

100-Plus

A self-contained, compact, horizontal or vertical laminar flow module.

The Enviroco 100-Plus is an economical, multi-purpose, laminar flow module 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.

Horizontal or Vertical Airflow

Using an existing work surface, the unique design of the 100-Plus enables quick and easy assembly to either a horizontal or vertical laminar airflow configuration.

The positive pressure[†] laminar airflow provides product protection only. 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
- Easy conversion to either horizontal or vertical configurations
- Single electrical outlet, 115V, 15 Amp, flush mounted on the front blower housing
- A welded steel cabinet with a corrosion resistant polyurethane enamel finish
- Perforated aluminum diffuser screen protects the HEPA filter and maintains uniform airflow velocity within the work area
- Quiet operation (65 dBA \pm 3 measured 30 in. (762 mm) from the filter face)
- Three clear, removable acrylic enclosures with a fixed view screen

Reverse Laminar Flow Option

The reverse or negative pressure laminar airflow 100-Plus (Part No. 10594) helps contain aerosols generated from 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 μ m or larger, per cubic meter of air.

[†]Note: Positive pressure laminar flow clean benches provide product protection only. Reverse or negative pressure laminar flow cabinets provide limited personnel and environmental protection from aerosols generated within the work area.



Vertical Flow Unit



Horizontal Flow Unit

SPECIFICATIONS

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

Washable type, polyurethane foam - 30% ASHRAE.

Airflow

90 feet per minute ± 10 FPM (0.45 meter per second) average velocity measured 6 in. (152.4 mm) from the diffuser screen. Uniformity $\pm 20\%$ of average or better.

Motor/Blower Assembly

Direct drive, continuous duty 1/8 Hp, .09kW, 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.

Single electrical outlet flush mounted on front blower housing.

Optional fluorescent lighting fixture provides 150 foot-candles (1615 lux) at the work surface.

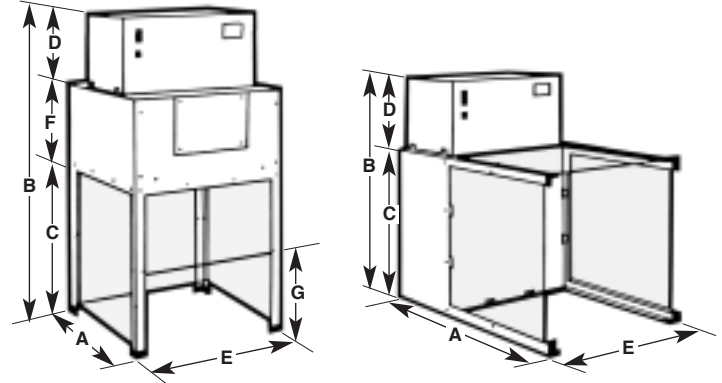
Construction

Welded metal cabinet with exterior finished in corrosion resistant polyurethane enamel.

Three removable 1/8 in. (3.18 mm) clear acrylic enclosure panels and fixed view screen.

Options

- 220V, 50hz Transformer
- Trace Metal Analysis Unit, Part No. 834911
- Fluorescent Light Fixture, Part No. 10615
- I.V. Rod, Part No. 10617
- Magnehelic Pressure Differential Gauge, Part No. 10693



Applications

- Critical Sample Preparation
- Hyperalimentation
- I.V. Admixtures
- Media Preparation
- Microscopy Analysis
- Pharmaceutical Preparation
- Syringe Filling
- Tissue Culture
- Microelectronic Assembly
- Optical Assembly
- Sterility Testing
- Reverse Flow Configuration for Particulate Containment

Warranty

Limited one year.

Part No.	10557	10557	10594	
Model No.	100-Plus Horizontal	100-Plus Vertical	100-Plus Reverse Flow	
Dimension - inches (millimeters)	A	37.50 (953)	24.00 (610)	24.00 (610)
	B	35.50 (902)	49.00 (1245)	53.00 (1347)
	C	24.00 (610)	23.75 (604)	23.75 (604)
	D	11.50 (293)	11.50 (293)	11.50 (293)
	E	24.00 (610)	24.00 (610)	24.00 (610)
	F	-----	13.75 (350)	13.75 (350)
	G	-----	12.00 (305)	12.00 (305)
BTU / Hour	600	600	600	
Ave. CFM @ 90 FPM (m ³ /hr @ 0.45 m/s)	360 (612)	360 (612)	360 (612)	
Power Requirements Amps @ 115 V / 60 Hz	4.2	4.2	4.2	
Ship Weight, lbs. (kilograms)	130 (59.0)	130 (59.0)	130 (59.0)	

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