



iGENE LABSERVE®
Innovative · Interactive · Intuitive

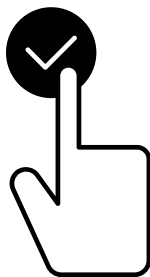
iShield Biosafety Cabinet

Class II, Type A2 and B2 Biological Safety Cabinets
Energy-Efficient, Safe, and Ergonomic
Biosafety Cabinet



CERTIFICATIONS

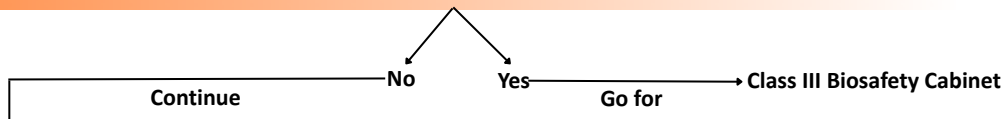




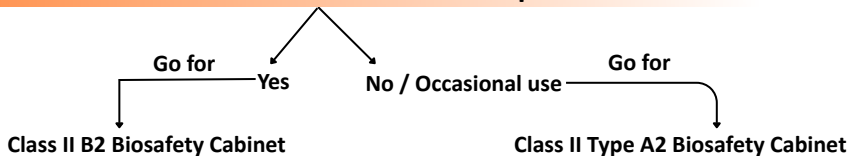
What is your laboratory application?



Are highly infectious or high-risk pathogens (BSL-3/BSL-4) being handled?



Are volatile toxic chemicals or radionuclides used & 100% exhaust of contaminated air required?



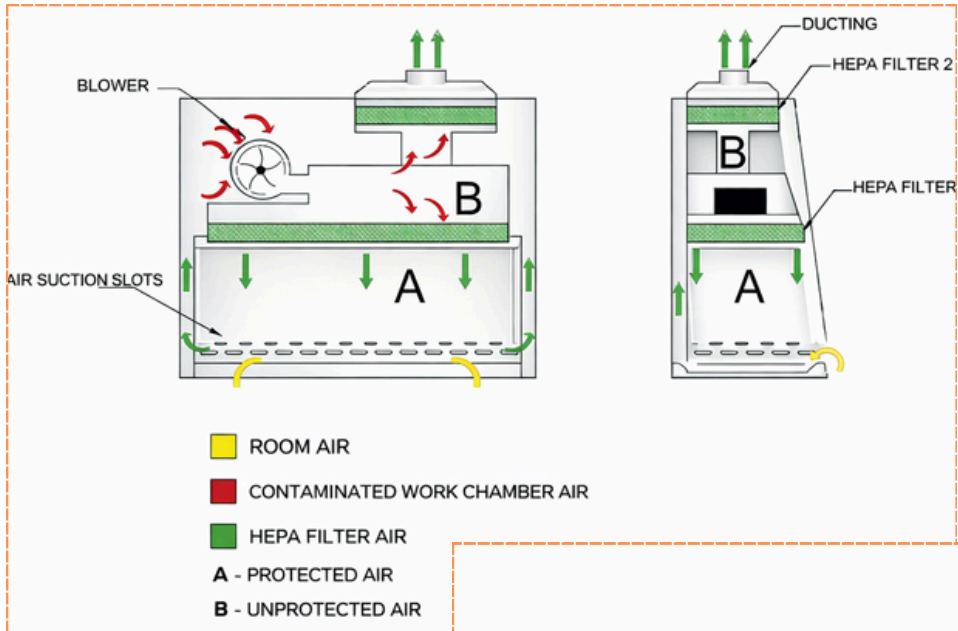
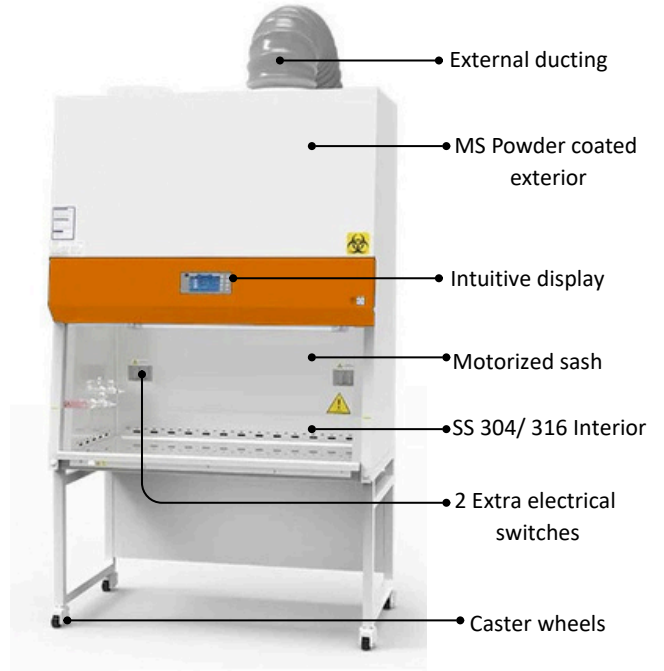
Select work area size

- 2 ft – Compact labs / limited space
- 4 ft – Standard laboratory workflow
- 6 ft – High sample volume / multi-user work

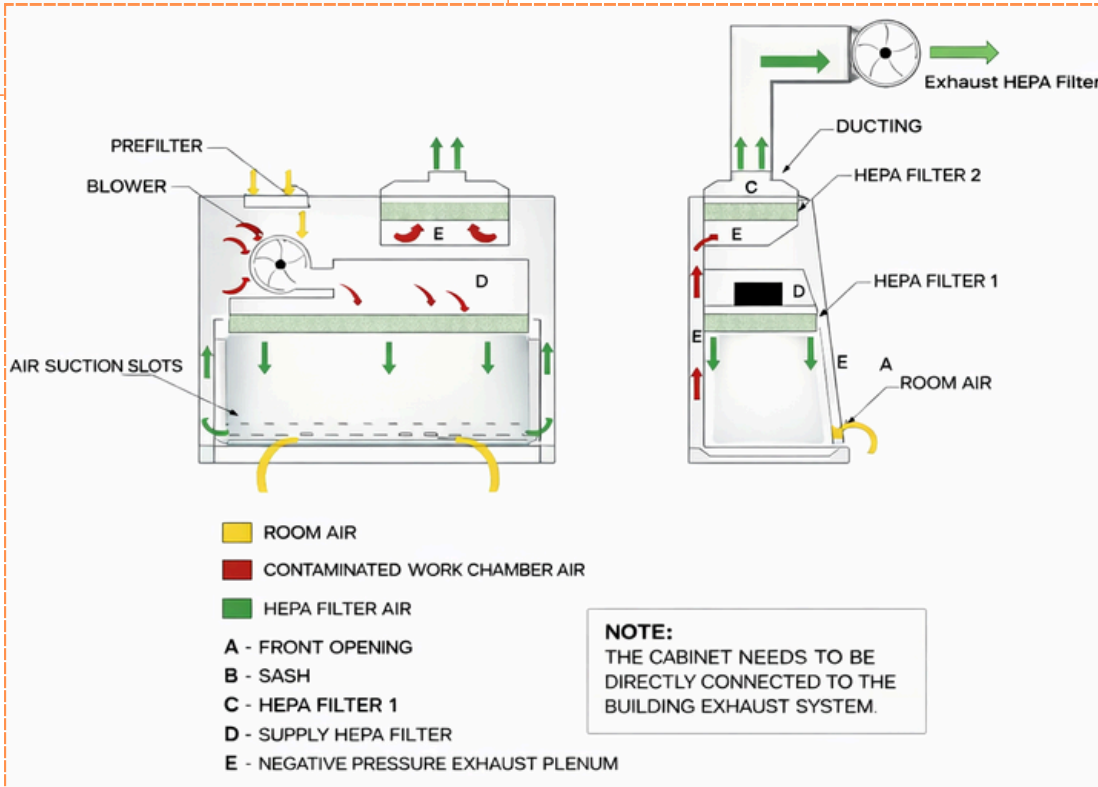
Choose filtration type

- **ULPA Filter:** 99.999% efficiency – critical & high-risk applications
- **HEPA Filter:** 99.97% efficiency – routine laboratory work

iGene Labsolve Class II A2 & B2 Biosafety Cabinets



Class II B2: 100% air exhaust out

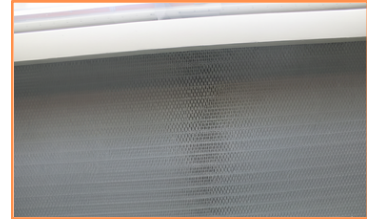


Energy Efficient AC/DC-ECM Motor

- Powered by latest generation AC/DC-ECM motor
- Stable airflow, despite building voltage fluctuations & filter loading



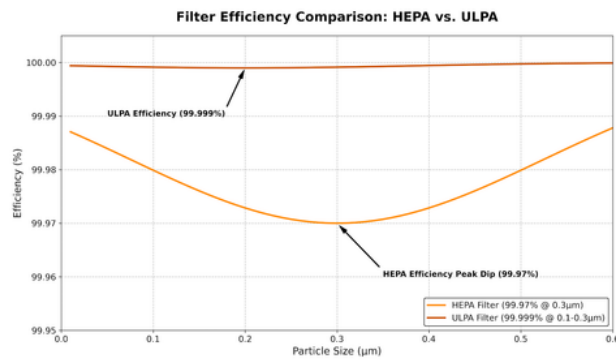
HEPA filter: Offer 99.97% typical efficiency at 0.3 micron.



ULPA filter: 99.999% typical efficiency for particle sizes of 0.1 to 0.3 micron.

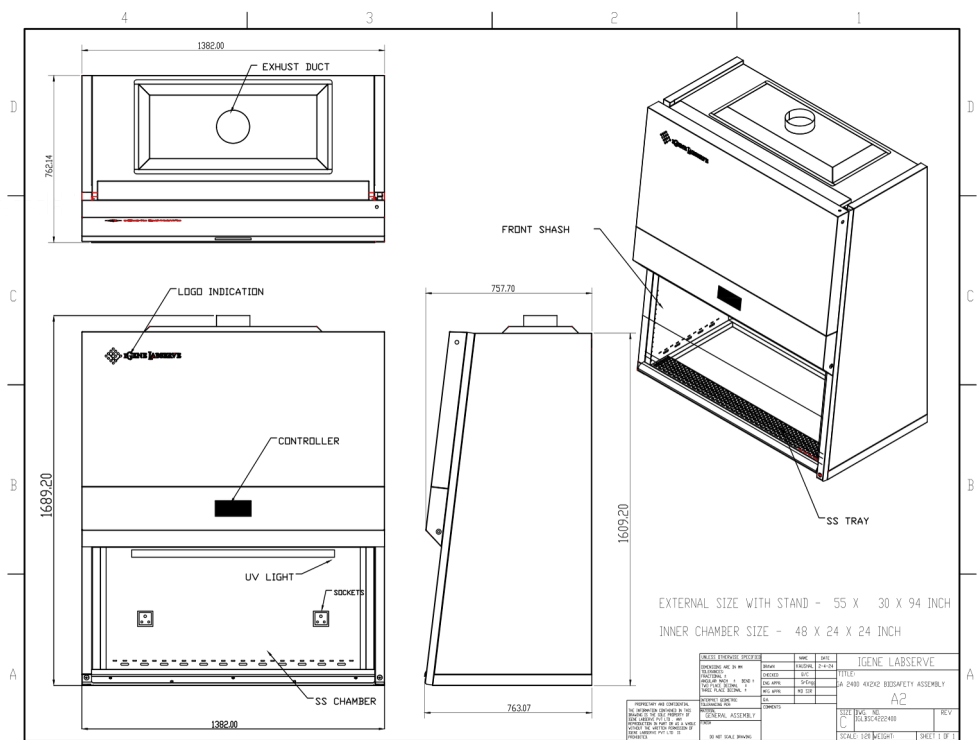
ULPA/ HEPA Filter

- Advanced high-efficiency filtration system for effective capture of fine airborne particles.
- Supports consistent airflow quality for critical laboratory operations.

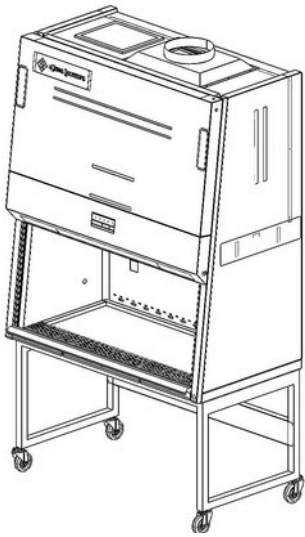


Lockable Caster wheels

Ensures easy mobility of the instrument.

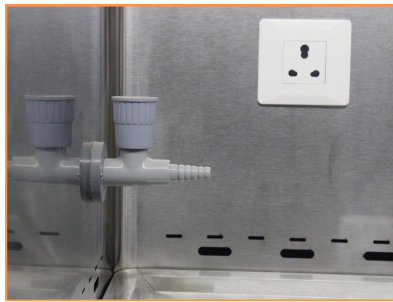


4 X 2 X 2 Biosafety Cabinet Assembly



Dynamic Chamber

- Blower plenum and side walls are surrounded by negative pressure
- Prevent contaminants from escaping outside



Single Piece Wall

- Large radius for easy cleaning
- Side-mounted electrical outlets and staggered service fixtures, for easy reach



Single Piece Work Tray

- Recessed to contain spillage
- Curved grill to prevent blockage



Front grills with arm rest

- Helps prevent grille blocking
- Comfortable working posture



Remote-controlled operation for enhanced convenience

- Precise control of sash movement (up/down)
- Remote ON/OFF control of UV lamp
- Blower operation control
- Lighting system control
- Easy parameter setting and adjustment



Dual HEPA filtered exhaust system

- Exhaust air passes through 2 HEPA filters in series
- Prevent release of biological containments into the environment

Fully enclosed gas-tight cabinet

- Fully enclosed SS chamber
- Leak tested and pressure tested cabinet body
- Maintains complete containment of hazardous agents
- Prevents any direct contact between operator and samples

HEPA filtered supply air

- Incoming air is HEPA filtered before entering the work chamber
- Provides clean working conditions
- Protects sample from contamination

Pass box

- Integrated dunk tank or pass through chamber
- Allows safe transfer of materials into and out of cabinet
- Prevents contamination breach during material movement

Mode of Construction

- MS Powder coated exterior
- Interior made from SS304 or SS316 stainless steel
- Smooth, crevice-free surfaces
- Easy cleaning and decontamination

Advanced Monitoring System

- Differential pressure monitoring
- HEPA filter monitoring
- Airflow monitoring
- Alarm system for unsafe conditions

Decontamination capability

- Supports formaldehyde or vaporized hydrogen peroxide (VHP) decontamination
- Entire cabinet can be sterilized before maintainance

Integrated Utility Connections

- Electrical outlets
- Data ports
- Utility services accessible without compromising containment

Suitable for BSL-3 and BSL-4 laboratories

Heavy-duty glove-port operation

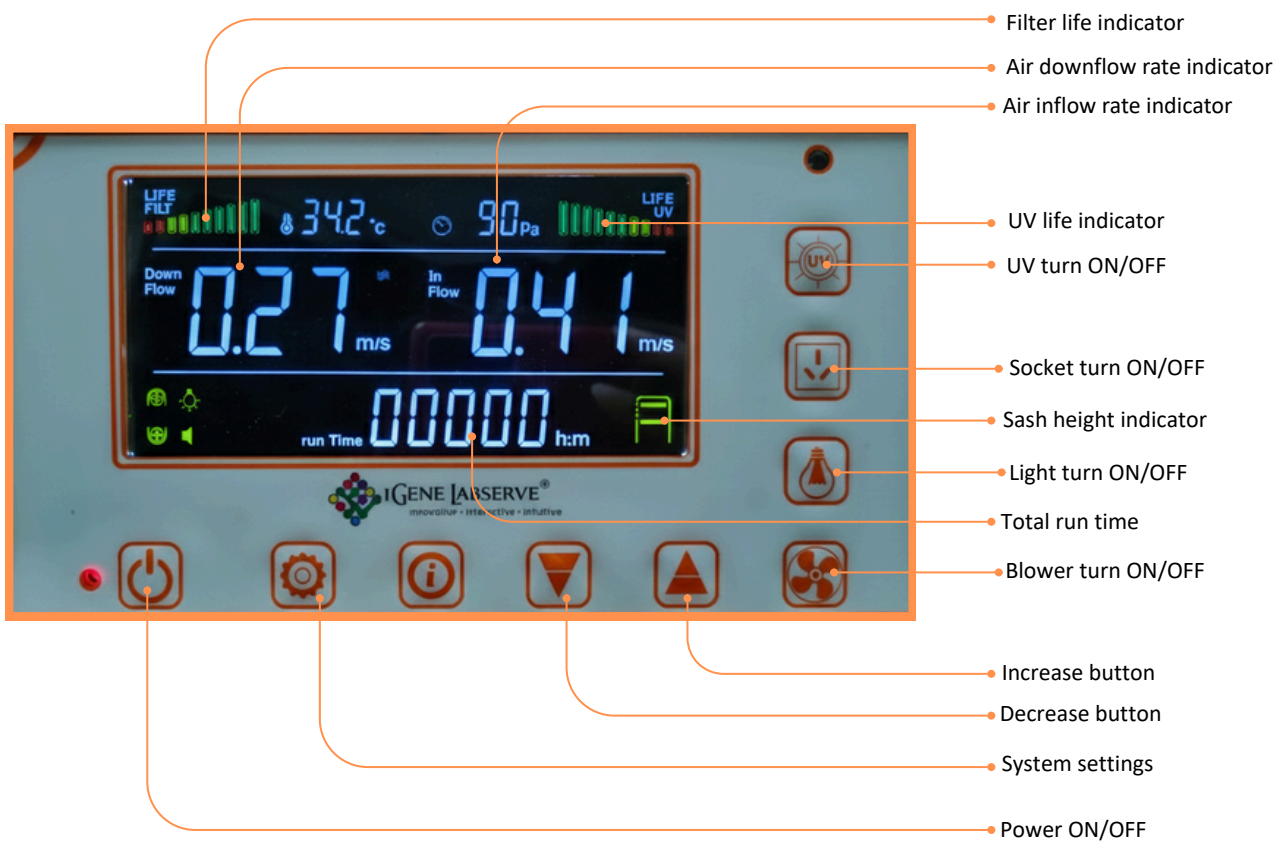
- Attached heavy duty neoprene or butyl rubber gloves
- Ergonomically positioned glove ports for comfortable handling

Negative pressure containment

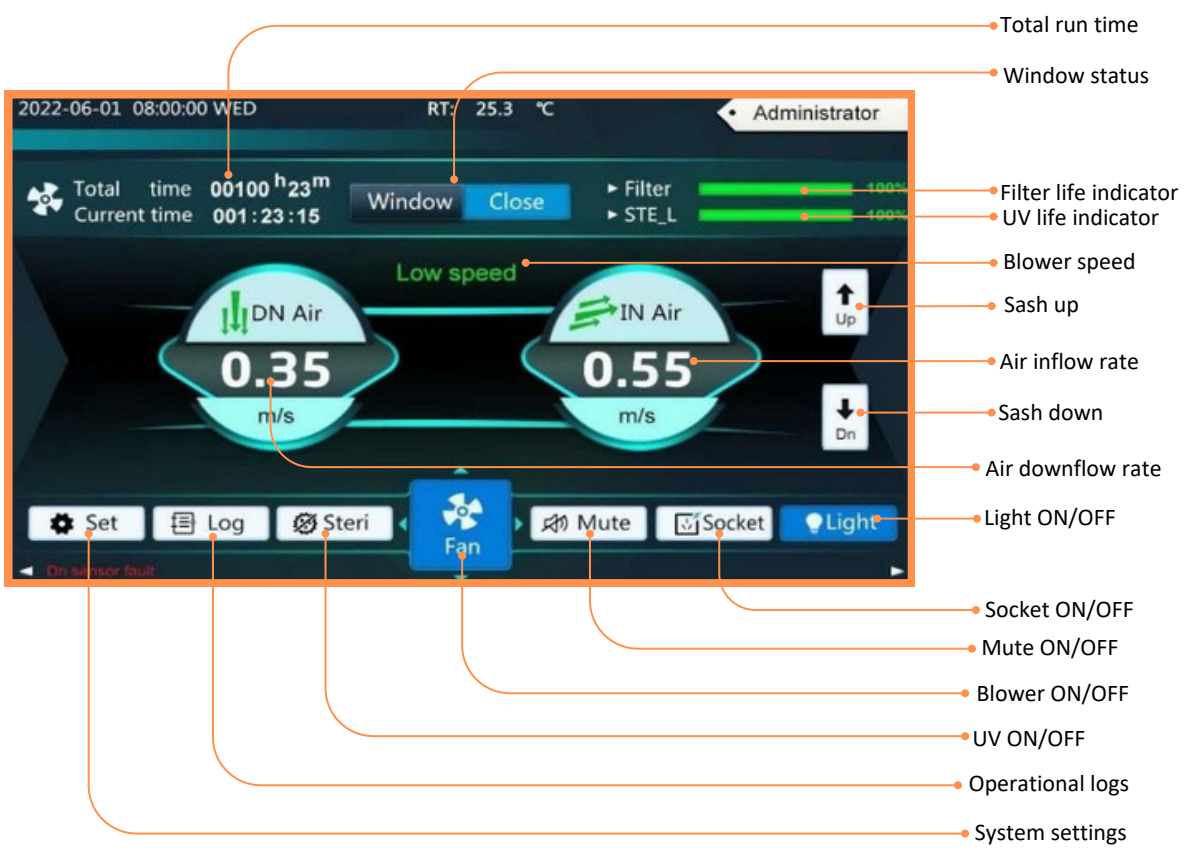
- Cabinet operates under negative pressure relative to laboratory
- Ensures maximum personnel protection



2200 Series



2400 Series



Class II type A2 Biosafety Cabinet Technical Specification

Model	Dimension (ft)	Internal Size (mm)	External Size without stand (mm)	External size with stand (mm)	Airflow Volume (Inflow)	Airflow Volume (Downflow)	Filter Type	Noise	Display	Certification
IG-CIIA222G (NSF Certified)	2 x 2 x 2	605 x 500 x 540	705 x 650 x 1290	705 x 650 x 2220	290 m ³ /h	360 m ³ /h	ULPA 99.9995% @ 0.12 μm	≤65 dB	Touchscreen	NSF49
IG-CIIA2222 (NSF-compliant)	2 x 2 x 2	610 x 610 x 610	774 x 764 x 1690	774 x 764 x 2400	240 m ³ /h	442 m ³ /h	HEPA 99.97% @ 0.3 μm	<65 dB	LCD/KeyPad	CE
IG-CIIA2322 (NSF-compliant)	3 x 2 x 2	910 X610 X610	1085 X 765 X 1690	1085 X 765 X 2400	445 m ³ /h	649 m ³ /h	HEPA 99.97% @ 0.3 μm	<65 dB	LCD/KeyPad	CE
IG-CIIA242G (NSF Certified)	4 x 2 x 2	1210 x 600 x 660	1383 x 775 x 1290	1383 x 775 x 2220	587 m ³ /h	863 m ³ /h	ULPA 99.9995% @ 0.12 μm	≤65 dB	Touchscreen	NSF49
IG-CIIA2422 (NSF-compliant)	4 x 2 x 2	1220 x 610 x 610	1382 x 764 x 1690	1382 x 764 x 2400	595 m ³ /h	884 m ³ /h	HEPA 99.97% @ 0.3 μm	<65 dB	LCD/Keypad	CE
IG-CIIA262G (NSF Certified)	6 x 2 x 2	1700 x 600 x 660	1873 x 775 x 1290	1873 x 775 x 2220	824 m ³ /h	1212 m ³ /h	ULPA 99.9995% @ 0.12 μm	≤65 dB	Touchscreen	NSF49
IG-CIIA2622 (NSF-compliant)	6 x 2 x 2	1829 x 610 x 610	1991 x 764 x 1690	1995 x 764 x 2400	892 m ³ /h	1325 m ³ /h	HEPA 99.97% @ 0.3 μm	<65 dB	LCD/KeyPad	CE



Class II type B2 Biosafety Cabinet Technical Specification

Model	Dimension (ft)	Internal Size (mm)	External Size without stand (mm)	External size with stand (mm)	Exhaust Volume	Airflow Velocity	Filter Type	Noise	Display	Certification
IG-CIIB242G (NSF Certified)	4 x 2 x 2	1210 x 600 x 660	–	–	100% Exhaust	Tested opening	ULPA 99.9995% @ 0.12 µm	≤60 dB	Touchscreen	NSF49
IG-CIIB2222 (NSF-compliant)	2 x 2 x 2	610 x 610 x 610	774 x 764 x 1690	774 x 764 x 2400	100% Exhaust	105 fpm	HEPA 99.97% @ 0.3 µm	<60 dB	LCD	CE
IG-CIIB2322 (NSF-compliant)	3 x 2 x 2	914 x 610 x 610	1080 x 764 x 1690	1080 x 764 x 2400	–	–	HEPA 99.97% @ 0.3 µm	<60 dB	LCD	CE
IG-CIIB2422 (NSF-compliant)	4 x 2 x 2	1219 x 610 x 610	1382 x 764 x 1690	1382 x 764 x 2400	–	–	HEPA 99.97% @ 0.3 µm	<60 dB	LCD	CE
IG-CIIB2622 (NSF-compliant)	6 x 2 x 2	1829 x 610 x 610	1995 x 764 x 1690	1995 x 764 x 2400	–	–	HEPA 99.97% @ 0.3 µm	<60 dB	LCD	CE



Class III Biosafety Cabinet Technical Specification

Parameter	Specification
Biosafety Level Compatibility	BSL-3 and BSL-4
Compliance Standards	NSF/ANSI 49, EN 12469, ISO 14644
Cabinet Design	Fully enclosed gas-tight cabinet
MOC	SS304/SS316 Interior and MS Powder Coated Exterior
Operating Pressure	Negative pressure (-120 to -250 Pa)
Access Method	Fixed glove ports with attached gloves
Glove Material	Neoprene / Butyl Rubber
Number of Glove Ports	2 or 4 (depending on cabinet size)(Customization available)
Supply Air Filtration	HEPA H14/ ULPA
Exhaust Filtration	Dual HEPA H14 filters in series
Airflow Pattern	Unidirectional filtered airflow
Noise level	<65dB
Illumination	>1000 LUX LED lighting
Leak Tightness	Fully leak tested cabinet
Transfer System	Pass box/ Dunk tank
Electrical Socket	230V AC, 50 Hz
Decontamination method	VHP or Formaldehyde fumigation
Exhaust Connection	Dedicated hard duct exhaust


Performance Specifications


Feature	Performance
Personnel Protection	Maximum
Product Protection	Maximum
Environmental Protection	Maximum
Containment Level	Highest
Cross Contamination Control	Excellent
Suitable Pathogens	High risk infectious agents
Operator Exposure risk	Extremely low


Ordering Informaion


Model No.	Description	Unit
IG-CIIA222G	Class II A2 Biosafety Cabinet – internal dimension 605 x 500 x 540 mm (NSF certified) supplied with a main body, UV lamp, base stand, multiple fuses (12.5A, 6.3A, 2.5A), drain valve set, rubber gaskets, SS screws/washers, hex wrench, remote control, tubular motor rod key.	1 Unit
IG-CIIA2222	Class II A2 Biosafety Cabinet – internal dimension 610 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand (4 pcs), nut bolts, duct clamp, remote control (only with PID), fuse 10A x2.	1 Unit
IG-CIIA2322	Class II A2 Biosafety Cabinet – internal dimension 910 X610 X 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand (4 pcs), nut bolts, duct clamp, remote control (only with PID), fuse 10A x2.	1 Unit
IG-CIIA242G	Class II A2 Biosafety Cabinet – internal dimension 1210 x 600 x 660 mm (NSF certified) supplied with a main body, UV lamps, base stand, fuses, drain valve set, gaskets, screws, remote, hex wrench, tubular motor rod key.	1 Unit
IG-CIIA2422	Class II A2 Biosafety Cabinet – internal dimension 1220 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand, nuts/bolts, duct clamp, remote (with PID), fuse 10A x2.	1 Unit
IG-CIIA262G	Class II A2 Biosafety Cabinet – internal dimension 1700 x 600 x 660 mm (NSF certified) supplied with a main body, UV lamps, base stand, fuses, drain valve set, gaskets, screws, remote, hex wrench, tubular motor rod key.	1 Unit
IG-CIIA2622	Class II A2 Biosafety Cabinet – internal dimension 1829 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand, nut bolts, duct clamp, remote (with PID), fuse 10A x2.	1 Unit
IG-CIIB242G	Class II B2 Biosafety Cabinet – internal dimension 1210 x 600 x 660 mm (NSF certified) supplied with a main body, UV lamp 30W, base stand, fuses (12.5A, 6.3A, 2.5A, 16A), drain valve set, rubber gaskets, screws, hex wrench, remote control, tubular motor rod key.	1 Unit
IG-CIIB2222	Class II B2 Biosafety Cabinet – internal dimension 610 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand, nut bolts, duct clamp, blower + blower stand, remote (with PID), fuse 16A x2.	1 Unit
IG-CIIB2322	Class II B2 Biosafety Cabinet – internal dimension 914 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand, nuts, duct clamp, blower, blower stand, remote (with PID), 16A fuses.	1 Unit
IG-CIIB2422	Class II B2 Biosafety Cabinet – internal dimension 1219 x 610 x 610 mm (NSF-compliant) supplied with a main body, power cord, tray, ducting, drain valve, stand, nuts, duct clamp, blower, blower stand, remote (with PID), 16A fuses.	1 Unit
IG-CIIB2622	Class II B2 Biosafety Cabinet – internal dimension 1829 x 610 x 610 mm (NSF-compliant) supplied with a full Standard B2 accessory kit included.	1 Unit
IG-CIII422	Class III Biosafety Cabinet supplied with all the standard accessories required for installation purpose.	1 Unit



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