LAB SETUP AMERICA

PRODUCT BROCHURE | LABORATORY & CLEANROOM EQUIPMENT

Ductless Fume Hoods

Filtered ductless fume hoods providing operator protection for general and specialty laboratory applications



- No ductwork required
- Carbon & HEPA filtration
- Energy efficient
- www.lsamerica.com

Purair® BASIC





General Application Ductless Fume Hoods

- Provides Operator Safety and Numerous Features for General Applications

30 watt[1] *Purair model P5-24-XT, with optional velometer.*

30–71 watt[1]

The single blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

ENERGY STAR PARTNER · GSA Schedule Contract GS-07F5832P · ISO 9001 ISO 14001 BUREAU VERITAS Certification

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INTRODUCTION

Purair® Basic ductless fume hoods are designed to protect the user and the environment from hazardous vapors generated on the work surface.

22–50 watt[1]

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

APPLICATIONS

Using innovative filtration technology, the Purair Basic creates a safe work environment over the widest range of applications in the industry.

Compounding \ Balance Enclosures, Microscopes and Robotic Equipment \ Forensics \ Histology \ Educational \ Microscopy \ Mobile and Classroom Demonstrations \ Pharmaceutical \ Powder Fingerprinting \ Powder Weighing \ Sample Prep Work \ Soldering \ Solvent Cleaning and Welding \ Veterinary \ Dental

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.

KEY FEATURES

- High efficiency EC blower.
- Energy saving LED lighting.
- Protects the operator from fume and (with added HEPA/ULPA filter) particle hazards.
- Improved filter clamping eliminates bypass leakage.
- Filter blockage alarm.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

Environmental Benefits. Air Science® ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



50 watt[1] *Purair P5-48-XT shown with optional Autocal controller, polypropylene spill tray and mobile base stand.*

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

A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.

B. Control Panel: Electronic controls and displays include switches for the blower and filter blockage alarm.

C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.

D. Air Velometer: An optional analog air velocity meter is positioned in the user's field of vision.

E. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength. Optional all polypropylene construction is available if desired; see accessories.

F. Hinged Front Sash: When closed, the cabinet sash protects the contents from inadvertent external contact and better isolates the air within. The sash is easy to open and close.

G. Work Surface: The internal work surface can be fitted with an optional polypropylene tray (available in white and black); see accessories.

H. Pass Through Ports: Electrical cords and cables are safely routed into the cabinet through ports on the back.

I. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.

J. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.

K. Dynamic Filtration Chamber: The dynamic filter chamber prevents any possible leakage of contaminated air by pressurizing the fan plenum (positive air) and depressuring the filter compartment (negative air).

L. Internal Manual Speed Controller: Authorized personnel may set the EC blower speed as desired.

M. Stand: Optional mobile base stand with locking casters.

N. Safety Filter: The optional carbon or HEPA/ULPA safety filter adds an additional layer of protection.

ADDITIONAL FEATURES

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

Construction: All models are available in either metal or polypropylene construction. Specify metal or polypropylene when ordering. See selection chart for specifications and dimensions. Available in 120V, 60Hz and 230V, 50Hz models.

22 watt[1] *Purair P5-24-XT, shown with optional velometer and mobile base stand.*

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[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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Air Science high-efficiency fume hoods 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 Purair Basic accommodates the full range of Multiplex™ Filtration System options.

The high capacity air handling system delivers face velocity of 100 fpm in compliance with US and international safety and performance standards.

DESIGN

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

The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and change. The unique filter clamping design eliminates bypass leakage outside the cabinet.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



Energy-efficient *blowers promote long life and dependable performance of Purair Basic fume hoods.*



SELECTION

Purair Basic products are available in 3 standard widths, 2 depth options, in metal or polypropylene construction, totaling 12 standard models.

Custom manufacturing capabilities permit adaptations of standard cabinets such as polypropylene construction shown here with mobile base stand.



P5-24-XT shown on optional base stand with flame resistant safe storage cabinet

CONTROL

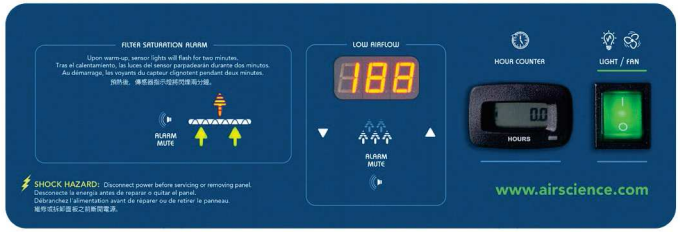
The **Basic control panel** is standard and includes an On/Off switch and Filter Blockage alarm.

The **optional Advanced** controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional Autocal controller** displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.



Basic Control Panel



Advanced Control Panel (ADVP)



Autocal Control Panel (ACAL)

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multiplex™

FILTRATION

At the heart of the Purair product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon filter and optional HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 7.

secur.
safe disposal service

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

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Purair Basic can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA filter can also be added. When used with a HEPA/ULPA filter, the ductless fume hood may be applied as a Class I Biological Safety Cabinet.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Secondary/ Stacked Filter, Optional	C	H	C	H
Primary Filter	C	H	H	C
Pre-Filter	P	P	P	P

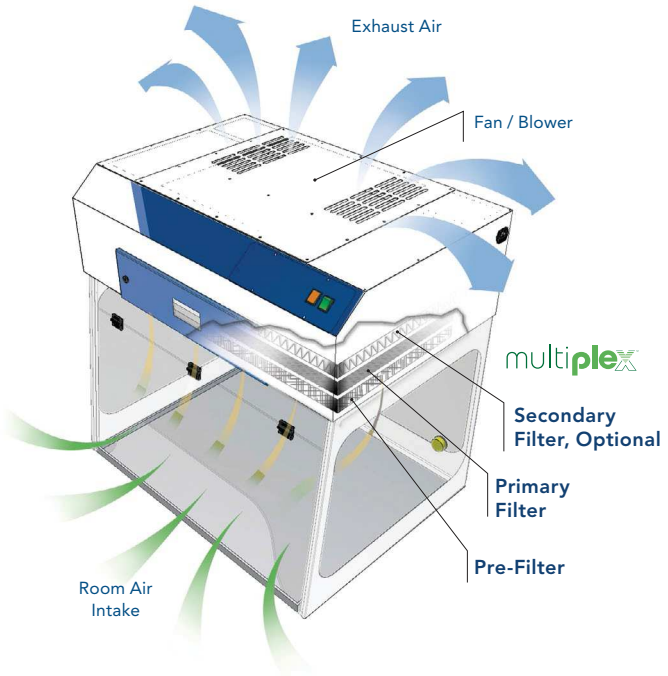
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

AIRFLOW

Contaminated air is pulled through the Multiplex Filtration System. Activated carbon adsorbs chemical vapors and optional HEPA/ULPA filters capture particulates. Clean air is returned to the room.

The main filters are easy to replace with no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

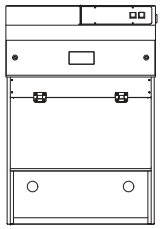
⚠ **The pre-filter** may be replaced while unit is in operation.



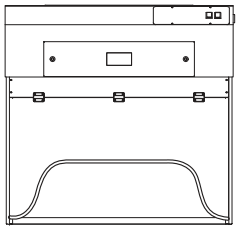
Specifications are subject to change without notice or obligation on the part of Air Science. For questions contact Air Science.

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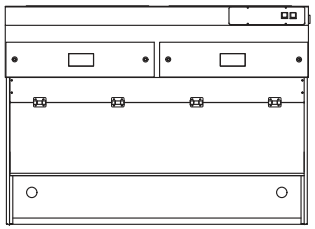
P5-24-XT



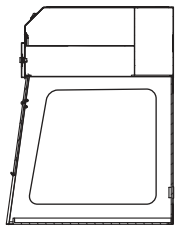
P5-36-XT



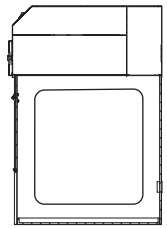
P5-48-XT



Standard Depth (XT)



Reduced Depth (XTS)



MODEL	VOLTAGE	DIMENSIONS			WEIGHT (LBS/KG)	
		Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
Standard Depth Models (XT)						
P5-24-XT-A	120V, 60Hz	23.6" / 600 mm	24" × 27" × 35" / 610 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-24-XT-G	230V, 50Hz	23.6" / 600 mm	24" × 27" × 35" / 610 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-36-XT-A	120V, 60Hz	23.6" / 600 mm	36" × 27" × 35" / 914 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-36-XT-G	230V, 50Hz	23.6" / 600 mm	36" × 27" × 35" / 914 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-48-XT-A	120V, 60Hz	23.6" / 600 mm	48" × 27" × 35" / 1219 × 676 × 889 mm	55" x 40" x 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104
P5-48-XT-G	230V, 50Hz	23.6" / 600 mm	48" × 27" × 35" / 1219 × 676 × 889 mm	55" x 40" x 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104
Reduced Depth Models (XTS) for countertops 24" or less						
P5-24-XTS-A	120V, 60Hz	23.6" / 600 mm	24" × 24" × 35" / 610 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-24-XTS-G	230V, 50Hz	23.6" / 600 mm	24" × 24" × 35" / 610 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-36-XTS-A	120V, 60Hz	23.6" / 600 mm	36" × 24" × 35" / 914 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-36-XTS-G	230V, 50Hz	23.6" / 600 mm	36" × 24" × 35" / 914 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-48-XTS-A	120V, 60Hz	23.6" / 600 mm	48" × 24" × 35" / 1219 × 610 × 889 mm	55" x 40" x 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104
P5-48-XTS-G	230V, 50Hz	23.6" / 600 mm	48" × 24" × 35" / 1219 × 610 × 889 mm	55" x 40" x 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104

"A" — 120V, 60Hz
"G" — 230V, 50Hz

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PRODUCT SPECIFICATIONS

Filtration	P5-24-XT | P5-24-XTS	P5-36-XT | P5-36-XTS	P5-48-XT | P5-48-XTS
Face Velocity	100 fpm / 0.50 m/sec	100 fpm / 0.50 m/sec	100 fpm / 0.50 m/sec

Construction	P5-24-XT | P5-24-XTS	P5-36-XT | P5-36-XTS	P5-48-XT | P5-48-XTS
Finish	<··· White epoxy coated steel frame and head unit. Clear sides and back panel. ···>		
Blower	<··· EC blower. ···>		
Controls	<··· Main On/Off. ···>		
Monitoring	<··· Filter blockage alarm, standard. ···>		

Efficiency	P5-24-XT | P5-24-XTS	P5-36-XT | P5-36-XTS	P5-48-XT | P5-48-XTS
Power Consumption* 120V, 60Hz	30 watt	54 watt	71 watt
Power Consumption* 230V, 50Hz	30 watt	54 watt	71 watt
Lighting	<··· LED. ···>		

** Watts at calibrated airflow setpoint with GP Filter(s) and prefilter installed.*

FILTER SPECIFICATIONS

Purair Model	P5-24-XT | P5-24-XTS	P5-36-XT | P5-36-XTS	P5-48-XT | P5-48-XTS
Secondary/Stacked Filter, Optional*	(1)	(1)	(2)
Primary Filter*	(1)	(1)	(2)
Pre-Filter*	(1)	(1)	(2)

** For specific examples refer to Multiplex filtration system summary on page 5.*

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.

** Other formulas may be available.*

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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[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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OPTIONS & ACCESSORIES

Purair Model		P5-24-XT | P5-24-XTS	P5-36-XT | P5-36-XTS	P5-48-XT | P5-48-XTS
Safety Filter*	An additional carbon, HEPA or ULPA safety filter exceeding ANSI/AIHA Z9.5 requirements can be installed after the main filter.	<··· Safety filters for vapor or particulate protection are available for all models. ···> Contact Air Science for ordering information.		
Advanced Controller*	The optional Advanced controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	P5-24-XT-A-ADVP P5-24-XT-G-ADVP P5-24-XTS-A ADVP P5-24-XTS-G-ADVP	P5-36-XT-A-ADVP P5-36-XT-G-ADVP P5-36-XTS-A-ADVP P5-36-XTS-G-ADVP	P5-48-XT-A-ADVP P5-48-XT-G-ADVP P5-48-XTS-A-ADVP P5-48-XTS-G-ADVP
Autocal Controller*	The optional Autocal controller displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.	P5-24-XT-A-ACAL P5-24-XT-G-ACAL P5-24-XTS-A-ACAL P5-24-XTS-G-ACAL	P5-36-XT-A-ACAL P5-36-XT-G-ACAL P5-36-XTS-A-ACAL P5-36-XTS-G ACAL	P5-48-XT-A-ACAL P5-48-XT-G-ACAL P5-48-XTS-A-ACAL P5-48-XTS-G-ACAL
Spill Tray (Polypropylene)	Removable for easy cleaning.	TRAY-P5-24 TRAY-P5-24-XTS	TRAY-P5-36 TRAY-P5-36-XTS	TRAY-P5-48 TRAY-P5-48-XTS
Dwyer Airflow Meter	Continuous display of face velocity.	DWYER	DWYER	DWYER
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*	Ductless fume hoods are available in all polypropylene construction.	P5-24-XT-A-PP P5-24-XT-G-PP P5-24-XTS-A-PP P5-24-XTS-G-PP	P5-36-XT-A-PP P5-36-XT-G-PP P5-36-XTS-A-PP P5-36-XTS-G-PP	P5-48-XT-A-PP P5-48-XT-G-PP P5-48-XTS-A-PP P5-48-XTS-G-PP
UV Lamp**	Creates light emission conditions know to safely decontaminate interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	P5-24-XT-A-UV P5-24-XT-G-UV P5-24-XTS-A-UV P5-24-XTS-G-UV	P5-36-XT-A-UV P5-36-XT-G-UV P5-36-XTS-A-UV P5-36-XTS-G-UV	P5-48-XT-A-UV P5-48-XT-G-UV P5-48-XTS-A-UV P5-48-XTS-G-UV

**Factory installed; specify when ordering.*
***Includes timer, door microswitch and fully closing front sash, all clear panels polycarbonate (UV filtering). Safety precautions need to be followed.*
"A" — 120V, 60Hz
"G" — 230V, 50Hz

Certain options, customizations or configurations may not be included in UL-C-61010-1 listings. Contact Air Science for details.
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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

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
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner

Air Science®

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ENERGY STAR PARTNER
GSA Schedule Contract GS-07F5832P
ISO 9001 ISO 14001 BUREAU VERITAS Certification
N° US014542 / N° US014543

Purair® ADVANCED





General Application Ductless Fume Hoods

• Premium Features and High Performance for Demanding Applications



59 watt[1] *Purair model P20-XT shown with optional velometer.*

37–118 watt[1]

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

USP 800 COMPLIANT

GSA Schedule Contract GS-07F-5632P

ISO 9001 ISO 14001 BUREAU VERITAS Certification

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INTRODUCTION

Purair® Advanced Series ductless fume hoods are designed to protect the user and the environment from hazardous vapors generated on the work surface.

37–118 watt[1]

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

APPLICATIONS

Using innovative filtration technology, the Purair Advanced creates a safe work environment over the widest range of applications in the industry.

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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.

KEY FEATURES

- High operator protection to fume and particle hazards.
- Improved clamping eliminates bypass leakage.
- Filter blockage alarm.
- Polypropylene work surface (stainless steel optional).
- High capacity filters for more demanding applications.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

Environmental Benefits. Air Science® ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

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Easy to Install. The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation, and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



37 watt[1] *Model P10-XT shown with optional FSA/Autocal controller and mobile cart.*

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

A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.

B. Control Panel: Electronic controls and displays include switches for the blower and filter blockage alarm.

C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.

D. Air Velometer: An analog air velocity meter is positioned in the user's field of vision.

E. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength. Optional all polypropylene construction is available if desired; see accessories.

F. Hinged Front Sash: When closed, the cabinet sash protects the contents from inadvertent external contact and better isolates the air within. The sash is easy to open and close.

G. Work Surface: The internal work surface can be fitted with an optional polypropylene (available in white and black) or stainless steel tray; see accessories.

H. Pass Through Ports: Electrical cords and cables are safely routed into the cabinet through ports on the back.

I. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.

J. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.

K. Dynamic Filtration Chamber: The dynamic filter chamber prevents any possible leakage of contaminated air by pressurizing the fan plenum (positive air) and depressuring the filter compartment (negative air).

L. Internal Manual Speed Controller: Authorized personnel may set the EC motor speed as desired.

M. Stand: Optional mobile cart with locking casters.

N. Safety Filter: The optional carbon or HEPA/ULPA safety filter adds an additional layer of protection.

O. Air Sampling Port: A filtered air sampling port allows manual filter monitoring.

P. Track & Wheel System: The filter glides in on a wheel and track system, then clamps tightly against the filter gasket to prevent filter tears and maintain filter integrity.

ADDITIONAL FEATURES

360 Degree Visibility: Clear acrylic 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. See selection chart for specifications and dimensions. Specify metal or polypropylene when ordering. Available in 120V, 60Hz and 230V, 50 Hz models.

39 watt[1] *Purair P15-XT, shown with optional stainless steel spill tray and mobile cart.*

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Each Air Science fume hood includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

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.
- EFT™ filtration technology broadens the Air Science application for ductless fume hoods.
- A high capacity air handling system delivers face velocity of 100 fpm.

DESIGN

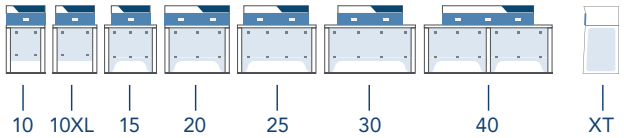
Professional quality Air Science fume hoods comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

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

The optional SafeSwitch HEPA Filter Shutter System is available for safer filter exchange.



Energy-efficient *EC blowers promote long life and dependable performance of Purair Advanced fume hoods.*



SELECTION

Purair Advanced products are available in 7 standard sizes, in metal or polypropylene construction, totaling 14 standard models.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



Advanced Control Panel



FSA/Autocal Control Panel



FSA Control Panel

CONTROL

The **advanced control panel** is standard and includes an On/Off switch, Hour Counter and Filter Blockage alarm.

The **optional FSA/Autocal controller** displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional FSA controller** offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.

The **optional Autocal controller** displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional Monitair microprocessor** controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen.



Autocal Control Panel



Monitair Control Panel

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multiplex™

FILTRATION

At the heart of the Purair product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 8.

safe SWITCH™

The optional SafeSwitch HEPA Filter Shutter system ensures that operators are safely separated from trapped contaminants during filter changes.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Purair Advanced can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added. When used with a HEPA/ULPA filter, the ductless fume hood may be applied as a Class I Biological Safety Cabinet.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single, blended, or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Secondary/ Stacked Filter, Optional	C	H	H or C	H
Primary Filter	C	H	H C	H C
Pre-FIlter	P	P	P	P

The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

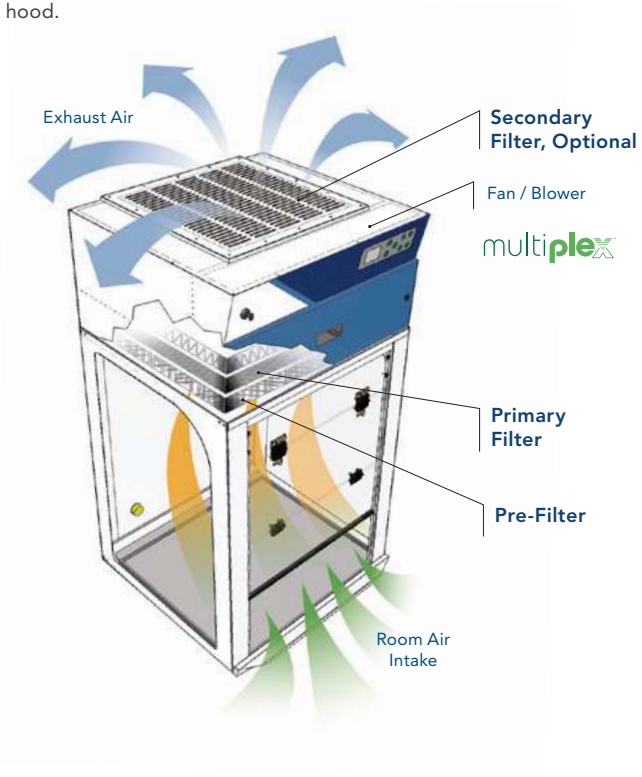
AIRFLOW

The Purair Advanced ductless fume hood maintains a constant face velocity of 100 fpm in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the Multiplex filtration system; clean air is returned to the room.

The main filters are easy to replace and install. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

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

The safety filter is easy to replace and enhances filter capacity of the hood.



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ENHANCED FILTRATION

The Air Science Enhanced Filtration Technology (EFT) is a universal filtration system developed for use with a wide range of core chemical families. These include organic acids, alcohols, aliphatic hydrocarbons, aromatic hydrocarbons, esters, aldehydes, ketones, ethers, halogens and others. Although the EFT system is weighted to accommodate these families, it can handle inorganic acids as well.

The Air Science EFT system is available as an option on Air Science Purair Advanced ductless fume hoods, standard on Purair Eco Series fume hoods and can be retrofitted on many Air Science ductless fume hoods already in service worldwide.



Independent Test Results Independent testing confirms that the Air Science EFT system is superior in critical areas to other "green" fume hood systems recently introduced to the industry. AFNOR NFX 15-211 requires that three chemicals (isoproponal, cyclohexane and hydrochloric acid) be tested under very precise conditions to ascertain and establish retention capacity at 1% of the threshold limit value (TLV) for each chemical.

Retention capacity (grams) for a single module at 1% of the TLV (Threshold Limit Value)

Specification	**AFNOR NFX 15-211**	
Testing Laboratory	**IBR**	**Intertek**
Product Manufacturer	Air Science	Brand E
Filter Type		Green
Test Results	EFT	
Isopropanol (alcohol)	2052	673
Cyclohexane (aliphatic hydrocarbon)	1531	914
Hydrochloric acid (inorganic acid)*	1205	2729*

**Based on "core" chemical families typically used in ductless fume hood applications, the Air Science EFT filter offers significant advantages over filters marketed as "universal" filters. With moderate to heavy acid applications, all ductless fume hoods made of metal are subject to corrosion and rust. On inorganic acids, the EFT filter provides a lesser, but more realistic, usable capacity.*

secur. safe disposal service

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

Avoid Revolving Filters Air Science strongly discourages the unsafe practice of revolving secondary backup filters into the primary filter compartment. All Air Science units are designed to avoid this false sense of security.

In a revolving filter system, users are instructed to rotate the secondary backup filter into the primary filter position after non-permissible exposure levels of chemicals are detected within the monitoring chamber.

Depending on when the unit can be properly shut down, the secondary filter can be loaded to the point of saturation itself, thereby creating a safety hazard if the filter is considered new.

If a new spare filter is not immediately available, a user may inadvertently (or knowingly) re-install a contaminated primary filter into the secondary location permitting the system to operate without protection.

Additionally, the secondary filter can become contaminated as it ages, sometimes for years, on top of an operational cabinet, losing filter efficiency by the time it is installed.

Either practice puts both personnel and the environment at risk, even though some manufacturers provide stickers to label the filters as "used."

The Air Science non-revolving filter practice ensures that only a new filter is fitted into the primary filter compartment and permits the secondary filter to remain installed for at least twice the change-out period, resulting in a 50% savings in filter change-out costs.

filtco

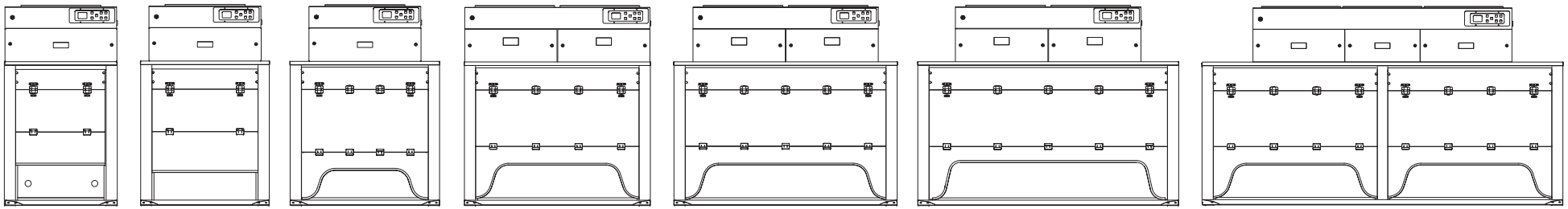
Through our partner company Filtco Filters, Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.

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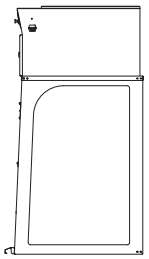
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P10-XT P10XL-XT P15-XT P20-XT P25-XT P30-XT P40-XT



MODEL		DIMENSIONS			WEIGHT (LBS/KG)	
Metal	Polypropylene	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
Tall Models						
P10-XT	**P10-XT-PP**	38" / 965 mm	30" × 27.375" × 53" / 762 × 695 × 1346 mm	50" × 40" × 42" / 1270 × 1016 × 1067 mm	111 / 50	175 / 79
P10XL-XT	**P10XL-XT-PP**	38" / 965 mm	34" × 27.375" × 53" / 864 × 695 × 1346 mm	40" × 40" × 42" / 1016 × 1016 × 1067 mm	141 / 64	225 / 102
P15-XT	**P15-XT-PP**	38" / 965 mm	39" × 27.375" × 53" / 991 × 695 × 1346 mm	40" × 50" × 42" / 1016 × 1270 × 1067 mm	143 / 65	250 / 113
P20-XT	**P20-XT-PP**	38" / 965 mm	49" × 27.375" × 53" / 1245 × 695 × 1346 mm	55" × 60" × 42" / 1397 × 1524 × 1067 mm	216 / 98	325 / 147
P25-XT	**P25-XT-PP**	38" / 965 mm	59" × 27.375" × 53" / 1499 × 695 × 1346 mm	40" × 67" × 42" / 1016 × 1702 × 1067 mm	235 / 106	350 / 159
P30-XT	**P30-XT-PP**	38" / 965 mm	69" × 27.375" × 53" / 1753 × 695 × 1346 mm	40" × 80" × 42" / 1016 × 2032 × 1067 mm	315 / 143	400 / 181
P40-XT	**P40-XT-PP**	38" / 965 mm	96" × 27.375" × 53" / 2438 × 695 × 1346 mm	40" × 108" × 42" / 1016 × 2743 × 1067 mm	427 / 193	550 / 249

Side View



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PRODUCT SPECIFICATIONS

Filtration	P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT[1]	P40-XT
Face Velocity	100 fpm	100 fpm	100 fpm	100 fpm	100 fpm	100 fpm	100 fpm

Construction	P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT[1]	P40-XT
Finish	<··· White epoxy coated steel frame and head unit. Clear sides and back panel. Polypropylene spill tray. ···>						
Blower	<··· EC blower. ···>						
Controls	<··· Main On/Off. ···>						
Electrical	<··· 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>						
Monitoring	<··· Filter blockage alarm, standard. ···>						

Efficiency	P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT[1]	P40-XT
Power Consumption[2]	37 watt	62 watt	39 watt	59 watt	60 watt	67 watt	84 watt
Lighting	<··· LED. ···>						

[1] The Purair 30 Series is configured with two filter sections, standard. A three filter configuration (similar to the Purair 40) is available to increase the airflow volume to 590 cfm; specify when ordering.
[2] All measurements are with Filter Type ASTM-030.
[3] Measured 12" (30 cm) from the cabinet front and 15" (38 cm) above the work surface plane.

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.
EPTFE	Universal filtration.

**Other formulas may be available.*

FILTER SPECIFICATIONS

Purair Model	P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT[1]	P40-XT
Safety Filter, Optional*	(1)	(1)	(1)	(2)	(2)	(2)	(3)
Primary Filter(s)*	(1)	(1)	(1)	(2)	(2)	(2)	(3)
Pre-Filter*	(1)	(1)	(1)	(2)	(2)	(2)	(3)

** For specific examples refer to Multiplex filtration system summary on page 5.*

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OPTIONS & ACCESSORIES

Purair Model		P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT	P40-XT
Safety Filter*	An additional carbon, HEPA or ULPA safety filter exceeding ANSI/AIHA Z9.5 requirements can be installed after the main filter.	<··· Safety filters for vapor or particulate protection are available for all models. ···> Contact Air Science for ordering information.						
FSA/Autocal Controller*	The optional FSA/Autocal controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	ADV-P	ADV-P	ADV-P	ADV-P	ADV-P	ADV-P	ADV-P
FSA Controller*	The optional FSA controller offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.	FSA	FSA	FSA	FSA	FSA	FSA	FSA
Autocal Controller*	The optional Autocal controller displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL
Monitair Controller*	The optional microprocessor controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Emits audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen. Not TUV compliant.	MON-P	MON-P	MON-P	MON-P	MON-P	MON-P	MON-P
Spill Tray (Stainless Steel)	Removable for easy cleaning.	TRAY-P10-SS	TRAY-P10XL-SS	TRAY-P15-SS	TRAY-P20-SS	TRAY-P25-SS	TRAY-P30-SS	TRAY-P40-SS
Spill Tray (Polypropylene)	Removable for easy cleaning.	TRAY-P10	TRAY-P10XL	TRAY-P15	TRAY-P20	TRAY-P25	TRAY-P30	TRAY-P40

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OPTIONS & ACCESSORIES (CONTINUED)

Purair Model		P10-XT	P10XL-XT	P15-XT	P20-XT	P25-XT	P30-XT	P40-XT
SafeSwitch HEPA Filter Shutter System*	Minimizes exposure to filter contaminants when removing used HEPA filters for insertion of new filters.	ASTM-030-SS	ASTM-030-SS	ASTM-030-SS	ASTM-030-SS (2)	ASTM-030-SS (2)	ASTM-030-SS (2)	ASTM-030-SS (3)
Base Stand, Mobile, With Casters	The mobile cart provides a lower storage shelf; accommodates wheelchair access. Locking casters fix the hood in place.	CART-30	CART-35	CART-40	CART-50	CART-60	CART-70	CART-97
Base Cabinet, Fixed (Metal)	Provides storage space below.	CART-MCC-30	CART-MCC-35	CART-MCC-40	CART-MCC-50	CART-MCC-60	CART-MCC-70	CART-MCC-97
Base Cabinet, Fixed (Polypropylene)	Provides storage space below.	CART-SSC-30	CART-SSC-35	CART-SSC-40	CART-SSC-50	CART-SSC-60	CART-SSC-70	CART-SSC-97
Fire Safety Cabinet Base	Flame resistant safe storage for combustible and flammable liquids.	CART-FSC-30	CART-FSC-35	CART-FSC-40	CART-FSC-50	CART-FSC-60	CART-FSC-70	CART-FSC-97
Remote Control**	Wired controller, provides lower access height to comply with ADA requirements.	RC-P	RC-P	RC-P	RC-P	RC-P	RC-P	RC-P
Polypropylene Construction*	Ductless fume hoods are available in all polypropylene construction.	P10-XT-PP	P10XL-XT-PP	P15-XT-PP	P20-XT-PP	P25-XT-PP	P30-XT-PP	P40-XT-PP
Duplex Electrical Outlet*	Two NEMA-1420R receptacles with ground fault interrupter. 120V service standard; international fixtures available.	AS-GFI	AS-GFI	AS-GFI	AS-GFI	AS-GFI	AS-GFI	AS-GFI
Service Fitting*	Cabinets can be fitted with service fixtures in sidewall or on work surface.	<··· SF-X. Specify service fitting type (faucet, valve, petcock) and location when ordering. ···>						
Stainless Steel Hanging Rod*	Hanging rod spans the width of the cabinet.	HANGR-P10	HANGR-P10XL	HANGR-P15	HANGR-P20	HANGR-P25	HANGR-P30	HANGR-P40
Cup Sink, Mounts into Tray*	Polyethylene cup sink (3" × 5" × 9") is fitted into the base tray. Other sizes, materials available. Contact Air Science to order.	SINK	SINK	SINK	SINK	SINK	SINK	SINK
UV Lamp***	Creates light emission conditions know to safely decontaminate interior surfaces. Includes a timer, door microswitch, fully closing front sash and UV filtering clear polycarbonate panels. The UV operation must comply with local codes and facility safety practices.	UV-P10	UV-P10XL	UV-P15	UV-P20	UV-P25	UV-P30	UV-P40

* *Factory installed; specify when ordering.*
** *Handheld box connects via cable to head unit. Includes On/Off switch and blower speed control. Can be placed inside work zone.*
*** *Includes timer, door microswitch and fully closing front sash, all clear panels polycarbonate (UV filtering). Safety precautions need to be followed.*

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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

For details visit the Warranty section of our website.

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 UL Certification pending or not available for Models P30 and P40, or models equipped with optional Monitair controller.
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001:2015 ENERGY STAR® Partner

Air Science®

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USP 800 COMPLIANT
ENERGY STAR PARTNER
GSA Schedule Contract GS-07F5832P
ISO 9001 ISO 14001 BUREAU VERITAS Certification N° US010998 / N° US010999

EDU™ Series





EDU™ Series Ductless Demonstration Fume Hoods

- Safe for Education, Vocational Training and Industrial Workforce Development



EDU-MOBILE, EDU-M-60

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

ISO 9001
ISO 14001
BUREAU VERITAS
Certification

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INTRODUCTION

The EDU Series Ductless Demonstration Fume Hoods are designed to provide 360° visibility while protecting users and the classroom environment from hazardous vapors generated on and above the work surface.

APPLICATIONS

Using innovative filtration technology, the EDU Series creates a safe work environment over the widest range of applications in the industry.

Science Class Lectures / Safety Practice Demonstrations / Laboratory Assignments

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.

KEY FEATURES

- High efficiency ebm-papst EC blower.
- Energy saving LED lighting.
- Protects the operator from fume and (with added HEPA/ULPA filter) particle hazards.
- Improved filter clamping eliminates bypass leakage.
- Filter blockage alarm.

PERFORMANCE ADVANTAGE

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

Environmental Benefits. Air Science® ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.



EDU-MOBILE, EDU-M-40

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.

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

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EDU-MOBILE, EDU-M-40, shown with optional duplex electrical outlet, gas petcock, cup sink and gooseneck water faucet.

DESIGN FEATURES

A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.

B. Control Panel: Electronic controls and displays include switches for the blower and filter blockage alarm.

C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.

D. Air Velometer: An analog air velocity meter is positioned in the user's field of vision.

E. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength. Optional all polypropylene construction is available if desired; see accessories.

F. Hinged Front Sash: When closed, the cabinet sash protects the contents from inadvertent external contact and better isolates the air within. The sash is easy to open and close.

G. Work Surface: The internal work surface is fitted with a standard polypropylene spill tray (available in white or black). An optional stainless steel tray is also available, see accessories.

H. Pass Through Ports: Electrical cords and cables are safely routed into the cabinet through ports on the back.

I. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and is 91% effective down to 1-3 microns.

J. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.

K. Internal Manual Speed Controller: Authorized personnel set the centrifugal fan motor speed as desired.

L. Locking Casters: Permit complete portability from lab to lab. The overall width and height are sized to fit easily through standard doorways.

M. Isolated Single Switch Electrical Sockets: 13 amp.

N. Quick Release Connections: For water, waste and gas.

O. Petcocks and Faucet: Available for gas and water. An optional gooseneck faucet is positioned over an optional chemically-resistant polypropylene sink cup integrated into the work surface.

ADDITIONAL FEATURES

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

Construction: All models are available in either metal or polypropylene construction. See selection chart for specifications and dimensions. Available in 120V, 60Hz and 230V, 50Hz models.

No Installation, No Ducting Required: Self-contained, integrated systems ideal for fixed location or mobile applications.

Safe, Energy-Efficient Operation: All conditioned air is safely returned to the room, minimizing impact on facility HVAC costs.

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PERFORMANCE

Air Science Multiplex Filtration 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.

EFT™ filtration technology broadens the Air Science application for ductless fume hoods.

A high capacity air handling system delivers face velocity of 100 fpm.

DESIGN

Professional quality Air Science fume hoods comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

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

The optional SafeSwitch HEPA Filter Shutter System is available for safer filter exchange.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



Energy-efficient *centrifugal fan promotes long life and dependable performance of EDU Series fume hoods.*

SELECTION

EDU Series products are available in 4 configurations and 6 standard sizes, in metal or polypropylene construction, totaling 12 standard models.

EDU SERIES DIFFERENTIAL SUMMARY






Feature	EDU-MOBILE	EDU-CLASSIC	EDU-ADA	EDU-JUNIOR
General Description	Mounted on wheeled cart with small side storage cabinet. Blowers, filters and controls are mounted below the work surface to lower the center of gravity.	Mounted on a wheeled cart with an enclosed chemical storage area in the base cabinet.	Provides wheelchair access to the workstation front. Controls are mounted in a handheld remote box placed inside the workzone.	A basic workstation, mounted on wheeled cart.
Airflow	↓	↑	↑	↑
Air Sampling Port	•	•	•	
Base Cabinet	•	•		
Dynamic Filter Chamber	•	•	•	
Filter Blockage Alarm	•	•	•	•
Hour Counter	•	•	•	
Optional Service Fixtures, Cup Sink	•	•	•	•
Push/Pull Handle	•	•		
Dwyer Continuous Airflow Display	•	•	•	•
Safety Filter	•	•	•	
Storage Compartment	•	•		
Track and Wheel Filter Insert/Remove Function	•	•	•	

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CONTROL

The **basic control panel** is standard on the EDU-JUNIOR and includes an On/Off switch and Filter Blockage alarm.

The **advanced control panel** includes an On/Off switch, Filter Blockage alarm and hour meter to aid in determining available filter life. Standard on EDU-MOBILE, EDU-CLASSIC and EDU-ADA.

The **optional FSA/Autocal controller** displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional FSA controller** offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.

The **optional Autocal controller** displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional Monitair microprocessor controller** monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen.



Basic Control Panel



Advanced Control Panel



FSA/Autocal Control Panel



FSA Control Panel



Autocal Control Panel



Monitair Control Panel



DOCKING STATION

An optional docking station prevents accidental disconnect of services to mobile fume hoods and prevents unauthorized access to main service connections which are securely locked away when not in use.

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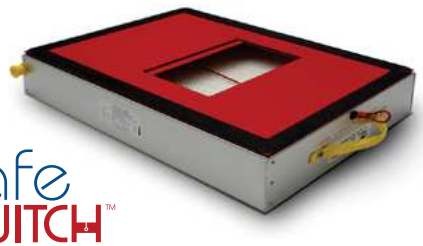
multiplex™

FILTRATION

At the heart of the EDU Series product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 13.



safe SWITCH™

The optional SafeSwitch HEPA Filter Shutter system ensures that operators are safely separated from trapped contaminants during filter changes.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The EDU Fume Hood can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added. When used with a HEPA/ULPA filter, the ductless fume hood may be applied as a Class I Biological Safety Cabinet.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single, blended or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Safety Filter, Optional	C	H	H or C	H
Primary Filter	C	H	H C	H C
Pre-FIlter	P	P	P	P

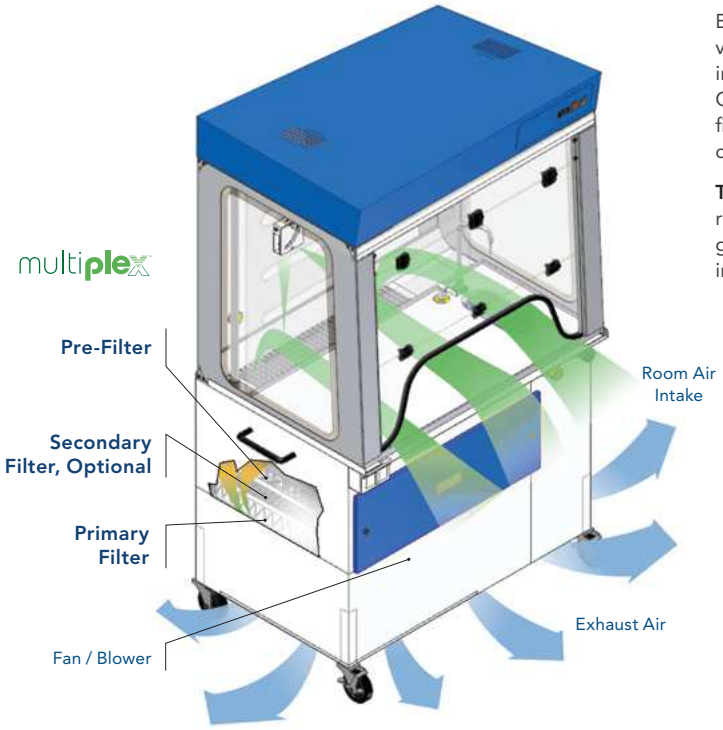
The system can be configured for the capture of acids, bases, and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.



EDU-ADA, P10XL-CART-RC-P

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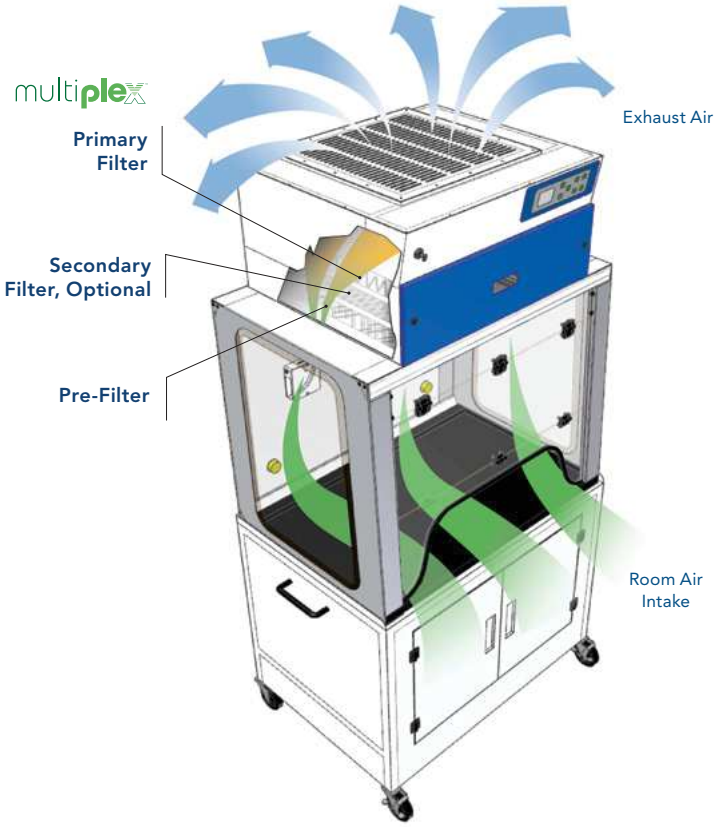


EDU-MOBILE
DOWNFLOW

AIRFLOW

EDU Series fume hoods maintain a constant face velocity of 100 FPM in compliance with U.S.A. and international standards for safety and performance. Contaminated air is pulled through the Multiplex filtration system where activated carbon adsorbs chemical vapors, returning clean air to the room.

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



EDU-CLASSIC, EDU-ADA and EDU-JUNIOR
UPFLOW

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ENHANCED FILTRATION

The Air Science Enhanced Filtration Technology (EFT) is a universal filtration system developed for use with a wide range of core chemical families. These include organic acids, alcohols, aliphatic hydrocarbons, aromatic hydrocarbons, esters, aldehydes, ketones, ethers, halogens and others. Although the EFT system is weighted to accommodate these families, it can handle inorganic acids as well.

The Air Science EFT system is available as an option on Air Science EDU series ductless fume hoods.



Independent Test Results Independent testing confirms that the Air Science EFT system is superior in critical areas to other "green" fume hood systems recently introduced to the industry. AFNOR NFX 15-211 requires that three chemicals (isoproponal, cyclohexane and hydrochloric acid) be tested under very precise conditions to ascertain and establish retention capacity at 1% of the threshold limit value (TLV) for each chemical.

Retention capacity (grams) for a single module at 1% of the TLV (Threshold Limit Value)

Specification	**AFNOR NFX 15-211**	
Testing Laboratory	**IBR**	**Intertek**
Product Manufacturer	Air Science	Brand E
Filter Type		Green
Test Results	EFT	
Isopropanol (alcohol)	2052	673
Cyclohexane (aliphatic hydrocarbon)	1531	914
Hydrochloric acid (inorganic acid)*	1205	2729*

**Based on "core" chemical families typically used in ductless fume hood applications, the Air Science EFT filter offers significant advantages over filters marketed as "universal" filters. With moderate to heavy acid applications, all ductless fume hoods made of metal are subject to corrosion and rust. On inorganic acids, the EFT filter provides a lesser, but more realistic, usable capacity.*

secur. safe disposal service

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

Avoid Revolving Filters Air Science strongly discourages the unsafe practice of revolving secondary backup filters into the primary filter compartment. All Air Science units are designed to avoid this false sense of security.

In a revolving filter system, users are instructed to rotate the secondary backup filter into the primary filter position after non-permissible exposure levels of chemicals are detected within the monitoring chamber.

Depending on when the unit can be properly shut down, the secondary filter can be loaded to the point of saturation itself, thereby creating a safety hazard if the filter is considered new.

If a new spare filter is not immediately available, a user may inadvertently (or knowingly) re-install a contaminated primary filter into the secondary location permitting the system to operate without protection.

Additionally, the secondary filter can become contaminated as it ages, sometimes for years, on top of an operational cabinet, losing filter efficiency by the time it is installed.

Either practice puts both personnel and the environment at risk, even though some manufacturers provide stickers to label the filters as "used."

The Air Science non-revolving filter practice ensures that only a new filter is fitted into the primary filter compartment and permits the secondary filter to remain installed for at least twice the change-out period, resulting in a 50% savings in filter change-out costs.

filtco

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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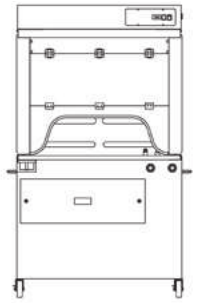


EDU-MOBILE

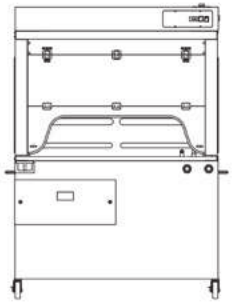
The EDU-MOBILE is mounted on a wheeled cart with a small side storage compartment. Blowers, filters and controls are mounted beneath the work surface to lower the center of gravity and simplify moving the unit from room to room.

EDU-MOBILE, EDU-M-40

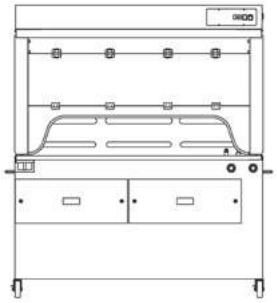
EDU-M-40



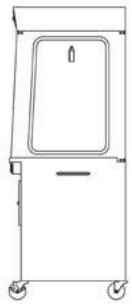
EDU-M-48



EDU-M-60



SIDE VIEW



MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
EDU-MOBILE					
EDU-M-40	38" / 965 mm	39.5" × 27.4" × 78" / 1003 × 695 × 1981 mm	48" × 40" × 90" / 1219 × 1016 × 2286 mm	270 / 122	320 / 145
EDU-M-48	38" / 965 mm	49.2" × 27.4" × 78" / 1250 × 695 × 1981 mm	60" × 40" × 90" / 1524 × 1016 × 2286 mm	370 / 168	420 / 191
EDU-M-60	38" / 965 mm	59.5" × 27.4" × 78" / 1511 × 695 × 1981 mm	72" × 40" × 90" / 1829 × 1016 × 2286 mm	470 / 213	520 / 236

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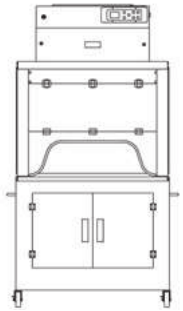
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EDU-CLASSIC

The EDU-CLASSIC has horizontal inflow with top mounted filters and exhaust. This model is mounted on a wheeled cart with an enclosed chemical storage area in the cabinet base.

P15-XT-CART-MCC-40



SIDE VIEW



EDU-CLASSIC, P15-XT-CART-MCC-40

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
EDU-CLASSIC					
P15-XT-CART-MCC-40	38" / 965 mm	39.5" × 28.5" × 87" / 1003 × 724 × 2210 mm	48" × 40" × 93" / 1219 × 1016 × 2362 mm	350 / 159	425 / 193

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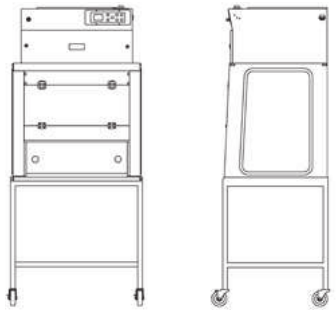
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EDU-ADA

The EDU-ADA permits wheelchair access to the workstation. Controls are mounted in a handheld remote box that can be placed adjacent to or inside the work area.

P10XL-CART-RC-P **SIDE VIEW**



EDU-ADA, P10XL-CART-RC-P

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
EDU-ADA					
P10XL-CART-RC-P	38" / 965 mm	34" × 27.4" × 87" / 864 × 695 × 2210 mm	48" × 40" × 90" / 1219 × 1016 × 2286 mm	234 / 106	284 / 129

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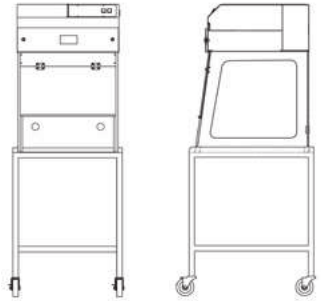
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EDU-JUNIOR

The EDU-JUNIOR is a basic workstation mounted on a wheeled cart.

P5-24-XT-CART **SIDE VIEW**



EDU-JUNIOR, P5-24-XT-CART

MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
EDU-JUNIOR					
P5-24-XT-CART	24" / 610 mm	24" × 27" × 70" / 610 × 686 × 1778 mm	40" × 40" × 80" / 1016 × 1016 × 2032 mm	176 / 80	225 / 102

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PRODUCT SPECIFICATIONS

EDU Series	EDU-MOBILE			EDU-CLASSIC	EDU-ADA	EDU-JUNIOR
Filtration	**EDU-M-40**	**EDU-M-48**	**EDU-M-60**	**P15-XT-CART-MCC-40**	**P10XL-CART-RC-P**	**P5-24-XT-CART**
Pre-Filter	100 fpm	100 fpm	100 fpm	100 fpm	100 fpm	100 fpm
Construction						
Construction	<··· White epoxy steel frame and head unit, clear sides and back panel. ···>					
Blower	<··· Centrifugal fan. ···>					
Controls	<··· Main On/Off. ···>					
Electrical	<··· 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>					
Monitoring	<··· Filter blockage alarm, standard. ···>					

FILTER SPECIFICATIONS

Purair Model	**EDU-M-40**	**EDU-M-48**	**EDU-M-60**	**P15-XT-CART-MCC-40**	**P10XL-CART-RC-P**	**P5-24-XT-CART**
Safety Filter, Optional*	(1)	(1)	(1)	(1)	(1)	(1)
Primary Filter(s)*	(1)	(2)	(2)	(1)	(1)	(1)
Pre-Filter*	(1)	(1)	(1)	(1)	(1)	(1)

** For specific examples refer to Multiplex filtration system summary on page 6.*

FILTER SUMMARY*

Formula	**Description**
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.
EPT	Universal filtration.

**Other formulas may be available.*

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OPTIONS & ACCESSORIES

		EDU-MOBILE			EDU-CLASSIC	EDU-ADA	EDU-JUNIOR
Air Science Model		**EDU-M-40**	**EDU-M-48**	**EDU-M-60**	**P15-XT-CART-MCC-40**	**P10XL-XT-CART-RC-P**	**P5-24-XT-CART**
Safety Filter	An additional carbon, HEPA or ULPA safety filter exceeding ANSI/AIHA Z9.5 requirements can be installed after the main filter.	<⋯ Safety filters for vapor or particulate protection are available for all models. ⋯> Contact Air Science for ordering information.					
FSA/Autocal Controller*	The optional FSA/Autocal controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	ADV-P	ADV-P	ADV-P	ADV-P	ADV-P	ADV-P
FSA Controller*	The optional FSA controller offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.	FSA	FSA	FSA	FSA	FSA	FSA
Autocal Controller*	The optional Autocal controller displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL	AUTOCAL
Monitair Controller*	The optional microprocessor controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Emits audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen. Not TUV compliant.	MON-P	MON-P	MON-P	MON-P	MON-P	--
Spill Tray (Stainless)	Removable for easy cleaning.	--	--	--	TRAY-P15-SS	TRAY-P10XL-SS	TRAY-P5-24XT-SS
SafeSwitch HEPA Filter Shutter System	Minimizes exposure to filter contaminants when removing used HEPA filters for insertion of new filters.	ASTM-030-SS	ASTM-030-SS	ASTM-030-SS	ASTM-030-SS	ASTM-030-SS	ASTS-030-SS
Polypropylene Construction*	Cabinets are available in all polypropylene construction. Contact Air Science for information.	--	--	--	P15-PP-CART-SSC-40	P10XL-PP-CART-RC	P5-24XT-PP-CART
Duplex Electrical Outlet*	Two NEMA 14-20R receptacles with ground fault interrupter. 110V service standard; international fixtures available.	AS-GFI	AS-GFI	AS-GFI	AS-GFI	AS-GFI	AS-GFI
Utilities Package*	Polyethylene cup sink (3" x 5" x 9"), faucet, service fixtures such as petcocks or valves. Other sizes and materials available. Specify when ordering.	WATER-EDU	WATER-EDU	WATER-EDU	WATER-EDU	WATER-EDU	WATER-EDU
Docking Station*	Security cable is shorter than utility and power line. Prevents damage from accidental disconnect of utility services to mobile fume hoods. Can be recessed or flush mounted. Includes key lock, quick release connections for water, waste and gas. An optional RJ45 outlet is available. Specify outlet choice when ordering.	DOCK-S	DOCK-S	DOCK-S	DOCK-S	DOCK-S	DOCK-S
Sliding Sash*	Vertical sliding sash permits easier access to the work surface when the mobile fume hood is used in limited space areas. Specify when ordering.	SSASH-P15	SSASH-P20	SSASH-P25	SSASH-P15	--	--
Dual Access*	Units can be fitted with dual access front and rear panels for applications where student access is required.	--	--	--	DSASH-P15	DSASH-P10XL	DSASH-P524-XT

** Factory installed; specify when ordering.*

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Options & Accessories (p.12)

WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

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
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CRF, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001:2015 ENERGY STAR® Partner
Education (UK)	CLEAPPS Instruction Approved (EDU) based on ASTM-100 filter.

Air Science®

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Purair RX®





High Performance Ductless Balance Enclosures

- Class I Enclosure, Complies with USP 800 and USP 795 Criteria for Non-Sterile Compounding

34 watt[1] *Purair model P5-36-XT (RX), with optional velometer.*

22–50 watt[1]

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

USP 800 COMPLIANT

USP 795 COMPLIANT

ISO 9001
ISO 14001
BUREAU VERITAS Certification

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INTRODUCTION

Purair® RX Class I Balance Enclosure meets USP 800 and USP 795 requirements for non-sterile compounding processes. The Purair RX is designed to protect the user and the environment from hazardous powders and particulates generated on the work surface.

22–50 watt[1]

The single EC blower motor assures lower cost of ownership in one of the world's most energy efficient ductless fume hoods.

APPLICATIONS

Using innovative filtration technology, the Purair RX creates a safe work environment over the widest range of applications in the industry.

Balance Enclosures \ Compounding \ Powder Mixing \ Powder Weighing

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.

KEY FEATURES

- High efficiency EC blower.
- Energy saving LED lighting.
- Protects the operator from powder and particle hazards.
- Improved filter clamping eliminates bypass leakage.
- Exhaust canopy allows for thimble ducting to the facility exhaust system.
- Filter blockage alarm.
- Complies with USP 800 and USP 795 guidelines.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

Environmental Benefits. Air Science® ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



34 watt[1] *Purair P5-36-XT shown with optional FSA/Autocal controller, polypropylene spill tray and scale.*

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[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

A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.

B. Control Panel: Electronic controls and displays include switches for the blower and filter blockage alarm.

C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.

D. Air Velometer: An optional analog air velocity meter is positioned in the user's field of vision.

E. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength. Optional all polypropylene construction is available if desired; see accessories.

F. Hinged Front Sash: When closed, the cabinet sash protects the contents from inadvertent external contact and better isolates the air within. The sash is easy to open and close.

G. Work Surface: The internal work surface is fitted with a standard black resin spill tray. An optional stainless steel tray is also available, see accessories.

H. Pass Through Ports: Electrical cords and cables are safely routed into the cabinet through ports on the back.

I. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.

J. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.

K. Internal Manual Speed Controller: Authorized personnel may set the EC blower speed as desired.

L. Side Waste Chutes: 6" diameter side waste chutes safely transfer waste from the work surface to the proper disposal receptacle.

M. Rear Internal Baffle: Rear baffle provides smooth horizontal airflow pattern. Removable for easy cleaning.

N. External Exhaust Connection: Standard 6 in. diameter exhaust connection port to allow for outside ducting if preferred. USP 800 compliant.[2]

OTHER FEATURES

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

Standards Compliant: Performance specifications and construction meet or exceed OSHA, ANSI and relevant international standards to assure operator safety. Purair RX enclosure hoods are USP 800 and USP 795 compliant.

Construction: All models are available in either metal or polypropylene construction. See selection chart for specifications and dimensions. Available in 120V, 60Hz and 230V, 50Hz models.

22 watt[1] *Purair P5-24-XT, shown with optional velometer, stainless steel spill tray and mobile cart.*

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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.*
2) *USP 800 guidelines for non-sterile HD compounding require the C-PEC to be equipped with redundant HEPA filtration (i.e. dual HEPA filters in series) or single HEPA filtration with exhaust vented to the exterior of the building.*

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Air Science high-efficiency fume hoods 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 Purair RX accommodates the full range of Multiplex™ Filtration System options.

The high capacity air handling system delivers face velocity of 100 fpm in compliance with US and international safety and performance standards.

DESIGN

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

The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

The Air Science filter assembly is easy to access and change. The unique filter clamping design eliminates bypass leakage outside the cabinet.

RELIABILITY

Internal systems are isolated from fumes, extending product life.



Energy-efficient *EC blowers promote long life and dependable performance of Purair RX fume hoods.*



SELECTION

Purair RX products are available in 3 standard widths, 2 depth options, in metal or polypropylene construction, totaling 12 standard models.

CONTROL

The **basic control panel** is standard and includes an On/Off switch and Filter Blockage alarm.



Basic Control Panel



FSA/Autocal Control Panel



FSA Control Panel

The **optional FSA/Autocal controller** displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional FSA controller** offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.

The **optional Autocal controller** displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.

The **optional Monitair microprocessor** controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen.



Autocal Control Panel



Monitair Control Panel

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multiplex™

FILTRATION

At the heart of the Purair product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon filter and optional HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 7.

safe SWITCH™

The optional SafeSwitch HEPA Filter Shutter system ensures that operators are safely separated from trapped contaminants during filter changes.

secur. safe disposal service

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

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Purair RX can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA filter can also be added. When used with a HEPA/ULPA filter, the ductless fume hood may be applied as a Class I Biological Safety Cabinet.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Secondary/ Stacked Filter, Optional	C	H	C	H
Primary Filter	C	H	H	C
Pre-Filter	P	P	P	P

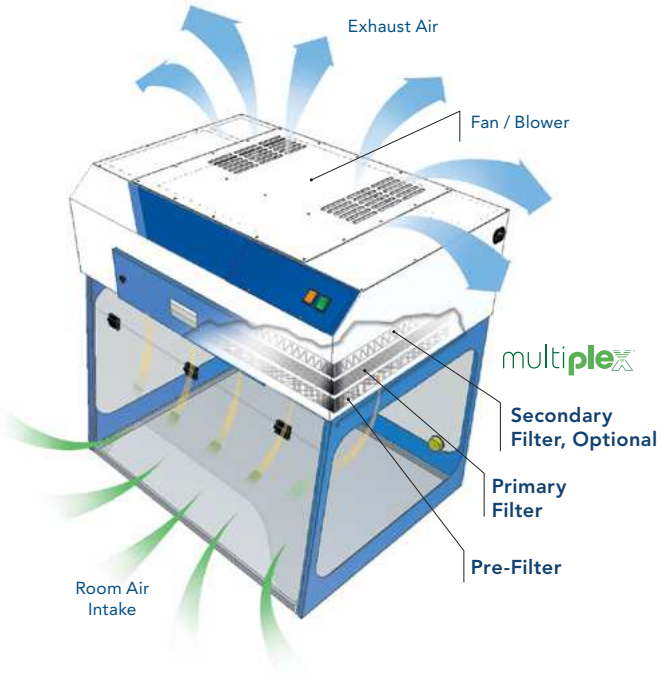
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

AIRFLOW

Contaminated air is pulled through the Multiplex Filtration System. Activated carbon adsorbs chemical vapors and optional HEPA/ULPA filters capture particulates. Clean air is returned to the room.

The main filters are easy to replace with no tools required. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

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

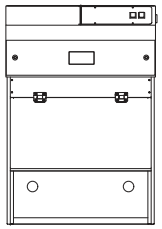


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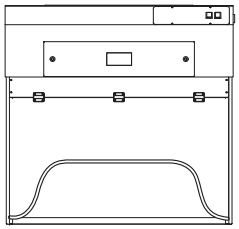
[1] *Energy consumption disclosure is based on internal testing with primary filters during normal operation. Power consumption published is nominal and dependent on cabinet size.*

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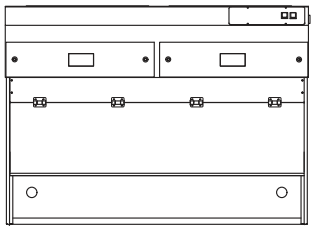
P5-24-XT (RX)



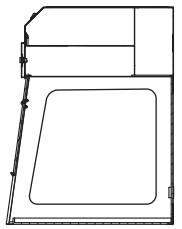
P5-36-XT (RX)



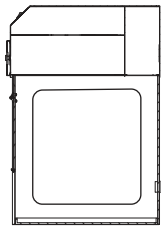
P5-48-XT (RX)



Standard Depth (XT)



Reduced Depth (XTS)



MODEL	DIMENSIONS			WEIGHT (LBS/KG)	
	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
Standard Depth Models (XT)					
P5-24-XT (RX)	23.6" / 600 mm	24" × 27" × 35" / 610 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-36-XT (RX)	23.6" / 600 mm	36" × 27" × 35" / 914 × 676 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-48-XT (RX)	23.6" / 600 mm	48" × 27" × 35" / 1219 × 676 × 889 mm	55" × 40" × 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104
Reduced Depth Models (XTS) for countertops 24" or less					
P5-24-XTS (RX)	23.6" / 600 mm	24" × 24" × 35" / 610 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	72 / 33	150 / 68
P5-36-XTS (RX)	23.6" / 600 mm	36" × 24" × 35" / 914 × 610 × 889 mm	40" × 40" × 40" / 1016 × 1016 × 1016 mm	99 / 45	170 / 77
P5-48-XTS (RX)	23.6" / 600 mm	48" × 24" × 35" / 1219 × 610 × 889 mm	55" × 40" × 45" / 1397 x 1016 x 1143 mm	138 / 63	230 / 104

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[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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PRODUCT SPECIFICATIONS

Filtration	**P5-24-XT (RX) | P5-24-XTS (RX)**	**P5-36-XT (RX) | P5-36-XTS (RX)**	**P5-48-XT (RX) | P5-48-XTS (RX)**
Face Velocity	100 fpm	100 fpm	100 fpm
Construction	**P5-24-XT (RX) | P5-24-XTS (RX)**	**P5-36-XT (RX) | P5-36-XTS (RX)**	**P5-48-XT (RX) | P5-48-XTS (RX)**
Finish	<··· White epoxy coated steel frame and head unit. Clear sides and back panel. Black resin spill tray ···>		
Blower	<··· EC blower. ···>		
Controls	<··· Main On/Off. ···>		
Electrical	<··· 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>		
Monitoring	<··· Filter blockage alarm, standard. ···>		
Efficiency	**P5-24-XT (RX) | P5-24-XTS (RX)**	**P5-36-XT (RX) | P5-36-XTS (RX)**	**P5-48-XT (RX) | P5-48-XTS (RX)**
Power Consumption[1]	22 watt	34 watt	50 watt
Lighting	<··· LED. ···>		

[1] *All measurements are with Filter Type ASTS-030.*
[2] *Measured 12" (30 cm) from the cabinet front and 15" (38 cm) above the work surface plane.*

FILTER SPECIFICATIONS

Purair Model	**P5-24-XT (RX) | P5-24-XTS (RX)**	**P5-36-XT (RX) | P5-36-XTS (RX)**	**P5-48-XT (RX) | P5-48-XTS (RX)**
Secondary/Stacked Filter, Optional*	(1)	(1)	(2)
Primary Filter*	(1)	(1)	(2)
Pre-Filter*	(1)	(1)	(2)

** For specific examples refer to Multiplex filtration system summary on page 5.*

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.

**Other formulas may be available.*

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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OPTIONS & ACCESSORIES

Purair Model		P5-24-XT (RX) | P5-24-XTS (RX)	P5-36-XT (RX) | P5-36-XTS (RX)	P5-48-XT (RX) | P5-48-XTS (RX)
Safety Filter*	An additional carbon, HEPA or ULPA safety filter exceeding ANSI/AIHA Z9.5 requirements can be installed after the main filter.	<··· Safety filters for vapor or particulate protection are available for all models. ···> Contact Air Science for ordering information.		
FSA/Autocal Controller*	The optional FSA/Autocal controller displays the airflow and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users to filter saturation and if the airflow reaches preset thresholds. An Hour Counter is also included.	ADV-P	ADV-P	ADV-P
FSA Controller*	The optional FSA controller offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.	FSA	FSA	FSA
Autocal Controller*	The optional Autocal controller displays the airflow. Audio and visual alarms alert users if the airflow reaches preset thresholds. An Hour Counter is also included.	AUTOCAL	AUTOCAL	AUTOCAL
Monitair Controller*	The optional microprocessor controller monitors and displays cabinet operating parameters, airflow, containment and offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Emits audio and visual alerts if conditions become unsafe and are all displayed on a LCD screen. Not TUV compliant.	MON-P	MON-P	MON-P
Spill Tray (Stainless)	Removable for easy cleaning.	TRAY-P5-24-SS TRAY-P5-2S-SS	TRAY-P5-36-SS TRAY-P5-36S-SS	TRAY-P5-48-SS TRAY-P5-48S-SS
SafeSwitch HEPA Filter Shutter System	Minimizes exposure to filter contaminants when removing used HEPA filters for insertion of new filters.	ASTS-030-SS	ASTS-030-SS	ASTS-030-SS (2)
Dwyer Airflow Meter	Continuous display of face velocity.	DWYER	DWYER	DWYER
Base Stand, Mobile, with Casters	The mobile cart 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.	P5-24-XT-PP P5-24-XTS-PP	P5-36-XT-PP P5-36-XTS-PP	P5-48-XT-PP P5-48-XTS-PP
Remote Control**	Wired controller, provides lower access height to comply with ADA requirements.	RC-P	RC-P	RC-P

* *Factory installed; specify when ordering.*

** *Handheld box connects via cable to head unit. Includes On/Off switch and blower speed control. Can be placed inside work zone.*

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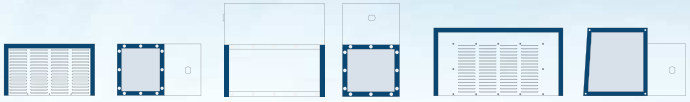
STANDARDS & COMPLIANCE

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
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner

Air Science®

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FumeBox™





Ductless Enclosures

- An Affordable, Effective Air Filtration System Solution
- Choose From Vertical or Low Profile Horizontal Design



Fume Box-AP60V

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

GSA Schedule Contract GS-07F-5632P

ISO 9001 ISO 14001 BUREAU VERITAS Certification

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INTRODUCTION

Air Science® Fume Box ductless enclosures are designed to protect the user from chemicals, vapors or powders during low-volume chemical manipulations by effectively containing low concentrations of noxious fumes, vapors or powders.

APPLICATIONS

Soldering \ Histology \ Cover Slipping \ Staining \ Pathology \ Graphic Arts, Sign Shops \ Art Conservation \ Electronics Assembly \ Particulate Control \ Manufacturing Processes \ Air Purification

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.

KEY FEATURES

- Low-profile, completely portable, no ductwork required.
- Compact size, easily positioned on shallow countertops or counters with overhanging wall cabinets.
- Clear viewing enclosure prevents chemical splash.
- Modular design permits multiple configurations.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

- **Environmental Benefits.** Air Science ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.
- **Versatile.** Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added.
- **Easy to Install.** The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.
- **Energy Efficient.** Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.
- **Cost Effective.** Facility ductwork, HVAC and construction costs are eliminated.
- **Safe to Use.** Cabinet airflow and face velocity protect users from incidental exposures to fumes.
- **Self-Testing.** (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



Fume Box-AP60H-XL

120 6th Street, Fort Myers, FL 33907
Toll Free. 800-306-0656 \ **www.**airscience.com

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Get a Quote.



Fume Box-AP60H

DESIGN FEATURES

A. Main On/Off Switch: High quality rocker On/Off switch controls unit power.

B. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength.

C. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.

D. Color: The cabinet is white with blue trim; side and back panels are clear.

E. Enclosed Filtration Chamber: Main filters can be carbon and/or HEPA/ULPA to fit a variety of containment needs.

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 polypropylene construction. See selection chart for specifications and dimensions. Available in 120V, 60Hz and 230V, 50Hz models.

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Get a Quote.

Each Air Science fume hood includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science Multiplex™ Filter offers a range of options for high performance protection.

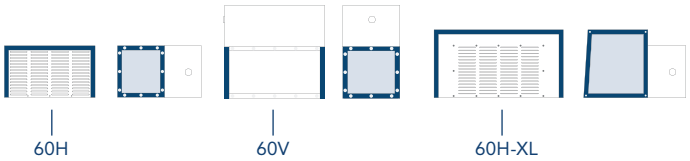
- Multiplex filter configuration permits a customized combination of filter media for a broad range of chemical families and biological agents if required.

A high capacity air handling system delivers face velocity of 100 fpm.

DESIGN

Professional quality Air Science fume hoods comply with current technical and safety regulations. The cabinet frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

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



SELECTION

Fume Box ductless enclosures are available in 3 standard models, in metal or polypropylene construction, totaling 6 standard models.

CONTROL

The **basic control panel** panel is standard and includes an On/Off switch and Filter Blockage alarm.



Basic Control Panel



Fume Box-AP60V



The optional source capture hose converts the Fume Box to a fume extraction unit with a 6" diameter (152 mm) hose to capture pollutants at their source. Hose can attach to any vented enclosure, exhaust port on your equipment or desk mount scoop.

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multiplex™ LEARN MORE

FILTRATION

The Fume Box utilizes innovative filtration technology with the exclusive **Multiplex Filtration System**. The Multiplex Filtration System consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science carbon filtration technique is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 7.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The Fume Box can be equipped with a single activated carbon main filter. For safety against particulates, a HEPA or ULPA can be installed.

secur. safe disposal service

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

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/Biological
Primary Filter	C	H
Pre-FIlter	P	P

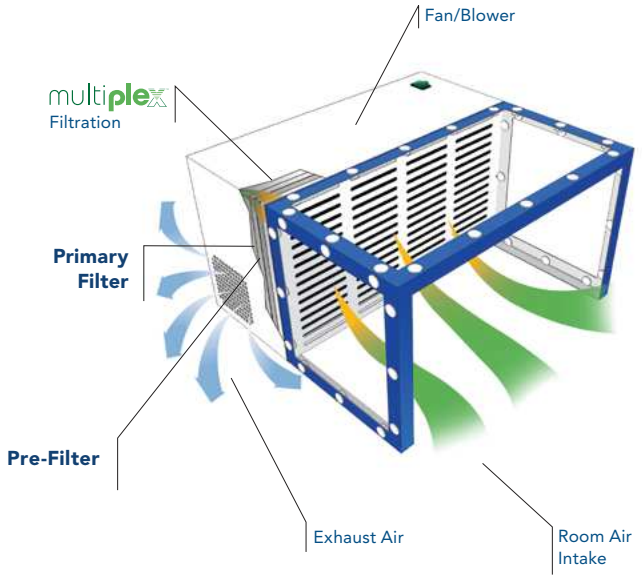
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

AIRFLOW

The Fume Box ductless enclosures maintain a constant face velocity of 100 fpm in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the Multiplex filtration system; clean air is returned to the room.

The main filters are easy to replace and install. The filter clamps tightly against the filter gasket to prevent filter bypass and maintain filter integrity.

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



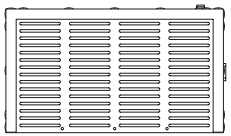
filtco *Through our partner company Filtco Filters, Air Science is a single source supplier of all pre-filters, carbon filters and HEPA/ULPA filters used in our products.*

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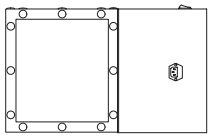
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Get a Quote.

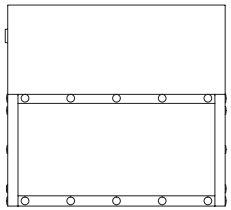
Fume Box-AP60H



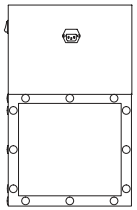
Side View



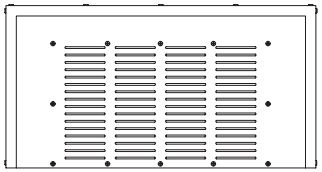
Fume Box-AP60V



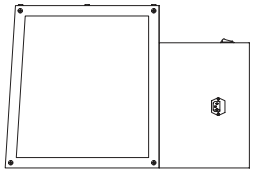
Side View



Fume Box-AP60H-XL



Side View



MODEL					WEIGHT (LBS/KG)	
Metal	Polypropylene	Internal (W x D x H)	External (W x D x H)	Shipping (W x D x H)	Net	Ship
AP60H	**AP60H-PP**	11.00" x 11.69" x 20.63" / 279 x 297 x 524 mm	20.72" x 12.02" x 21.16" / 526 x 305 x 537 mm	27" x 27" x 16" / 686 x 686 x 406 mm	45 / 20	60 / 27
AP60V	**AP60V-PP**	20.63" x 11.69" x 11.00" / 524 x 297 x 279 mm	21.16" x 12.02" x 20.72" / 537 x 305 x 526 mm	27" x 27" x 16" / 686 x 686 x 406 mm	45 / 20	60 / 27
AP60H-XL	**AP60H-XL-PP**	29.22" x 13.82" x 15.32" / 742 x 351 x 389 mm	29.75" x 24.72" x 15.67" / 756 x 628 x 398 mm	40" x 40" x 36" / 1016 x 1016 x 914 mm	50 / 23	100 / 45

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Get a Quote. Warranty Info.

PRODUCT SPECIFICATIONS

Filtration	AP60H	AP60V	AP60H-XL
Airflow	<··· 135.9 cfm ···>		
Face Velocity	<··· 100 fpm ···>		

Construction	AP60H	AP60V	AP60H-XL
Finish	<··· White epoxy-coated steel filtration unit with blue enclosure. Clear sides and top panels. ···>		
Blower	<··· AC blower. ···>		
Controls	<··· Main On/Off. ···>		
Electrical	<··· 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>		
Monitoring	<··· Filter blockage alarm, standard. ···>		
Pre-Filter Weight	<··· 1 lb / 0.4 kg. ···>		
Filter Weight	<··· 7 lbs / 3.5 kg. ···>		

FILTER SPECIFICATIONS

Fume Box	AP60H	AP60V	AP60H-XL
Primary Filter(s)*	(1)	(1)	(1)
Pre-Filter*	(1)	(1)	(1)

** For specific examples refer to Multiplex filtration system summary on page 5.*

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.

**Other formulas may be available.*

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OPTIONS AND ACCESSORIES

Fume Box		AP60H	AP60V	AP60H-XL
Spill Tray (Polypropylene)	Removable for easy cleaning.	TRAY-AP60	TRAY-AP60	TRAY-AP60-XL

Fume Extraction Unit		AP60EX
Source Capture Hose*	Converts the Fume Box to a fume extraction unit with a 6" diameter (152 mm) hose to capture pollutants at their source. Hose can attach to any, exhaust port on your equipment or desk mount scoop.	AP60EX

**Factory installed; specify when ordering.*

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
OSHA, Occupational Safety and Health Information	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001:2015 ENERGY STAR® Partner

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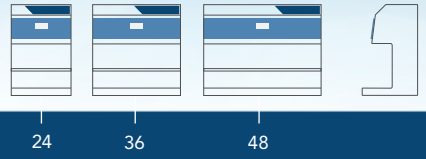
WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

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DWS™



Ductless Downflow Workstations

- Provides feature-rich operator safety & facilitates operative-intensive applications with unrestricted access



Model DWS24 offers a redesigned interior, featuring increased interior height, energy efficient Belong fan, LED lighting and a standard rear storage shelf, while delivering negative airflow to the work surface to capture and direct vapors to a carbon filter.

Air Science®

"The World's Most Extensive Selection of Ductless Fume Hoods."

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INTRODUCTION

Air Science® DWS Downflow Workstations are high efficiency ductless fume hoods designed to protect the user and the environment from hazardous vapors generated on the work surface. Unrestricted front and side access facilitates applications requiring complex and intensive operator involvement, while downward airflow in the chamber protects the operator.

APPLICATIONS

Using innovative filtration technology, the DWS Downflow Workstations create a safe work environment over the widest range of applications in the industry.

Chemical \ Dental \ Forensic \ Histology \ Industrial \ Microscopy \ Pharmaceutical \ Powder Fingerprinting \ Veterinary

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.

KEY FEATURES

- Downward airflow protects operator from fume and particle hazards.
- Unrestricted front and side access to work area.
- Redesigned DWS offers increased internal height.
- Easy to change high capacity filters.
- Improved filter clamping eliminates bypass leakage.
- Filter blockage alarm.

DUCTLESS TECHNOLOGY

The Eco-Friendly Choice

Advanced carbon filtration technology offers a safe, high performance alternative to conventional ducted fume hoods for a broad range of applications.

Environmental Benefits. Air Science ductless fume hoods isolate and trap chemical vapors to prevent ecological impact through release into the environment.

Versatile. Each filtration system is selected for its specific application. Carbon filters are available in more than 14 configurations for use with vapors of organic solvents, acids, mercury and formaldehyde. HEPA/ULPA filters can be added for biological safety.

Easy to Install. The ductless fume hood is self-contained and does not require venting to the outside. Many units are portable and may be moved with minimal downtime and without filter changes. Set-up, operation and filter maintenance are straightforward.

Energy Efficient. Because filtered air is returned to the room, no demands are required of the facility HVAC capacity for make-up air.

Cost Effective. Facility ductwork, HVAC and construction costs are eliminated.

Safe to Use. Cabinet airflow and face velocity protect users from incidental exposures to fumes.

Self-Testing. (select models) Electronic airflow monitoring assures continuous safety. An electronic gas sensor monitors carbon filter performance.



Model DWS48 offers a wide, high-visibility work area with easy access to the perforated negative pressure work surface.

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DESIGN FEATURES

A. Filter I.D. Window: A convenient, strategically placed front cover window shows the installed filter part number and installation date to encourage timely filter replacement.

B. Control Panel: Electronic controls and displays include switches for the blower, filter blockage alarm.

C. Filter Blockage Alarm: Continuously monitors filter loading and alerts user when service is needed.

D. Steel Support Frame: The chemical resistant epoxy coated steel frame adds mechanical strength. Optional all polypropylene construction is available if desired; see accessories.

E. Work Surface: Under the perforated stainless steel internal work surface is a polypropylene tray to retain any spillage.

F. Rear Shelf: Epoxy-coated steel rear perforated shelf provides additional storage space for operator tools and analysis materials.

G. Electrostatic Pre-Filter: The electrostatic pre-filter is accessible from inside the chamber and 91% effective down to 1-3 microns.

H. Filter Door Key: Filter access keys prevent unauthorized removal or accidental exposure to dirty filters.

I. Internal Manual Speed Controller: Authorized personnel set the centrifugal fan motor speed as desired.

J. Internal LED Lighting: A vapor proof LED lamp illuminates the interior of the workstation.

ADDITIONAL FEATURES

270 Degree Visibility: Unrestricted user access to the front and sides of the workstation also admits ambient illumination and provides an unobstructed view of its contents.

Construction: All models are available in either metal or polypropylene construction. Specify metal or polypropylene when ordering. See selection chart for specifications and dimensions. Available in 120V, 60Hz and 230V, 50Hz models.

Model DWS36, shown with optional mobile cart.

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Each Air Science downflow workstation includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

PERFORMANCE

The Air Science Multiplex™ Filtration System 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.
- EFT™ filtration technology broadens the Air Science application for ductless fume hoods.

DESIGN

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

The frame and work surfaces, comprised of industrial components, are durable and chemically resistant.

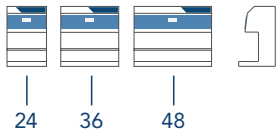
The Air Science filter assembly is easy to access, easy to change, plus a unique filter clamping design eliminates bypass leakage outside the cabinet.

Wider units, comprising two or more workstations can be positioned side-by-side with junction connections option.

RELIABILITY

Internal systems are isolated from fumes, extending product life.

Energy-efficient ebm-papst brand centrifugal blowers promote long life and dependable performance of DWS downflow workstations.



SELECTION

DWS products are available in 3 standard sizes, in metal or polypropylene construction, totaling 6 standard models.

CONTROL

The **advanced control panel** is standard and includes an On/Off switch, Hour Counter and Filter Blockage alarm.

The **optional FSA controller** offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.



Advanced Control Panel



FSA Control Panel



Model DWS36, shown in black, optional.

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multiplex™ LEARN MORE

FILTRATION

At the heart of the DWS product line is innovative filtration technology. **The Multiplex Filtration System** consists of a pre-filter, main activated carbon or HEPA/ULPA filter and safety activated carbon or HEPA/ULPA filter. The system permits a customized combination of filter media and configuration for chemical and physical adsorption specific to each application need.

The Air Science **carbon filtration technique** is based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material that is superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.

View available filters and descriptions on page 8.

FILTER CONFIGURATION

The Multiplex feature permits one or more filtration options to be combined to meet a wider range of multiple-use applications.

The DWS can be equipped with a single activated carbon main filter or with a stacked configuration which combines two main filters, each activated to adsorb one or more specific vapors or family of vapors. For safety against particulates, an optional HEPA or ULPA can also be added.

The carbon filter is sized to fit the specified product model number and configured to optimize airflow across 100% of the filter surface area. The self-contained assembly maximizes filter efficiency, prolongs filter life, optimizes diffusion and saturation and improves user safety.

P. Electrostatic Pre-Filter: Protects the main filters from aerosols, mists, dust and particulates.

C. Activated Carbon Main Filter: A single, blended, or stacked filter configuration.

H. HEPA/ULPA Filter, Optional: Both HEPA and ULPA filters use micro-glass fiber media designed to capture fine particles and biologicals. Both filters can capture particles smaller than the micron size for which they are tested. HEPA and ULPA filter efficiencies are 99.97% at 0.3 microns and 99.999% at 0.12 microns respectively.

MULTIPLEX FILTRATION SYSTEM, SUMMARY

Application	Chemical	Powder/ Biological	Chemical & Powder	Chemical within Cleanroom
Primary Filter	C	H	H C	H C
Pre-FIlter	P	P	P	P

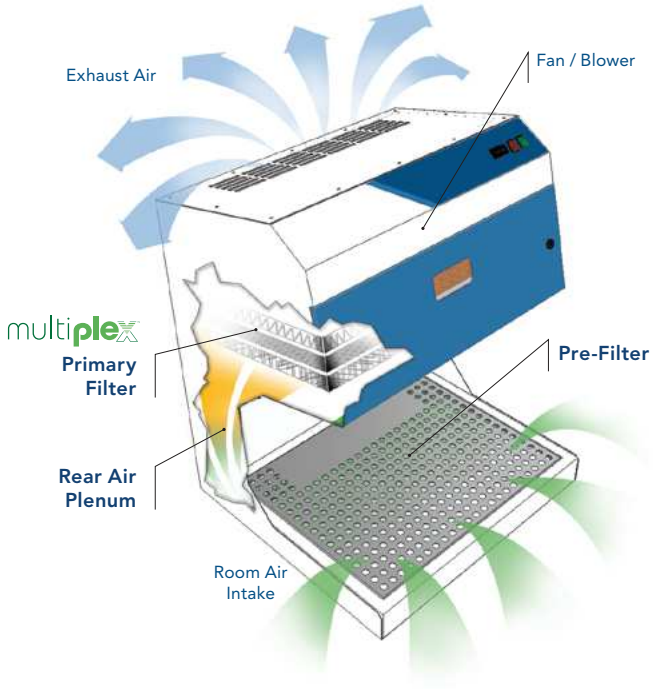
The system can be configured for the capture of acids, bases and particulates, such as biological aerosols, when paired with HEPA or ULPA filters.

AIRFLOW

DWS Downflow Workstations maintain a constant face velocity of 80 fpm at the work surface in compliance with USA and international standards for safety and performance. Contaminated air is pulled through the Multiplex filtration system where activated carbon adsorbs chemical vapors and/or particulates if HEPA/ULPA filters are used. Clean air is returned to the room.

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

⚠ **The pre-filter** may be changed from below the work surface while unit is running.



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ENHANCED FILTRATION

The Air Science Enhanced Filtration Technology (EFT) is a universal filtration system developed for use with a wide range of core chemical families. These include organic acids, alcohols, aliphatic hydrocarbons, aromatic hydrocarbons, esters, aldehydes, ketones, ethers, halogens and others. Although the EFT system is weighted to accommodate these families, it can handle inorganic acids as well.

The Air Science EFT system is available as an option on Air Science DWS downflow workstations, standard on Purair Eco Series fume hoods and can be retrofitted on many Air Science ductless fume hoods already in service worldwide.

Independent Test Results Independent testing confirms that the Air Science EFT system is superior in critical areas to other "green" fume hood systems recently introduced to the industry. AFNOR NFX 15-211 requires that three chemicals (isoproponal, cyclohexane and hydrochloric acid) be tested under very precise conditions to ascertain and establish retention capacity at 1% of the threshold limit value (TLV) for each chemical.

Retention capacity (grams) for a single module at 1% of the TLV (Threshold Limit Value)

Specification	**AFNOR NFX 15-211**	
Testing Laboratory	**IBR**	**Intertek**
Product Manufacturer	Air Science	Brand E
Filter Type		Green
Test Results	EFT	
Isopropanol (alcohol)	2052	673
Cyclohexane (aliphatic hydrocarbon)	1531	914
Hydrochloric acid (inorganic acid)*	1205	2729*

**Based on "core" chemical families typically used in ductless fume hood applications, the Air Science EFT filter offers significant advantages over filters marketed as "universal" filters. With moderate to heavy acid applications, all ductless fume hoods made of metal are subject to corrosion and rust. On inorganic acids, the EFT filter provides a lesser, but more realistic, usable capacity.*



secur.
safe disposal service

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

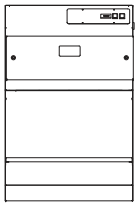


Air Science DWS uses energy efficient blowers for long life, dependable performance.

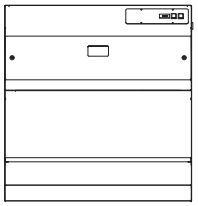
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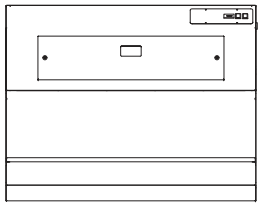
DWS24



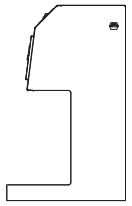
DWS36



DWS48



Side View



MODEL		DIMENSIONS			WEIGHT (LBS/KG)	
Metal	Polypropylene	Internal Height	External (W × D × H)	Shipping (W × D × H)	Net	Ship
DWS Models						
DWS24	**DWS24-PP**	18.17" / 462 mm	24" × 22.81" × 37.55" / 610 × 580 × 954	40" × 40" × 48" / 1016 × 1016 × 1219 mm	120 / 55	160 / 73
DWS36	**DWS36-PP**	18.17" / 462 mm	36" × 22.81" × 37.55" / 914 × 580 × 954	48" × 40" × 48" / 1219 × 1016 × 1219 mm	131 / 60	227 / 103
DWS48	**DWS48-PP**	18.17" / 462 mm	48" × 22.81" × 37.55" / 1219 × 580 × 954	55" × 40" × 48" / 1397 × 1016 × 1219 mm	185 / 84	250 / 114

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

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PRODUCT SPECIFICATIONS

Filtration	DWS24	DWS36	DWS48
Face Velocity	80 fpm	80 fpm	80 fpm

Construction	DWS24	DWS36	DWS48
Finish	<··· White epoxy coated steel frame and head unit. Stainless steel spill tray. ···>		
Blower	<… Belong fan. …>		
Controls	<··· Main On/Off. ···>		
Electrical	<··· 120V, 60Hz or 230V, 50Hz voltages available. Specify when ordering. Other voltage options available. ···>		
Monitoring	<··· Filter blockage alarm and hour counter, standard. ···>		

Efficiency	DWS24	DWS36	DWS48
Power Consumption[1]	49 watt	73 watt	146 watt
Lighting	<··· LED. ···>		
Noise, dBA[2]	< 60	< 59	< 64

[1] All measurements are with Filter Type ASTM-030.
[2] Measured 12" (30 cm) from the cabinet front and 15" (38 cm) above the work surface plane.

FILTER SPECIFICATIONS

DWS Model	DWS24	DWS36	DWS48
Primary Filter*	(1)	(1)	(1)
Pre-Filter*	(1)	(1)	(1)

** For specific examples refer to Multiplex filtration system summary on page 5.*

FILTER SUMMARY*

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic and alcohol removal.
ACI Plus!/ SUL	Designed to neutralize volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors; It is frequently used for iodination reactions with lower level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes; It is widely used in hospital pathology laboratories.
HEPA/UPLA	Powders and particulates.

**Other formulas may be available.*

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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OPTIONS & ACCESSORIES

DWS Model		DWS24	DWS36	DWS48
FSA Controller*	The optional FSA controller offers limited detection of low concentrations of hydrocarbon, some gases and organic acids. Audio and visual alarms alert users if filter saturation reaches preset thresholds. An Hour Counter and Low Airflow alarm are also included.	FSA	FSA	FSA
Spill Tray (Polypropylene)	Located under work surface.	TRAY-DWS24	TRAY-DWS36	TRAY-DWS48
Base Stand, Mobile, With Casters	The mobile cart 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*	Ductless fume hoods are available in all polypropylene construction.	DWS24-PP	DWS36-PP	DWS48-PP
Stainless Steel Hanging Rod*	Hanging rod spans the width of the cabinet.	HANGR-DWS24	HANGR-DWS36	HANGR-DWS48
Side Windows Attachment*	Transparent acrylic side panels for the downflow workstation.	SIDE-DWS	SIDE-DWS	SIDE-DWS
Front Sash Attachment*.**	Tranparent acrylic front sash for the downflow workstation.	SASHDWS-24	SASHDWS-36	SASHDWS-48
Junction Connections*	Connects two or more workstations to form a continuous unit with only one control system.	JUNCT-DWS	JUNCT-DWS	JUNCT-DWS
Black*	Metal units powder coated black; polypropylene units made with black material.	BLACK	BLACK	BLACK

** Factory installed; specify when ordering.*
*** Must order the acrylic side windows option.*

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WARRANTY

This product is protected by the Air Science Legacy Limited Lifetime Warranty™.

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
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. This product may assist you with compliance or as part of your chemical hygiene plan. Please consult your Safety Officer and/or Industrial Hygienist.
Environment	ISO 14001: 2015 ENERGY STAR® Partner

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