

CELLGARD HD 481ES

energy saver

ADVANCED SAFETY ENGINEERING FOR EFFECTIVE
HANDLING OF HAZARDOUS PARTICULATE DRUGS
AND POWDERS IN A CLASS II, TYPE A2 BIOLOGICAL
SAFETY CABINET



The CellGard™ HD (Hazardous Drug) ES (Energy Saver) Class II, Type A2 Biological Safety Cabinet offers personnel, product, and environmental protection for handling of hazardous particulate drugs and powders. ISO Class 5 sterility and protection for your valuable in process work materials.

Levels of Protection

True laminar airflow provides a sterile environment that minimizes cross contamination. A strong air barrier 105 fpm (0.53 m/s) protects the end user from hazardous materials in the work zone. Multiple oval HEPA pre-filters located underneath the work surface provide the primary means for particulate filtration that allows for an efficient and safe bag-in/bag-out filter change procedure without exposing the interior HEPA filters. Environmental protection is achieved by all contaminated air passing through a 99.99% HEPA filter.

Benefits of NuAire Cabinets

- Largest HEPA filters with the most pleats per square inch
- TOUCHLINK™ Electronic Control System
- Internal exhaust damper
- An optimally determined fan for each model size/width



TOUCHLINK™ Electronic Control System Display



NU-481

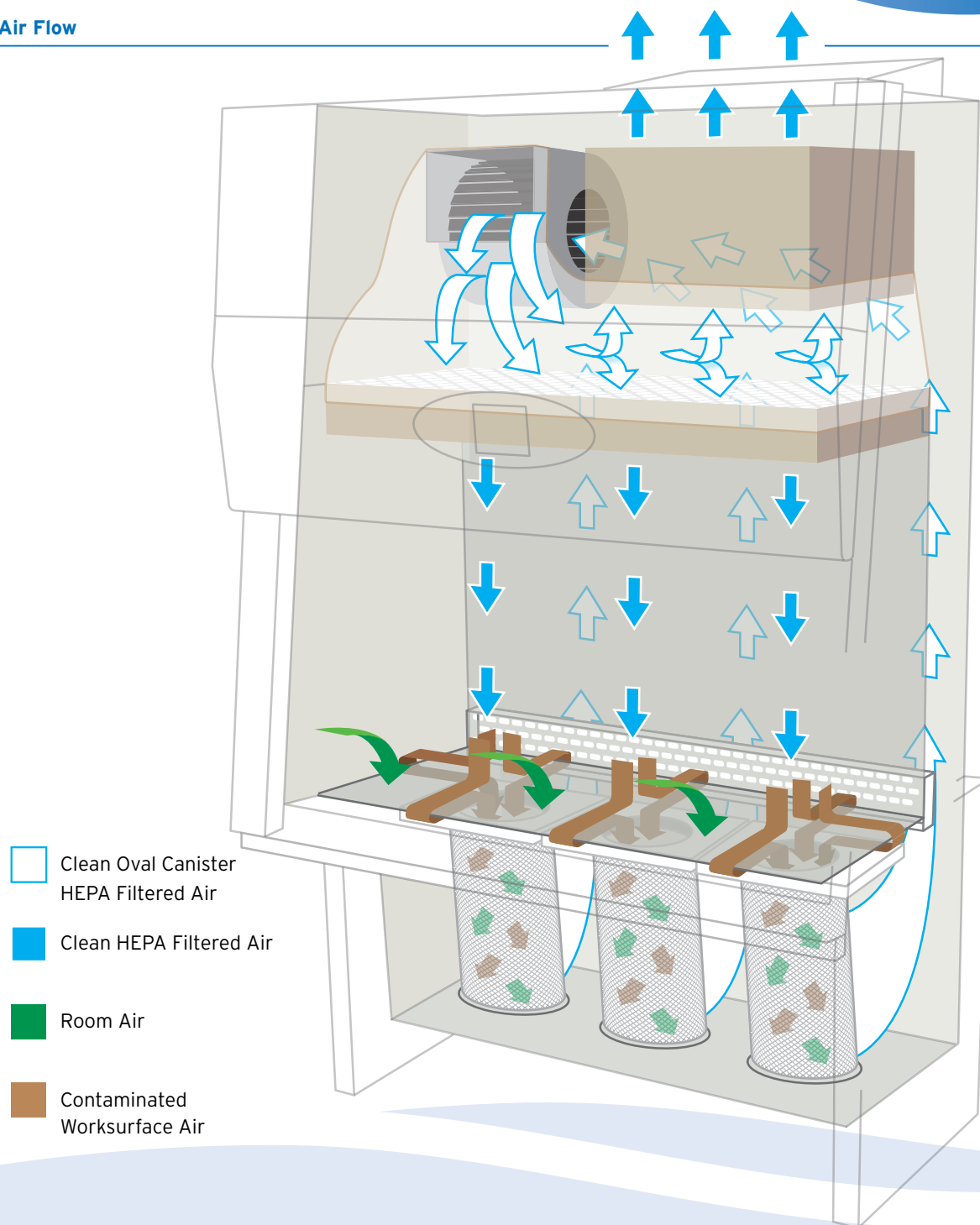
TOUCHLINK™ Electronic Control System

- On/off functions for fluorescent and germicidal ultraviolet lights, blower motor, and interior outlets.
- Monitors high/low limits for airflow and window position.
- Date/clock display
- Timer function (laboratory timer, set purge cycles, outlet timer, UV light timer, auto-run timer, night setback, or weekend turn-off.
- Complete diagnostic functions for a NSF trained service technician or certifier.

nitecare™- A unique system initiated by the window closure, will reduce motor / blower operational airflow to conserve energy while maintaining work zone sterility. (Configurable)

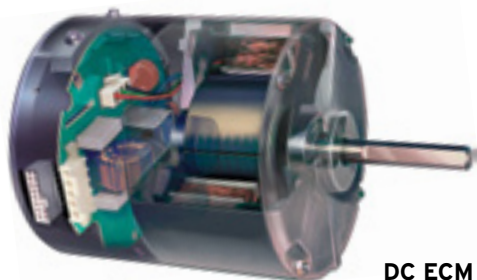
intelliFlow™- Fast, Accurate, Reliable, Dual Thermistor Airflow Sensors powered by TSI. The sensor technology used in certification instruments to assure BSC optimal performance.

Air Flow



Energy Saver Technology

NuAire incorporates our existing technology and new DC ECM technology to give you the best VALUE - lower energy costs, longer filter life, and reduced noise and vibration.



DC ECM Motor

Added benefits from DC ECM Technology

- Less energy to operate
- Greater horsepower and lower potential RPM
- Integrated digital control system
- Longer filter life
- Lowest possible noise and vibration

Oval Canister HEPA 99.99% Filter Technology

The oval canister size and shape of the HEPA pre-filter provides the necessary surface area for a longer filter life, and optimizing the replacement process.



The Ease of Bag-In / Bag-Out

1. Remove work surface
2. Remove paper catch grill over each oval HEPA prefilter
3. Seal contaminated interior of each oval HEPA filter
4. Remove four (4) fasteners per each oval HEPA prefilter
5. Bag-Out used oval HEPA prefilter and replace



Note: Filter change process should be performed by a qualified service technician.



NU-481

Experience Ergonomics™

The NU-481 provides an ergonomically correct environment by providing the following:

- Ability to sit or stand at a range of heights (Telescoping or Auto)
- Expanded vision zone reduces awkward postures and proper lighting reduces glare
- Forearm support for comfort and safety
- Effective work zone area for more "user-friendly" space



CellGard™ HD ES NU-481 Biological Safety Cabinet

Specifications

Catalog Number	NU-481-400 Nominal 4 Foot (1.2 m)	NU-481-500 Nominal 5 Foot (1.5 m)	NU-481-600 Nominal 6 Foot (1.8 m)
Performance Specifications: 1. Personal Protection 2. Product Protection	NSF/ANSI 49	NSF/ANSI 49	NSF/ANSI 49
NSF / ANSI 49 (Class / Type)	Class II, Type A2	Class II, Type A2	Class II, Type A2
Style of Cabinet	Console w/base stand	Console w/base stand	Console w/base stand
Cabinet Construction	All welded stainless steel 16GA, Type 304 pressure tight design	All welded stainless steel 16GA, Type 304 pressure tight design	All welded stainless steel 16GA, Type 304 pressure tight design
Diffuser for Air Supply (Metal)	Non-flammable	Non-flammable	Non-flammable
HEPA Filter Seal Type: Supply Filter - 99.995% Eff. on 0.3 Microns Exhaust Filter - 99.995% Eff. on 0.3 Microns Oval PreFilter - 99.995% Eff. on 0.3 Microns	HEPEX™ Seal Neoprene Neoprene	HEPEX™ Seal Neoprene Neoprene	HEPEX™ Seal Neoprene Neoprene
Fumigation: Automated per NIH/NSF Procedures	Yes	Yes	Yes
Standard Services: Service Coupling (3/8 inch NPT) Gas Valve / Service Coupling (3/8 inch NPT) Duplex Outlet	One, Right Sidewall One, Right Sidewall Two, Backwall	One, Right Sidewall One, Right Sidewall Two, Backwall	One, Right Sidewall One, Right Sidewall Two, Backwall
Optional Services: Gas Cocks (3/8 inch NPT) Remote Controlled Valves Ultraviolet Light Standard/Cup Sinks	Up to 3 each Sidewall Up to 3 each Sidewall One, Backwall Left or Right Work Surface	Up to 3 each Sidewall Up to 3 each Sidewall One, Backwall Left or Right Work Surface	Up to 3 each Sidewall Up to 3 each Sidewall One, Backwall Left or Right Work Surface
Cabinet Size Inches (mm): Height (Fully Assembled), Min/Max Height (Min for Transport) Width Depth	87 7/8 (2232) / 93 7/8 (2384) 79 3/8 (2016) 54 7/8 (1394) 33 (838)	87 7/8 (2232) / 93 7/8 (2384) 79 3/8 (2016) 66 7/8 (1699) 33 (838)	87 7/8 (2232) / 93 7/8 (2384) 79 3/8 (2016) 78 7/8 (2003) 33 (838)
Work Access Opening Inches (mm): Standard Opening Height/Optional Standard Inflow Velocity	10 (254) / 8 (203) 105 fpm (.53 m/s)	10 (254) / 8 (203) 105 fpm (.53 m/s)	10 (254) / 8 (203) 105 fpm (.53 m/s)
Work Zone Inches (mm): Height Width Depth	28 1/2 (724) 46 3/8 (1178) 26 1/8 (664)	28 1/2 (724) 58 3/8 (1483) 26 1/8 (664)	28 1/2 (724) 70 3/8 (1788) 26 1/8 (664)
Viewing Window Inches (mm): Standard safety plate sliding glass	Fully Closed to 18 (457) Open	Fully Closed to 18 (457) Open	Fully Closed to 18 (457) Open
Required Exhaust CFM / CMH Thimble (NU-906/908) Thimble (NU-907)	8 (203) / 10 (254) Opening 359 (610) / 426 (724) 389 (660) / 456 (755)	8 (203) / 10 (254) Opening 445 (756) / 531 (902) 474 (806) / 560 (952)	8 (203) / 10 (254) Opening 532 (904) / 634 (1077) 563 (935) / 665 (1130)
Plant Duct Static Pressure Eng / Metric	0.05 - 0.1" / 1.27 - 2.54 mm	0.05 - 0.1" / 1.27 - 2.54 mm	0.05 - 0.1" / 1.27 - 2.54 mm
Heat Rejected, BTU / Hr (non-vented) (vented)	2669 157	2983 198	3140 198
Electrical: Volts, AC 60 Hz Amps*: Blower/Lights (10 / 8 Openings) Amps: Outlets Amps: Total 3.7 m Power Cord (one)	U.L. / U.L.-C Listed 115 6.0 / 5.8 3 14 12 GA - 3 Wire, 20A	U.L. / U.L.-C Listed 115 6.0 / 5.8 3 14 12 GA - 3 Wire, 20A	U.L. / U.L.-C Listed 115 6.0 / 5.8 3 14 12 GA - 3 Wire, 20A
Crated Shipping Weight**	750 lbs. / 340 kg.	840 lbs. / 381 kg.	930 lbs. / 422 kg.
Net Weight	700 lbs. / 318 kg.	790 lbs. / 358 kg.	880 lbs. / 399 kg.

*Based on cabinet with new filters running at 115 VAC **Crated shipping weight does not include weight for accessories or options



For more information please visit
www.nuaire.com or call **1.800.328.3352**

