

Enviralab® Sterility Module

A self-contained clean work station with unique laminar airflow pattern.

The Envirco Enviralab® Sterility Module (ESM) is a positive pressure[†] laminar flow clean bench that is completely self-contained. It provides an ISO Class 5* (Class 100) environment within the work area that complies with the latest IEST Recommended Practices.

The ESM has a modular design with a unique airflow pattern that provides the non-aspirating action of vertical flow, while retaining the positive work protection of horizontal flow. Air from within the cabinet is returned to the room through the front access opening.

STANDARD FEATURES

- An ISO Class 5* environment utilizing an aerosol challenged high efficiency particulate air (HEPA) filter
- Exclusive airflow design with an all stainless steel interior construction
- Three standard sizes with 26 in. (660.4 mm) deep work areas
- Fluorescent lighting fixture provides 100 foot candles (1076 Lux) at the work surface
- Shielded ultraviolet (UV-C) lamp enhances sterilization of the work surface when the cabinet is not in use
- Stainless steel I.V. rod
- Covered duplex electrical outlet, 115V, 15 Amp installed on right rear wall
- Color-keyed airflow meter
- A welded steel cabinet with exterior finished in corrosion resistant polyurethane enamel
- Perforated aluminum diffuser screen protects the HEPA filter and maintains uniform airflow velocity within the work area
- Quiet operation (65 dBA ± 3 measured 30 in. (762 mm) from the filter face)
- Optional, matching support stand serves as a base for the ESM Module to provide a console-type work station
- CSA approved

[†]Note: Positive pressure laminar flow clean benches provide product protection only. Does not protect personnel or the environment from aerosols generated within the work area.

*As defined by the latest ISO 14644 and IEST Recommended Practices, where particle count does not exceed 3520 particles, 0.5 µm or larger, per cubic meter of air.



SPECIFICATIONS

Filters

Aluminum framed High Efficiency Particulate Air (HEPA) filter, with a minimum efficiency of 99.99% at 0.3 micron, aerosol challenged (zero probed).

Prefilters

Disposable - 30% ASHRAE.

Airflow

90 FPM (.45 m/s) ±10 FPM (.05 m/s) average velocity measured 6 in. (152.4 mm) from the diffuser screen. Uniformity ±20% of average or better.

* Note: Provides product protection only. Does not protect personnel or the environment from aerosols generated within the work area.

Motor/Blower Assembly

Direct drive, continuous duty 1/4 Hp (.19 kW) (ESM-3), 1/3 Hp (.25 kW) (ESM-4) or 1/2 Hp (.37 kW) (ESM-6) with sealed-for-life bearings and inherent overload protection. Motor/blower assembly is electronically balanced (dynamically) and mounted on vibration dampening rubber mounts. Motor/blower assembly is designed to provide rated airflow through a 50% increase in initial static pressure.

Speed Controller

Solid state speed control with RFI suppression for adjusting airflow velocity.

Electrical

Standard 15 Amp, 115V, single phase, 60 Hz, rubber covered cord with 3-prong grounded plug. Covered duplex electrical outlet installed on right rear wall. Fluorescent lighting fixture provides 100 foot candles at the work surface. Shielded UV light fixture. Separate blower and light switches.

Warranty

Limited one year.

Construction

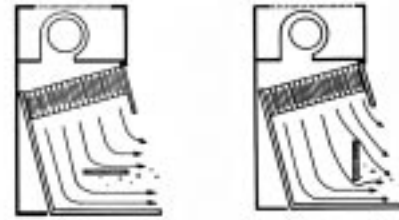
Welded steel cabinet with exterior finished in corrosion resistant polyurethane enamel. All stainless steel work area.

Applications

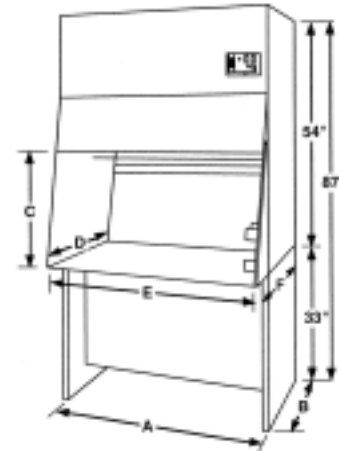
- Critical Sample Preparation
- Hyperalimentation
- I.V. Admixtures
- Media Preparation
- Microscopy Analysis
- Pharmaceutical Preparation
- Syringe Filling
- Tissue Culture

Options

- Additional Duplex Electrical Outlet, Part No. 10652
- Lab Service (right rear wall installed), Part No. 10190
- Matching Support Stand, Part No. 10761 (3-ft) (.9144 m), 10170 (4-ft) (1.2192 m), 10316 (6 ft) (1.8288 m)
- 220 V, 50 Hz unit transformer



Enviralab's unique, positive pressure, laminar airflow pattern sweeps around obstructions, minimizing reverse turbulence while maximizing cleansing within the critical work area.



Shown with optional matching support stand.

Part No.	10758	10166	10315	
Model No.	ESM-3	ESM-4	ESM-6	
Dimensions inches (millimeter)	A	35.00 (889)	47.00 (1193.8)	70.00 (1778)
	B	24.25 (615.95)	24.25 (615.95)	24.25 (615.95)
	C	28.00 (711.2)	28.00 (711.2)	28.00 (711.2)
	D	26.13 (663.7)	26.13 (663.7)	26.13 (663.7)
	E	33.50 (850.9)	44.50 (1130.3)	67.50 (1714.5)
	F	32.25 (819.15)	32.25 (819.15)	32.25 (819.15)
No. of Blowers	1	1	1	
BTU / Hour	1000	1200	1600	
Ave. CFM @ 90 FPM (m ³ /hr @ .45 m/s)	540 (918)	720 (1224)	1080 (1836)	
Power Requirements Amps @ 115 V / 60 Hz	6.0	8.0	10.0	
Ship Weight, lbs. (kilograms)	265 (120.2)	370 (167.8)	510 (231.3)	

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AND WITHOUT INCURRING LIABILITY FOR MODIFICATIONS TO EQUIPMENT PREVIOUSLY SOLD.