

Laminar Flow Cabinets

- Simple, Effective Protection for Samples and Work Processes
- Uncompromised Performance, Economical Price



34 watt¹ Purair FLOW-36.



22–50 watt¹

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient laminar flow cabinets.



Air Science[®]

"The World's Most Extensive Selection of Containment Solutions"



Schedule
Contract GS-07F5832P



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FLOW

Laminar Flow Cabinets

24 • 36 • 48

PRODUCT OVERVIEW

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INTRODUCTION

Purair® FLOW Series laminar flow cabinets are designed to protect the interior work zone from particulate contamination.

The Purair FLOW Series product line employs the Air Science exclusive [Multiplex™ HEPA Filtration](#) technology to sustain a contamination-free environment.

HEPA filtered air passes uniformly through the cabinet interior via vertical laminar flow. The airflow is oriented to prevent introduction of airborne particulates during normal use.



22–50 watt¹

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient laminar flow cabinets.

APPLICATIONS

Vertical laminar flow cabinets are intended for use in non-hazardous applications where user protection from biologicals or biohazardous byproducts is not required.

Mycology and Food Microbiology \ Plant and Mammalian Cell Culture \ Clinical Pharmacies and Hospitals \ Cleanrooms \ Semiconductor Assembly \ Pharmaceutical Production \ Aerospace Contamination Control \ Medical Device Assembly \ General Research Protocols



KEY FEATURES

- Provides sterile work zone for aseptic techniques.
- Air cleanliness meets ISO Class 5.
- Energy saving LED lighting.
- Vertical laminar flow with HEPA filtration.
- Large front opening provides unrestricted access to the work zone.

FLOW SERIES

The Purair FLOW is designed to provide protection to the work surface from biological or particulate contamination. It is ideal for pharmacy compounding of non-toxic agents, assembly of finely tuned instrumentation, cell culture and other processes where protection of the user is not required but easy access to the work surface is important. ISO Class 5 air quality is maintained through a downward laminar flow that provides gentle airflow throughout the cabinet. The clean, simple, low maintenance design offers a comfortable workstation for a range of applications and may be bench mounted or positioned on a mobile bench.



Purair FLOW-48 shown with optional spill tray and mobile cart.



Deep into its second generation, Air Science embraces the diversity and cultural heritage of the founders and co-workers who are continuing a tradition of excellence. Demonstrating a commitment to adaptation, inclusion and quality output from a United States-based company with a domestic and global reach.

120 6th Street, Fort Myers, FL 33907

Toll Free. 800-306-0656 \ www.airscience.com

Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

¹) Energy consumption disclosure is based on internal testing with primary filters during normal operation. Power consumption published is nominal and dependent on cabinet size.

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DESIGN FEATURES

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DESIGN FEATURES

- A. Control Panel:** The control panel includes an On/Off switch for simple operation.
- B. Main Filter:** HEPA filter with 99.99% efficiency for 0.3 micron particulates (ULPA optional).
- C. Pre-Filter:** Disposable polyester fiber pre-filter with 85% arrestance.
- D. Blower Motor:** Centrifugal fan.
- E. Stand:** Optional base stand converts to mobile cart with optional locking casters.
- F. Lighting:** Compact LED cabinet lamp located away from laminar flow area.
- G. Pass Through Ports:** Convenient rear-wall pass through ports for safe routing of instrument cords, cables, and leads.
- H. Filter Door Lock:** Prevents unauthorized removal or accidental exposure to saturated filters.
- I. Filter Clamp:** Wide knob filter clamps are conveniently located forward of the assembly. The clamps secure the filter to the plenum with even pressure to assure a tight seal and to simplify filter removal and replacement when required.
- J. Work Surface:** Optional polypropylene spill tray, available in white or black, or optional stainless steel spill tray available.

ADDITIONAL FEATURES

360 Degree Visibility: Clear back and side panels allow ambient illumination into the chamber and provide users with an unobstructed view of its contents.

Construction: All models are available in either metal or polypropylene construction, specify when ordering. Available in 120V, 60Hz or 230V, 50Hz models.

Purair FLOW-24, shown with optional spill tray and mobile cart.

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PERFORMANCE & SELECTION

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Air Science FLOW cabinets are expertly designed to meet specific applications and certified for quality construction. Standard features, options and accessories are developed purposefully to enhance user-friendliness.

PERFORMANCE

The [Air Science Multiplex filter](#) offers a range of options for high performance protection.

Multiplex filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

Purair FLOW cabinets maintain up to 0.45 m/s (90 fpm) airflow velocity, measured 6" (150 mm) from the filter face.

The HEPA filters are easy to replace; no tools required.

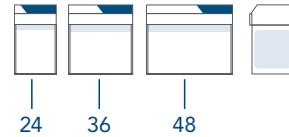
DESIGN

Professional quality Air Science cabinets comply with current technical and safety regulations.

The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant with a microbial powder finish coating.

The Air Science filter assembly is easy to access, easy to change, plus a unique filter clamping design eliminates bypass leakage of the main filter.

Stackable sections make cabinets highly portable and enable quick setup.



SELECTION

Purair FLOW cabinets are available in three model sizes with various options. Designed for desktop use, or for installation on an optional base stand or mobile cart.

RELIABILITY

Purair FLOW cabinets incorporate energy-efficient centrifugal blowers for maximum operational savings, low noise and minimal vibration.

Air Science uses long-life HEPA filters without aluminum separators to increase filter efficiency, minimize the potential for leakage and increase filter life.

CONTROL

The **basic control panel** features an On/Off switch for simple operation of the blower and light.



Basic Control Panel



Energy-efficient EC blowers promote long life and dependable performance of Purair FLOW work stations.



Purair FLOW-36, shown with optional mobile cart.

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CONTAINMENT & FILTRATION

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multiple 

FILTRATION

At the heart of the Purair product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter and main filter. The mechanical design enhances safety, convenience and overall value.

- The disposable pre-filter is accessible from the exterior top of the cabinet.
- A filter clamping mechanism allows for the filter to be easily installed and ensures an even seal at the filter peripheral face at all times to prevent bypass leakage.
- The filter chamber prevents contaminated air from contacting internal cabinet mechanisms.



SECUR.
safe disposal service



Filter disposal services are available in selected markets providing responsible destruction or recycling of used saturated filters in authorized facilities.

AIRFLOW

Room air enters from the top of the cabinet through the disposable pre-filter where larger particles are trapped, increasing the service life of the main HEPA filter.

Air is forced evenly across the HEPA filter to deliver a flow of pure air within the work zone to dilute and flush airborne contaminants from the work area. A nominal filter face velocity of up to 0.45 m/s (90 fpm) ensures that there is a sufficient number of air changes within the work zone to eliminate cross contamination and to maintain optimum cleanliness.

Purified air travels across the work zone to the work surface in a vertical downflow stream and then exits the work zone across the open cabinet front.

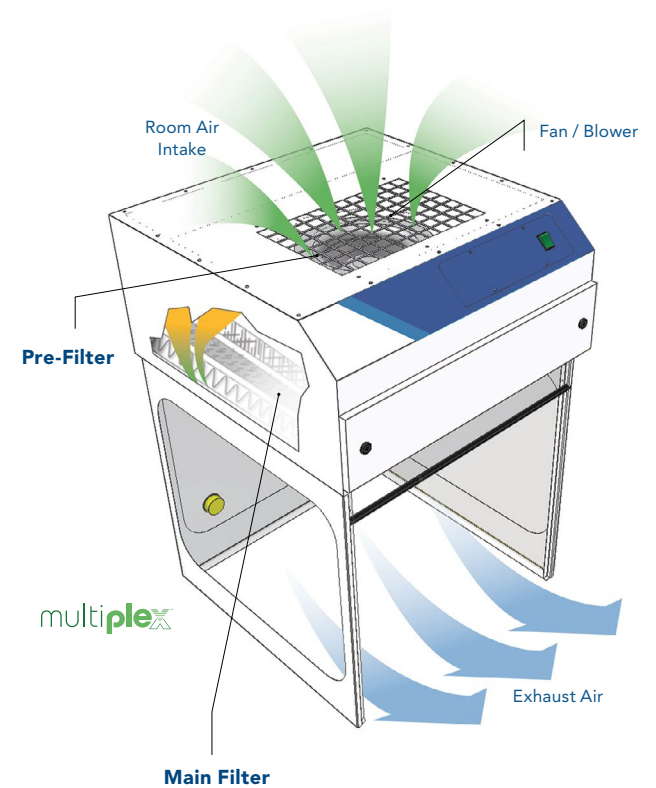
FILTER CONFIGURATION

P.  **The pre-filter** may be replaced while unit is in operation.

H. **The main filter** is easy to replace; no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and to maintain filter integrity.

MULTIPLYX FILTRATION SYSTEM, SUMMARY

| | | |
|-------------|----------|---|
| Pre-Filter | P | Disposable polyester fibers with 85% arrestance. |
| Main Filter | H | A self-contained filter designed to physically capture particles larger than 0.3 microns (HEPA) or 0.12 microns (ULPA). |

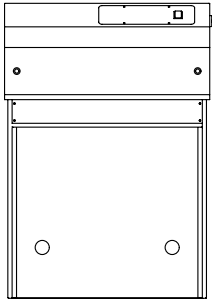


Through our partner company [Filtco Filters](#), Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.

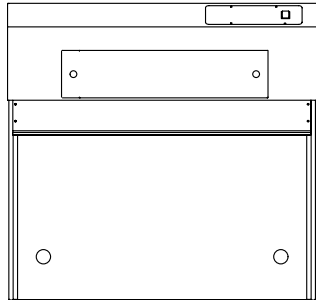
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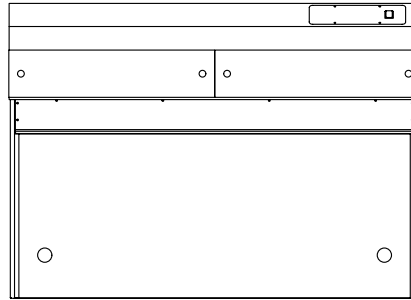
Purair FLOW-24



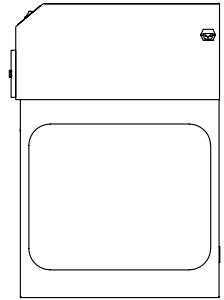
Purair FLOW-36



Purair FLOW-48



Side View



| MODEL | DIMENSIONS | | | | WEIGHT (LBS/KG) | | |
|---------|---------------|-----------------|----------------|---------------------------------------|---|----------|-----------|
| | Nominal Width | Internal Height | Internal Depth | External (W x D x H) | Shipping (W x D x H) | Net | Ship |
| FLOW-24 | 24" / 610 mm | 24" / 610 mm | 24" / 610 mm | 24" x 24" x 35" / 610 x 610 x 889 mm | 40" x 40" x 45" / 1016 x 1016 x 1143 mm | 72 / 33 | 150 / 68 |
| FLOW-36 | 36" / 914 mm | 24" / 610 mm | 24" / 610 mm | 36" x 24" x 35" / 914 x 610 x 889 mm | 48" x 40" x 45" / 1219 x 1016 x 1143 mm | 99 / 45 | 175 / 79 |
| FLOW-48 | 48" / 1219 mm | 24" / 610 mm | 24" / 610 mm | 48" x 24" x 35" / 1219 x 610 x 889 mm | 60" x 40" x 45" / 1524 x 1016 x 1143 mm | 138 / 63 | 225 / 102 |

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PRODUCT SPECIFICATIONS

| Filtration | FLOW-24 | FLOW-36 | FLOW-48 |
|--------------------------------|---|---------|---------|
| Airflow | <... Vertical downflow; 0.3 m/s - 0.45 m/s (60 - 90 fpm). ...> | | |
| Pre-Filter | <... Disposable polyester fibers with 85% arrestance. ...> | | |
| Main Filter | <... HEPA efficiency, 99.99% at 0.3µm. ...> | | |
| Clamping | <... Screw compression clamp. ...> | | |
| Construction | FLOW-24 | FLOW-36 | FLOW-48 |
| Finish (exterior) | <... White epoxy-coated steel frame with white legs on cabinet sides. ...> | | |
| Windows | <... Acrylic, transparent. ...> | | |
| Blower | <... EC blower. ...> | | |
| Controls | <... Main On/Off switch for fan and lighting. Solid-state fan speed control with RFI filter maintains blower uniformity. ...> | | |
| Electrical | <... 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ...> | | |
| Pass Through Ports | <... Two, standard, knock-out. ...> | | |
| Efficiency | FLOW-24 | FLOW-36 | FLOW-48 |
| Power Consumption ¹ | 22 watt | 34 watt | 50 watt |
| Lighting | <... LED. ...> | | |

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OPTIONS & ACCESSORIES

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OPTIONS AND ACCESSORIES

| Purair Model | | FLOW-24 | FLOW-36 | FLOW-48 |
|-------------------------------------|--|---------------|---------------|---------------|
| ULPA Filter | ULPA filter efficiency 99.999% at particle sizes between 0.1 to 0.3µm. | ASTS-030U | ASVLP536-030U | ASTS-030U (2) |
| Spill Tray (Polypropylene) | Removable for easy cleaning. | TRAY-P5-24 | TRAY-P5-36 | TRAY-P5-48 |
| Spill Tray (Stainless Steel) | Removable for easy cleaning. | TRAY-P5-24-SS | TRAY-P5-36-SS | TRAY-P5-48-SS |
| Base Stand, Mobile, with Casters | Provides a lower storage shelf; accommodates wheelchair access. Locking casters fix the hood in place. | CART-25 | CART-36 | CART-50 |
| Base Cabinet, Fixed (Metal) | Provides storage space below. | CART-MCC-25 | CART-MCC-36 | CART-MCC-50 |
| Base Cabinet, Fixed (Polypropylene) | Provides storage space below. | CART-SSC-25 | CART-SSC-36 | CART-SSC-50 |
| Fire Safety Cabinet Base | Flame resistant safe storage for combustible and flammable liquids | CART-FSC-25 | CART-FSC-36 | CART-FSC-50 |
| Polypropylene Construction* | Cabinets are available in all polypropylene construction. Contact Air Science for information. | FLOW-24-PP | FLOW-36-PP | FLOW-48-PP |

Factory installed; specify when ordering.

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OPTIONS & ACCESSORIES

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WARRANTY

This product is protected by the Air Science **Legacy Lifetime Warranty™** which starts on the date of shipment from our factory. This limited warranty is the result of thousands of successful Air Science production applications in pharmaceutical, laboratory, forensic, industrial and educational applications.

This warranty covers defects in materials and workmanship. Our liability under the Legacy Lifetime Warranty is, at our option, to repair or replace any defective parts of this equipment if you document that these parts were defective at the time we sold the product to you. Normal conditions apply.



For details visit the [Service section](#) of our website at www.airscience.com.

STANDARDS & COMPLIANCE

| | |
|----------------------------|--|
| Quality Management Systems | ISO 9001:2015 |
| Electrical Safety | UL-C-61010-1 CAN/CSA C22.2 61010-1-12 EN 61010-1:2010 CE Mark |
| Environment | ISO 14001:2015 ENERGY STAR® Partner |



120 6th Street \ Fort Myers, FL 33907
T. 239-489-0024 \ **Toll Free.** 800-306-0656 \ F. 800-306-0677
www.airscience.com

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