
Illumination1）	≥650Lx			
Max.Power (with socket)	2.1 KVA	2.3 KVA	2.5 KVA	2.5 KVA
Rated power	1 KVA	1.2 KVA	1.4 KVA	1.4 KVA
Voltage	220~240V/50HZ,single phase			
Net weight	350KG	420KG	490KG	540KG
Gross weight	430KG	520KG	600KG	620KG

1) The illumination can be optional by choose Lamp