

# Biosafety Cabinet Class II A2

IG-CIIA2



**IGENE LABSERVE**

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# FEATURES & SPECIFICATIONS

## DESCRIPTION

Biosafety Cabinets are specialized workstations widely used in clinical, pharmaceutical, life science and industrial laboratories where experiments need highly contaminant free environment.

Also known as biological safety cabinets and biohazard safety cabinets, these are made in three different class types such as Class 1, Class 2 and Class 3; in which Class 2 is widely used in microbiology laboratories because it provides protection to both product as well as personal. It is biosafety level factor which decides which BSC should be used in laboratory. These cabinets are considered safer than another clean benches because such BSCs effectively eliminate risks to operator / staff, samples and the environment from pathogenic biological agents (PBA) and microorganisms responsible for spreading airborne infection.

## TYPES

There are three types of class 2 biosafety cabinets are made. It is the type of work which decides which class 2 BSC should be used in laboratory.

Below is short description about all types:

- ❖ Type A2: recirculate approximately 70% air and 30% exhaust
- ❖ Type B1: recirculate approximately 30% air and 70% exhaust
- ❖ Type B2: Does not recirculate but exhaust 100% air.

## CONSTRUCTION

These cabinets are ergonomically designed to provide long service life. Only thick metal sheets and pipes are used in construction so that you may get the finest and safest Biosafety Cabinet in the market today. There are three different MOC used

- ❖ Complete Stainless Steel 304 / 316.
- ❖ Inner Stainless Steel, Outer Mild Steel.
- ❖ Stainless Steel bench, rest mild Steel.



## AIR CIRCULATION

In order to minimize spread of airborne bacterial and viral organisms, the use of filter is crucial; therefore, we use 99.99% efficiency HEPA filters for particle size 0.3 microns in our biological class 2 type A2 safety cabinets. These air filters are of reputed brands in the market, economical in price and easily replaceable. ISO 5/Class 100 quality, supply and exhaust through HEPA filters are done. Inflow velocity remains approx. 105 fpm (0.5 m/sec), while down flow velocity remains approx. 55 fpm (0.3 m/sec), 70 % air is re-circulated and 30% exhaust.

## STANDARD ACCESSORIES

Our Biosafety cabinets are fitted with fluorescent lights outside working zone. UV lamps are fitted inside working zone in such a way that the operator cannot see them directly. An hour meter is connected to UV lamp. Electrical sockets are fitted to run any instrument under the working area; in addition, service fixtures for air, gas, vacuum and water are fitted on demand.

(We also manufacturer biosafety cabinets class 2 type B1 and B2)

## MICROPROCESSOR BASED PID CONTROLLER

- ❖ Automatic control of UV, Blower and LED light on sash movement.
- ❖ Large LCD Display with clear vision.
- ❖ External Socket control to avoid hand touch inside the chamber.
- ❖ Warm up timer option allows delay in switching on LED to clear internal air before working on opening of Sash to safe level.

## STANDARD SIZE/ DIMENSION

Model No.	Dimension (ft)	Dimension (mm)
IG- CIIA2222	2 x 2 x 2 ft	610 x 610 x 610 mm
IG-CIIA2322	3 x 2 x 2 ft	914 x 610 x 610 mm
IG-CIIA2422	4 x 2 x 2 ft	1219 x 610 x 610 mm
IG-CIIA2522	5 x 2 x 2 ft	1524 x 610 x 610 mm
IG-CIIA2622	6 x 2 x 2 ft	1829 x 610 x 610 mm



# SPECIFICATION

<b>Sizes Available</b>	2ft, 3ft, 4ft, 5ft and 6 ft
<b>Construction</b>	SS 304 /316 / Powder coated MS or GI sheet
<b>Work top</b>	SS 304 /316
<b>Controller</b>	ON/Off switches for Cabinet, Light & Blower
<b>Air filtration</b>	HEPA filter 99.99% efficiency
<b>Air recirculation</b>	70% recirculation and 30% exhaust
<b>Average-Airflow Velocity</b>	Air flow velocity 450 Cubic foot per min
<b>Fumigation</b>	In-built fumigation port
<b>Noise level</b>	Less than 60 dB
<b>Standard Fittings</b>	Magnehelic pressure gauge Fluorescent lamp UV light
<b>Optional</b>	Microprocessor based controller system Digital display of real time inflow / down flow air velocities Alarm for variation in air flow and blocked blower Sash height alarm UV hour meter Virus burnout Service valves (gas, vacuum, air & water) Electrical sockets Differential pressure sensor Arm / elbow rest Drain pan on work bench Movable stand (wheels) Foot rest Calibration certificates HMI Controller

