

PRODUCT DATA SHEET

■ **Introduction**

A self-contained clean work station with unique unidirectional airflow pattern providing the non-aspirating action of vertical flow while retaining the positive work protection of horizontal flow.

The Enviralab® Sterility Module (ESM) is a completely self contained, positive pressure, unidirectional airflow clean bench that provides an ISO Class 5* (Class 100) environment within its work area. 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.

■ **Standard Features**

- » An ISO Class 5* environment utilizing an aerosol challenged HEPA filter.
- » Exclusive airflow design with an all stainless steel interior construction.
- » Fluorescent lighting fixture providing 100 foot candles at the work surface.
- » Shielded ultraviolet lamp enhances sterilization of the work surface when the cabinet is not in use.
- » Perforated, anodized aluminum diffuser screen protects the HEPA filter and maintains a uniform airflow velocity within the work area.
- » Stainless steel I.V. rod.
- » Covered duplex electrical outlet.
- » Color-keyed airflow meter.
- » Three sizes with optional base support stands.

■ **Options**

- » Lab Service, Part No. 10190.
- » Additional Duplex Electrical Outlet, Part No. 10652.
- » Matching 3-Foot Support Stand, Part No. 10761.
- » Matching 4-Foot Support Stand, Part No. 10170.
- » Matching 6-Foot Support Stand, Part No. 10316.

■ **Applications**

The high performance Enviralab Sterility Module has successfully demonstrated its versatility in a wide variety of applications and industries.

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

■ **Warranty**

- » Limited 1-year warranty.

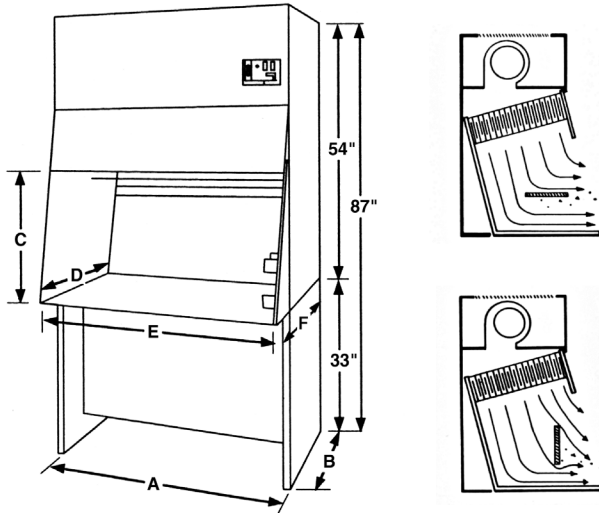
** As defined by the latest ISO 14644 and IEST Recommended Practices, where particle count does not exceed 3520 particles, 0.5 µm or larger per cubic meter of air.*



Enviralab Sterility Module

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■ Dimensional Information



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

■ Specification

Construction

Welded steel cabinet with exterior finished in polyurethane enamel. Stainless steel work area.

Filters

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

Prefilters

Disposable - 30% ASHRAE.

Airflow

90 feet per minute ±10 FPM average velocity measured 6 inches from the diffuser screen. Uniformity ±20% of average or better.

Part No.	10758	10166	10315	
Model No.	ESM-3	ESM-4	ESM-6	
Dimension Inches (mm)	A	35 (914)	47 (1193)	70 (1778)
	B	24.25 (616)	24.25 (616)	24.25 (616)
	C	28 (711)	28 (711)	28 (711)
	D	26.13 (664)	26.13 (664)	26.13 (664)
	E	33.5 (851)	44.5 (1130)	67.5 (1715)
	F	32.25 (819)	32.25 (819)	32.25 (819)
No. of Blowers	1	1	1	
BTU / Hr	1000	1200	1600	
Avg. CFM @ 90 FPM (m ³ /hr @ 0.45 m/s)	540 (1699)	720 (2039)	1080 (2719)	
Power Requirements Amps @ 115 V / 60 Hz	6.0	8.0	10.0	
Ship Weight, lbs. (kilograms)	265 (120)	370 (168)	510 (231)	

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

Electrical

Standard 15 Amp, 115 V, single phase, 60 Hz, rubber covered cord with 3-prong ground plug. Covered duplex electrical outlet installed on right rear wall. Separate blower and light switches. 220 Volt, 50-60 Hz available.

Motor/Blower Assembly

Direct drive, continuous duty 1/4 Hp (ESM-3), 1/3 Hp (ESM - 4) or 1/2 Hp (ESM-6) with sealed-for-life bearings and inherent overload protection. 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.