

YORLAB® BIO-SAFETY CABINET **Model No.: YSL / YSI-190EX.**

Specifications:

- YSI-190EX Bio-Safety cabinets are of highly focused design. These are Microprocessor Controller based with LCD Display, Menu Control, automatic filter alarm system, and a large number of very useful features.
- YORLAB is in the field of Bio-Safety, Laminar Flow & other HEPA filtered Cabinets since over 4 decades.
- YORLAB Bio-Safety Cabinets are of international quality & are considered top-of-the-line by its very large number of regular users. A country-wide network of Service Centers provide quick & responsive Service & Support. These Cabinets are available in the following Class varieties.
- YSI-190EX Microprocessor based model with LCD Display has the following Menu Controlled Features :
 - Password (Programmable) for Authorized Operation.
 - Initial Self Cleaning Cycle with programmable time.
 - Real Time Clock. UV Timer
 - Total UV used Time . Total HEPA Filter run time
 - HEPA Filter Alarm after programmed hours with ON/OFF
 - HEPA Filter last change date
 - Audio Visual Door Unsafe Alarm, if door is at incorrect operating height
 - UV/Door/Fluorescent Light Inter Lock i.e. UV switches ON only when door is closed, and automatically switches OFF fluorescent lights
 - Power Socket with external control
 - Service Center phone number (stored)

Unique Features :

2-Stage Exhaust Protection :

- HEPA Filters
- UV Burn out, with View window in work chamber to monitor its working.
 - **Sliding Sash** - Counter Balanced Door for effortless operation. Motorized Door is optional.
 - **Negative Press System in Class II Type B3** : A Negative Pressure plenum surrounds the positive press plenum & ensure that any contaminants trying to leak out are sucked back into the system & sent back to the HEPA Filter, instead If leaking out into the environment, ensuring full safety.
 - **Intelligent Blower System (Optional)**: Motor Blower System is designed to provide rated air flow with new filter at a lower speed. This speed is increased automatically when required due to filter chocking , to maintain the air velocity within 90 ± 20 ft/min as required under US Fed Std 209E, and considerably prolongs HEPA Filter life
 - **Side Capture Zones** : for capturing stray contamination from entering into or escaping from the work chamber form near sides walls.



- Air Curtain on Table Front Edge for preventing contaminants from entering into or escaping from the work chamber from table front edge.
 - **Spillage Drain System** : Collection Channels with Drain outlet provided under the work table.
 - **Manometer** : To monitor supply filters. Magnahelic Gauge is optional.
 - Work Zone Single piece sides & back wall with rounded corners to prevent trapping of contaminants in crevices and allow proper cleaning.
 - **Sloped Front**: Ergonomical design ensures better operator confront, and more reach into the Work Area.
 - **Electric Outlet**: Provided in the work chamber for connecting any appliance.
 - Front Arm Rest is provided to prevent operator's arms from the blocking airflow, and for user comfort, along with Foot Rest.
 - **Ease of Maintenance**: HEPA & Pre Filters replaceable from front.
 - Factory pre-installed for instant commissioning Only ducting needs to be connected at site.
 - Standard Construction Body of Cold Rolled Mild Steel, Powder Coated after 7-Tank pre-treatment. Chamber & work Table of S. Steel 304.
- #### Spare / Optional Accessories :
- Virus Burn Out Unit at Exhaust.
 - Motorized Door, Electrically Operated, for best operator comfort.
 - UV Hour Meter, to keep track of total UV used time.
 - Exhaust System, for ducting length above 6 feet.
 - Full Body, Chamber, and work Table of heavy S. Steel 304.

Continued on.....

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- Micro-Controller Based operation : Menu Controlled with LCD Display. Refer first page for Menu functions.
- Laminar Airflow Velocity : Average of 0.45 m/s or 90 fpm measured 150mm/6" filter face for 45 air charges / minute work zone
- Re-circulation : 70% of total Air Velocity
- Exhaust : 30% of total Air Velocity
- Air Cleanliness in Working Area : meets or exceeds US Federal Standard 209E Class 100
- Main & Exhaust Filters : HEPA (Minipleat Optional)
- HEPA Filters : Rated for min. 99.97% efficiency at 0.3 micron particle size
- Pre-Filters : Low pressure drop. High efficiency, 10 microns
- UV Sterilization : In work chamber & Exhaust Plenum. Emission in the germicidal band UV -Cm 254mm.
- Alarm : Door unsafe position
- Half Speed Control : For idling periods
- Noise Level : <58dBA at operator level
- Gas ON/OFF : Electrical, Flame Auto Off with power failure.
- Inter Lock : UV/ Fluorescent Lites/ Door
- Exhaust : Double protection with HEPA & UV
- Motors / Blowers : Double shaft, Balanced, low vibration
- Power : 220-240VAC / 50 Hz 1Ph

Internal & External Dimensions	YBS-22	YBS-32	YBS-42	YBS-62
Internal Work Zone LxWxH (in)	24" x 24" x 27"	36"x24"x27"	48" x 24" x 27"	72" x 24" x 27"
(approx) (mm)	610x610x685	915 x610x685	1220x610x 685	1828 x610x685
External Dimensions Lx W x H	28" x 35"x 74"	42" x 35"x 74"	52" x35" x 74"	76" x 35"x 74"
in (mm)	710 x 890 x1880	1070 x 890 x 1880	1320 x 890 x 1880	1930 x 890 x 1880

Preferred Class most widely used, as described in following Text. Cleanliness level in the Work Chamber meets or exceeds Class 100 level of US Fed Std 209E. These cabinets are available in the following Class varieties.

Type	Airflow Pattern	Personal, Product & Environmental Protection.
Class-I	Front suction, exhaust through HEPA Filter	Personal, Product & Environmental Protection.
Class-II, Type A	70% re-circulated through HEPA 30% Exhaust through HEPA w/o Ducted	Personal, Product & Environmental Protection.
Class-II, Type B	100% re-circulated through HEPA	Personal, Product Protection.
Class-II, Type B1	30% re-circulated through HEPA 70% Exhaust through HEPA Ducted	Personal, Product & Environmental Protection.
Class-II, Type B2	No-re-circulated 100% Exhaust via HEPA & Ducted	Yes
Class-II, Type B3	Same as ClassII TypeB1 but plenum under Negative Pressure w.r.t. Room	Yes
Class-III	Same as ClassII TypeB2 but with work area Access Through Glove Pots for Absolute Safety	Yes