

LAMINAR AIRFLOW EQUIPMENT



Whether your business focus is profit, cost reduction, or process effectiveness, NuAire offers a comprehensive variety of Laminar Airflow Equipment that is tested and proven to help obtain or improve these goals. At NuAire, customer satisfaction is our top goal.

Engineering Airflow Experts

In every NuAire product you'll find brilliant and practical design, impeccable attention to detail in every phase of fabrication and assembly, outstanding value, and dependable service. Our expertise and experience support your systems. From helping define your requirements to providing long-term back-up that will assist every application. This is the foundation for NuAire's world-wide reputation and the reason NuAire is universally recognized as the finest.

Quality and Dependability for the Future

The AireGard series Laminar Airflow Workstations are specially designed to provide the ideal particle-free, and bacteria-free, clean air environment for the laboratory. Whether horizontal or vertical airflow has been designed into the specific product, each product utilizes 99.99% HEPA [High Efficiency Particulate Air] filters, quality parts, and is built to last.

Nuaire Advantages

Improved Principles of Laminar Airflow Design offer better protection for personnel, product, and the environment. True Laminar Airflow, HEPEX™ Zero Leak Airflow System, and State-of-the-Art Electronic Systems are just a few of the quality, reliable systems available on

NuAire products. Safer Ergonomic Designs builds integrity into these easy to use and clean products.

Safety Is Not An Option

Each individual product or systems is tested thoroughly to assure optimal performance. A final test report is shipped with each product, certifying that the product meets or exceeds the products' design criteria. We back our products by offering the strongest warranty in the market.

Recognizing The Difference

A well designed cabinet works better, lasts longer, and safer and more efficient to operate. NuAire Laminar Airflow Equipment is easy to clean, quiet, and require less maintenance. With NUAIRE You Know!



NU-126 Applications

Life Science Research

Use with a thermal cycler, small centrifuge, or other types of small equipment where clean air is a requirement.

Pharmacy

For use in the sterile preparations of an IV Admixture, Antibiotics, or other drugs.

Animal or Plant

For work involving procedures requiring work-in-progress protection from outside potentially harmful contaminants.

Testing Manufacturing or Inspections

NU-126

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- · Vertical flow clean air
- 99.99% HEPA filtered air
- 8" access opening
- Clear acrylic side panels for high visibility
- Formica™ work surface
- Mini-helic pressure gauge indicates filter load
- Use with Thermal Cycler or small equipment
- · Portable but durable or other
- · Prefilters incoming air

The AireGard NU-126 is available in two models:	NU-126-300	NU-126-400
Overall Dimensions		
Width	33" (808 mm)	45" (1143 mm)
Depth	22" (559 mm)	22" (559 mm)
Height	44" (1118 mm)	44" (1118 mm)
Work Area Dimensions		
Width	29" (737 mm)	41" (1041 mm)
Depth	21³/₄" (552 mm)	21³/₄" (552 mm)
Height	24" (607 mm)	24" (607 mm)

The AireGard NU-126 Vertical Laminar Airflow Workstations are designed to provide the ideal particle-free, bacteria-free clean-air environment needed for laboratory work, testing, manufacturing, inspection, or pharmaceutical procedures. The exclusive design innovations built into the NU-126 will provide exceptional performance in the most demanding environments.

Vertical/Horizontal Laminar Airflow

The AireGard NU-126 has a unique configuration that offers the benefits of vertical airflow as the air moves around the objects on the work surface but allows the horizontal airflow to move through the work access opening acting as a barrier against contamination. The slanted viewing window not only provides

an excellent view of the work in process but also substantially protects the operator from direct contact with contaminants generated within the work area.

HEPA Filters

All NuAire clean workstations use High Efficiency Particulate Air [HEPA] filtration for the supply air systems. The HEPA filters are rated 99.99% efficient for all particulate matter of 0.3 microns, with greater collection efficiency for larger and/or smaller particles.

The life of the HEPA filter is extended by:
1] disposable fiberglass prefilters; 2] an adjustable motor-speed controller, which maintains proper airflow requirements; and 3] a high-capacity motorized impeller, which automatically maintains uniform filter pressure assuring uniform velocities.

Performance and Quality

The NU-126 is a superior clean workstation because it is designed with these special built-in features that consistently exceed our customer's requirements:

- The highly reliable ATTENUMOUNT® vibrations control system, provides extraordinary attenuation of sound and vibration.
- Clear Lucite[™] acrylic sidewalls and a scratch-resistant clear polycarbonate viewing panel surrounds the work area to prevent that "trapped" feeling while allowing more natural sunlight into the work area.
- Controls, adjustments, prefilters, and HEPA filters are conveniently accessible from the front of the cabinet.

Performance Specification

ISO Std. 14644

Performance Levels

Light:

175 foot-candles [1614 LUX] on the work surface

Vibration:

Less than 200 micro-inches on the work surface

Sound:

Less than 62 dBa against ambient 55 dBa

Electrical Requirements

115 VAC, 60 HZ, Single Phase 230 VAC, 50 Hz, Single Phase

Standard Features

Vertical Airflow-Product Protection Fluorescent Lighting Clear Acrylic Sidewalls Clear Polycarbonate Viewing Window

Hinged View Screen with AutoLift

Two Service Ports

HEPA Filtered Airflow

Fiberglass Prefilters

90 FPM [.46m/s] Down Flow Air Velocity

White Formica Work Surface

Optional Features

Service Valves For Gas/Air/Vacuum

Stainless Steel Work Surface

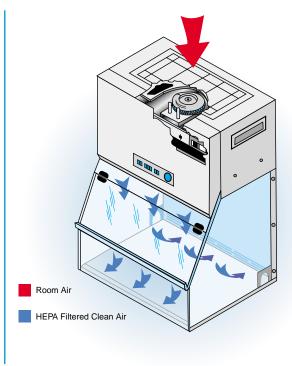
IV Bar with six hooks

Ultraviolet [Germicidal] Lamp

30" [762 mm] Base Support Stand

36" [914 mm] Base Support Stand

Front Closure Panel





AIREGARD 201/301 HORIZONTAL AIRFLOW WORKSTATIONS

The NuAire NU-201 and NU-301 Horizontal Laminar Airflow Workstations are specially designed to provide the ideal particle-free, bacteria-free, clean-air environment needed for laboratory work, testing, manufacturing, inspection, or pharmaceutical procedures.

True Laminar Airflow

The NU-201 and NU-301 create true laminar airflow and uniform horizontal velocities throughout the entire work zone.

Both models achieve minimal air turbulence by making the work area enclosure zone an extension of the HEPA filters' actual flow area. The clean filtered, uniform velocity air is then allowed to flow outward in streamlines, eliminating "backwash".

HEPA Filters

All NuAire clean workstations use High Efficiency Particulate Air (HEPA) filtration for their supply air systems. The HEPA filters are rated 99.99% efficient for all particulate matter of 0.3 microns, with greater collection efficiency for larger and/or smaller particles.

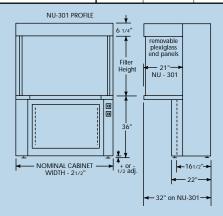
The life of the HEPA filter is extended by:
1) disposable fiberglass prefilters, which
collects atmospheric dust; 2) an
adjustable motor-speed controller, which

NU-201



STANDARD SIZES

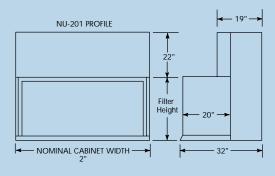
_NU-301	Cabinet Width, ft.	Filter Height, in.	Weight, Ibs.
NU-301-324	3	24	290
NU-301-330	3	30	300
NU-301-336	3	36	310
NU-301-424	4	24	330
NU-301-430	4	30	340
NU-301-436	4	36	350
NU-301-524	5	24	375
NU-301-530	5	30	385
NU-301-536	5	36	395
NU-301-624	6	24	420
NU-301-630	6	30	430
NU-301-636	6	36	440



STANDARD SIZES

NU-201	Width, ft.	Height, in.	Weight, Ibs.
NU-201-224	2	24	140
NU-201-230	2	30	150
NU-201-324	3	24	180
NU-201-330	3	30	190
NU-201-336	3	36	200
NU-201-424	4	24	220
NU-201-430	4	30	230
NU-201-436	4	36	240
NU-201-524	5	24	240
NU-201-530	5	30	250
NU-201-536	5	36	265
NU-201-624	6	24	280
NU-201-630	6	30	290

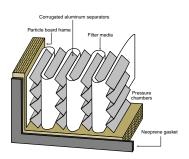
I Cabinet



maintains proper airflow requirements; and 3) a high-capacity motor/blower, which automatically maintains consitent filter pressure assuring uniform velocities.

Zero Leak Airflow

NuAire's HEPEX[™] Zero Leak Airflow System provides quiet, uniform velocities through the entire sterile work zone. NuAire's system surrounds all positive pressure flow chambers and ducts with vacuum (or negative) air pressure relative to the room. This feature eliminates the possibility of cabinet and gasket leaks.

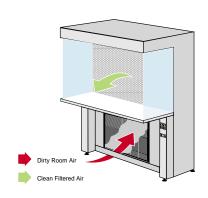


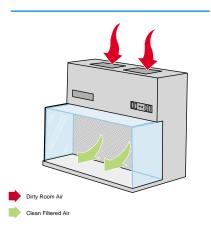
Uneven particulate loading is prevented by maintaining high-static pressure over the entire filter surface.

Performance and Quality

The NU-201 and NU-301 are superior clean workstations because they are designed with these special built-in features that consistently exceed our customer's requirements:

- The highly reliable vibration control system provides extraordinary attenuation of sound and vibration.
- Clear polycarbonate top and side panels surround the work area to prevent a "trapped" feeling and allow viewing of the workstation by other personnel.
- Controls, adjustments, prefilters and HEPA filters are conveniently accessible from the front of the unit.





Performance Specification

ISo 14644

Airflow Control System

Motor Speed Control:

Factory set at 90 fpm (.46 m/s): regulated by solid state traic motor speed controller

HEPA Filter:

One (Supply) disposable extended media, dry type filter rate airflow capacity in accordance with specification MIL-F 51068

Prefilters:

Fiberglass disposable

Performance Levels

Light:

175 foot-candles on work surface

Vibration:

Less than 200 micro-inches on the work surface

Sound:

Less than 62 dBa against ambient 55 dBa

Electrical Requirements

115 VAC, 60 Hz, single phase 8 ft., 3-wire grounded flexible power cord separate circuit breaker for cabinet motor, and lights. All electrical components are U.L. Listed or Recognized.

Standard Features

HEPEX Zero Leak Airflow System

Clear Top/Side Acrylic Panels

Textured Powder Coat Urethane Finish

Smooth White Formica™ Work Surface

Front Maintenance

Fluorescent Light

Protective Fiber Grill

Fiberglass Disposable Prefilter

Full Instrument Panel

Minihelic Gauge

Accessories and Options

Ultraviolet Light

Outlet

Service Valves

Ground Fault Interrupter (GFI)

IV Bar

Base Support Stand for NU-201

Footrest

Storage Trays

Stainless Steel Work Surface

Stainless Steel Side Walls

Please note that NuAire continally makes product improvements which may cause the product specifications to change. Please consult factory to verify current product specifications.





AIREGARD 819 VENTED WORKSTATION

Portable FumeHood Safety

The 819 is a Class I Vented Enclosure designed to contain and remove contaminants from the work surface with the aid of an external exhaust system. The 819 provides personnel protection for the safe handling of aerosols and particulate of low to moderate risk assessment.

The 819 is a partially enclosed workspace with clear acrylic sidewalls and front view screen. An air barrier inflow velocty set between 75 and 100 FPM provides optimal personnel protection.

The 819 work surface is constructed using Dupont Corian® and incorporates an ergonomically designed work access air foil to maximize comfort and improve air barrier protection.

NU-819 Application

The 819 Containment Workstation provides safe, reliable performance for applications involving pipetting, staining, transfers, animal necropsy, slide preps; small equipment uses such as blenders, roboics, balances, water baths, or centrifuges; or other applications where personnel safety is mandatory.



Standard Features

- Clear acrylic sidewalls
- · Clear acrylic hinged viewing window
- · White acrylic back panel
- Dupont Corian® work surface

Optional Features

- · Low flow alarm
- · Base support stand
- Exhaust HEPA filter blower module [A]
- Flexible exhaust duct [B]

Standard Sizes		NU-819-300	NU-819-400	
	Width	35 ³ / ₄ " [908 mm]	47 ³ / ₄ " [1213 mm]	
	Depth	29" [737 mm]	29" [737 mm]	
•	Height	22 ¹ / ₂ " [572 mm]	22 ¹ / ₂ " [572 mm]	



AIREGARD 813 AIR BALANCE ENCLOSURE

Portable Safety Station for Personnel Protection

The 813 is a Class I Biological Safety Cabinet that is an exceptional value and offers personnel protection for work in process where other cabinets are not appropriate choices for size or cost reasons.

The 813 is a generation of exceptionally quiet enclosures that can even be used with a micro-computer based balance. The open front allows room air to flow in past the operator and over the work in process. The small size (30" W or 42" W x

22" D) means it can be strategically placed for convenient handling of aerosols and particulates of low to moderate risk assessment. Clear acrylic panels and windows make viewing of work convenient from all sides of the cabinet.

The 813 automatically exhausts filtered air back into the room, or can be coupled from the exhaust collar to the plant exhaust system, making the cabinet suitable for work with dilute preparations of chemical carcinogens.



NU-813

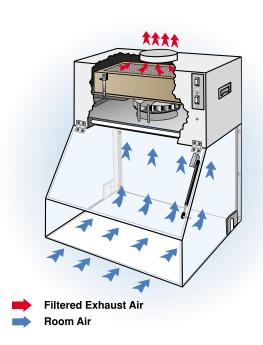
Standard Features

- Self exhausting
- Fluorescent light
- Side panels of 1/2" thick clear acrylic
- Viewing window of 1/4" thick clear acrylic
- Back panel of 1/4" thick white polycarbonate
- · Hinged viewing window with gas spring lift
- 99.99% exhaust HEPA filter
- Two service ports
- Air barrier inflow adjustable 75-100 FPM
- HEPA filter 99.99% efficient on 0.3 Mic
- Sound level: 56 dBa at 75 FPM;
 60 dBa at 100 FPM
- 8 ft. power cord, molded plug
- Convenience outlet in back of cabinet

Optional Features

- Base with depressed center to hold spillage
- · Low airflow alarm





Standard Sizes		NU-813-300	NU-813-400	
	Width	30"	42"	
	Depth	22"	22"	
	Height	405/8"	405/8"	

AIREGARD 114 UNIVERSAL CLEAN AIR MODULE



NU-114 Applications

Hospital / Clinic Infection Control

To isolate airborne contaminants and provide an environment that will promote reduced exposure of personnel to the contaminants.

Construction

To protect high-risk immunosuppressed patients from aspergillosis during construction and remodeling projects.

Bio-terrorism

To help control room environments during a potential infectious outbreak or bio-terrorism activity.

NU-114

Standard Features

HEPEX Zero Leak Airflow System
Portable, easy-to-move lockable casters

Low noise and Low Vibration

Central Control Panel

Retractable 30 foot power cord

99.99% Efficient HEPA filter

Fiberglass Prefilters

115 VAC, 60 HZ, Single Phase

Textured Powder Coat Urethane Finish

Model NU-114-424

Width: 26 1/2 inches
Depth: 26 inches
Height: 55 1/2 inches

Net Weight: 185 pounds

Room Air

Prefiltered Air

HEPA Filtered Clean Air

General Air Quality

Room size in feet $[H \times W \times D] = X \text{ cu. ft.}$

720 CFM {Air Volume} = number of room air changes Room size X cu. ft. per minute

Example:

room size = 8 ft. x 10 ft. x 12 ft. = 960 cu. ft.

720 CFM = .75 room air changes 960 cu. ft. per minute

.75 X 60 minutes = 45 room air changes per hour



AireGard 114 Universal Clean Air Module

The AireGard NU-114 is a totally self-contained HEPA filter module that cleanses air from particulates within an enclosed area. The module's high-powered blower/motor combination pulls room air through a rough pre-filter and filters the air from particulates as the air flows back into the room through the large 99.99% HEPA filter. The operating horizontal airflow with the cabinet [90 LFPM {Linear Feet per Minute}] is controlled by a potentiometer.

Recirculation, Positive or Negative Pressure Environments

The NU-114 can be used as a recirculation device or can be used as either a positive pressure or negative pressure device. By placing the NU-114 module between two spaces, the module will extract 720 CFM from one space and place it into the next. If the supply air to the first space were less than 720 CFM, the room would be under negative pressure. The creation of a negative pressure area helps to contain [isolate] potentially harmful room contaminants.

The creation of a positive pressure environment helps to protect clean areas from contaminants entering from another room. An energy efficient clean room can be used for any application requiring sterile work processes.

TESTING

Full factory testing is your assurance of reliability in the laboratory. Each NuAire product is thoroughly inspected in our factory prior to final shipment, and that's just the final step in a rigorous system of quality control – from superior designs and materials, to finished product and final testing for certified performance. Whenever quality cannot be fully assessed in final assembled form, products are thoroughly inspected during sub-assembly fabrication.

WARRANTY

We continually believe our customers deserve the best equipment available in terms of performance, safety, and service. We have implemented this objective by offering our customers the strongest warranty in the market. NUAIRE wants you to have the best. you have purchased the best... now we want you to have a warranty that is the best. We want you to know that your confidence is well placed in NUAIRE products.

CUSTOMER SALES AND SERVICE

Our customers say the nicest things about us. NUAIRE has redefined customer service, as exemplified by our expertly trained staff who have happily created strong relationships with our customers. NUAIRE service extends throughout the world. We extend to you, our valued customer, a service concept unique in the market,

"we give you consistently the best we have to offer."



WITH NUAIRE YOU KNOW



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