LABTOP®
Quality Lab Equipment

24 YEARS
SINCE 1996

LAMINAR AIR FLOW
AND BIO SAFETY CABINETS

Labtop range of biological safety cabinets and laminar airflow cabinets are 21 CFR Compliant & are designed for product, personnel and environmental protection. These Safety Cabinets are ideally used in hospitals, clinical research, life science, Blood banks and pharmaceutical laboratories.

CONSTRUCTION

These cabinets are basically constructed with an outer body of Mild Steel duly powder coated. The inner work table is made of stainless steel. GMP models are in total stainless steel (Inside S. S 304 with mirror finish and outside. S.S 304 dull finish.) And the unit is mounted on caster wheels for ease of mobility.

BLOWER MOTOR ASSEMBLY

Duly balanced, direct drive highly efficient centrifugal blower units sized to provide adequate air flow volume over the entire surface of HEPA filter. These are directly coupled to an inbuilt motor and operate with minimum noise level i.e. lower than 65 db on scale and Vibration less than 2.5 um.

FRONT WINDOW

Front window consists of frameless laminated UV resistance shattered proof glass door

CONTROL AND DISPLAY

A **programmable logic controller (**PLC**)** is a digital computer used for automation of controlling electromechanical processes, and it controls and indicates information of pressure, temperature, system status with audio visual alarm, control of illumination, UV lamp and Door open and close functions event management with less maintenance hence no moving parts.

- PLC with 4.3" touch screen and color Display
- Password protected **H**uman **M**achine **I**nterface (HMI)
- Data storage to record set values, process values, date & time with variable time intervals
- Display of set value and process value
- High speed Ethernet connectivity
- Data logging capacity up to 200000 readings
- Log report for Alarm and other event management
- Programmable alarms with event management
- Self diagnostic system with error messages

Colour HMI with touch screen displays all the parameters including air velocity and timer. An inbuilt UV timer helps in the decontamination by switching ON the UV tube for a certain interval of time. A user friendly software and soft touch controls for blower, light, UV and power are easy to use.

UV INTERLOCK SYSTEM

In order to prevent operator exposure to harmful ultraviolet radiation, an UV interlock system is a standard feature with all cabinets with UV lamp, operator must close the sash in order for UV to activate and if sash is accidently raised, the UV lamp will automatically deactivate to ensure safety.

WATER PROOF SOCKET

2 water proof sockets are located in the side panel, for optimum convenience of using small devises inside the cabinet

EXTENSIBLE VALVE

2 supply valves are available for extensive function, compatible with liquid, gas and vacuum

BIOSAFETY CABINETS CLASS II B2

Class II Type B2 biological safety cabinets provide product, operator and environmental protection and are suitable for work with trace amounts of toxic chemicals and agents assigned to biological safety levels 1, 2 or 3. In a Class II Type B2 cabinet, all inflow and down flow air is exhausted after HEPA filtration to the external environment without recirculation across the work surface.

SALIENT FEATURES

- Large front panel display and user friendly control panel
- 10° slanted view screen provides highly visible and easily accessible area
- Work area is surrounded by negative pressure , double-wall plenums for superior protection
- Sturdy construction of cabinet protects from air leakage from the working zone
- Display of Life of UV lamp, HEPA filter and temperature
- Caster wheels for ease of mobility
- Levelling jack for vibration free operation

TECHNICAL SPECIFICATIONS				
Cat. No.	LBS-32B2 LBS-32B2P LBS-32B2G LBS-32B2GP	LBS-42B2 LBS-42B2P LBS-42B2G LBS-42B2GP	LBS-52B2 LBS-52B2P LBS-52B2G LBS-52B2GP	LBS-62B2 LBS-62B2P LBS-62B2G LBS-62B2GP
Working Area (mm)	900×600×600	1200×600×600	1500×600×600	1800×600×600
External Size with stand (mm)	1020x800x2260	1320x800x2260	1620x800x2260	1920x800x2260
Inflow Velocity (m/s)	0.53 ± 0.025			
Down flow velocity (m/s)	0.33 ± 0.025			
Control system	PLC / Manual			
Display	Colour HMI with touch screen / Deferential pressure Gauge			
Air Flow system	0% air recirculation and 100 % exhaust			
Maximum opening (mm)	400			
Safe Opening (mm)	200			
Filter	HEPA filter 99.999 % efficient			
Particle Retention	0.3 microns			
Class	100			
Base Height (mm)	635			
Noise level (dB)	≥ 65			
Exhaust Volume (m3/h)	936	1315	1645	1972
Downflow Volume (m3/h)	626	835	1045	1253
Power	300	350	400	800
Voltage	230 VAC			
Net weight (kg)	200	225	250	275
Gross weight	250	275	300	325
Packing Size (mm)	1147x930x1800	1447x930x1800	1747x930x1800	2050x930x1800

P Models are with Programmable logic control (PLC)
G Models are made out of Stainless steel 304 (GMP)

LAMINAR AIR FLOW

LABTOP laminar **air flow cabinet** is a Clean Bench designed to prevent contamination of semiconductor wafers, biological samples, or any particle sensitive device. The cabinet is made of Mild steel or stainless steel. These **Laminar Airflow** units are used for applications such as tissue culture, media preparation, sterile handlings, PCR sample preparation and many more.

SALIENT FEATURES

- Large front panel display and user friendly control panel
- 10° slanted view screen provides highly visible and easily accessible area
- Work area is surrounded by negative pressure , double-wall plenums for superior protection
- Sturdy construction of cabinet protects from air leakage from the working zone
- Display of Life of UV lamp, HEPA filter and temperature
- Caster wheels for ease of mobility
- Leveling jack for vibration free operation

LABTOP **laminar air flow chamber** exist in both horizontal and vertical configurations, Laminar air flow cabinets may have a UV-C germicial lamp to sterilize the cabinet and contents when not in use.

AIR FLOW AND FILTRATION

Laminar air Flow principle involves double filtration of air. Atmospheric air is drawn through pre filter and is made to pass through highly effective HEPA (High Efficiency Particulate Air) filters having efficiency rating as high as 99.99% with cold DOP and 99.97% with hot DOP, thus retaining all airborne particles of size 0.3 micron and larger. Double filtered air blows in laminar flow through the work table at designed velocity of 70 FPM-110FPM(Avg. Air flow velocity 90 FPM)

TECHNICAL SPECIFICATIONS FOR VERTICAL LAMINAR AIR FLOW					
Cat. No.	LLF-2V	LLF-3V	LLF-4V	LLF-5V	LLF-6V
	LLF-2VP	LLF-3VP	LLF-4VP	LLF-5VP	LLF-6VP
	LLF-2VG	LLF-3VG	LLF-4VG	LLF-5VG	LLF-6VG
	LLF-2VGP	LLF-3VGP	LLF-4VGP	LLF-5VGP	LLF-6VGP
Working Area (mm)	600×600×600	900×600×600	1200×600×600	1500x600x600	1800×600×600
Air Flow	Vertical				
Working Table	Stainless steel 304, 16 SWG				
Control system	PLC / Manual				
Display	Colour HMI with touch screen / Deferential Pressure Gauge				
Size of HEPA filter (mm)	600×600×76	900×600×76	1200×600×76	1500 x600x76	1800×600×76
Pre filters	1				
Filter efficiency	99.9 %				
Air Cleanliness	Class 100				
Particle Retention	0.3 micron				
Velocity	90 FPM + 20 %				
Illumination	LED, 750 - 800 LUX				
External Size with stand	730x700x1975	1030x700x1975	1330x700x1975	1630x700x1975	1930x700x1975
Size with packing	860x830x1500	1260x830x1500	1460x830x1500	1760x830x1500	2060x830x1500
Power	500 W	500 W	1000 W	1000 W	1000 W
Net weight	110	125	150	160	190
Gross weight	145	175	185	185	225
Voltage	110 V/230 V AC				

TECHNICAL SPECIFICATIONS FOR HORIZONTAL LAMINAR AIR FLOW					
Cat. No.	LLF-2H	LLF-3H	LLF-4H	LLF-5H	LLF-6H
	LLF-2HP	LLF-3HP	LLF-4HP	LLF-5HP	LLF-6HP
	LLF-2HG	LLF-3HG	LLF-4HG	LLF-5HG	LLF-6HG
	LLF-2HGP	LLF-3HGP	LLF-4HGP	LLF-5HGP	LLF-6HGP
Working Area (mm)	600×600×600	900×600×600	1200×600×600	1500x600x600	1800×600×600
Air Flow	Horizontal				
Working Table	Stainless steel 304, 16 SWG				
Control system	PLC / Manual				
Display	Colour HMI with touch screen / Deferential Pressure Gauge				
Size of HEPA filter	600×600×76	900×600×76	1200×600×76	1500 x600x76	1800×600×76
Pre filters	1				
Filter efficiency	99.9 %				
Working Area	Class 100				
Particle Retention	0.3 micron				
Velocity	90 FPM + 20 %				
Illumination	LED, 750 - 800 LUX				
Voltage	110 V/230 V AC				
Power	500 W	500 W	1000 W	1000 W	1000 W
External Size	730 x800x1200	1040x800x1200	1345x800x1200	1650x800x1200	1960x800x1200
External Size with stand	730x800x1900	1040x800x1900	1345x800x1900	1650x800x1900	1960x800x1900
Size with packing	860x927x1650	1170x927x1650	1480x927x1650	1780x927x1650	2090x927x1650
Net weight	110	125	150	160	190
Gross weight	145	175	185	185	225

NB : P Models are with Programmable logic control (PLC)

     G Models are made out of Stainless steel 304 (GMP)

SERVICE AND SUPPORT

The training undertaken by our Channel partners and engineers is of the highest standard in the industry, ensuring that our customers are supported by the highest level of technical expertise and as such can be assured that their equipment will perform to the standards required at all times.

Our wide network of Engineers/Technicians enables us to respond to any technical query, ensuring that our customers receive the maximum benefit from their equipment.

DOCUMENTATION

LABTOP offers IQ, OQ, PQ and DQ validation with documentation, reports, calibration and test certificates.

LABTOP
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ISO 13485:2016

CE 1050

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