



CELLGARD HD 481ES[★] energy saver

ADVANCED SAFETY ENGINEERING FOR EFFECTIVE
HANDLING OF TOXIC SUBSTANCES (I.E. CYTOTOXIC DRUGS)
IN A CLASS II BIOLOGICAL SAFETY CABINET



The CellGard™ HD (Hazardous Drug) ES (Energy Saver) Class II Biological Safety Cabinet offers personnel, product, and environmental protection for handling of toxic substances (i.e. cytotoxic drugs) meeting the requirements of DIN 12980. 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 protects the end user from cytotoxins 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 HEPA H14 with 99.995% @ 0,3 µ particles filter (H14 according EN1822).

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

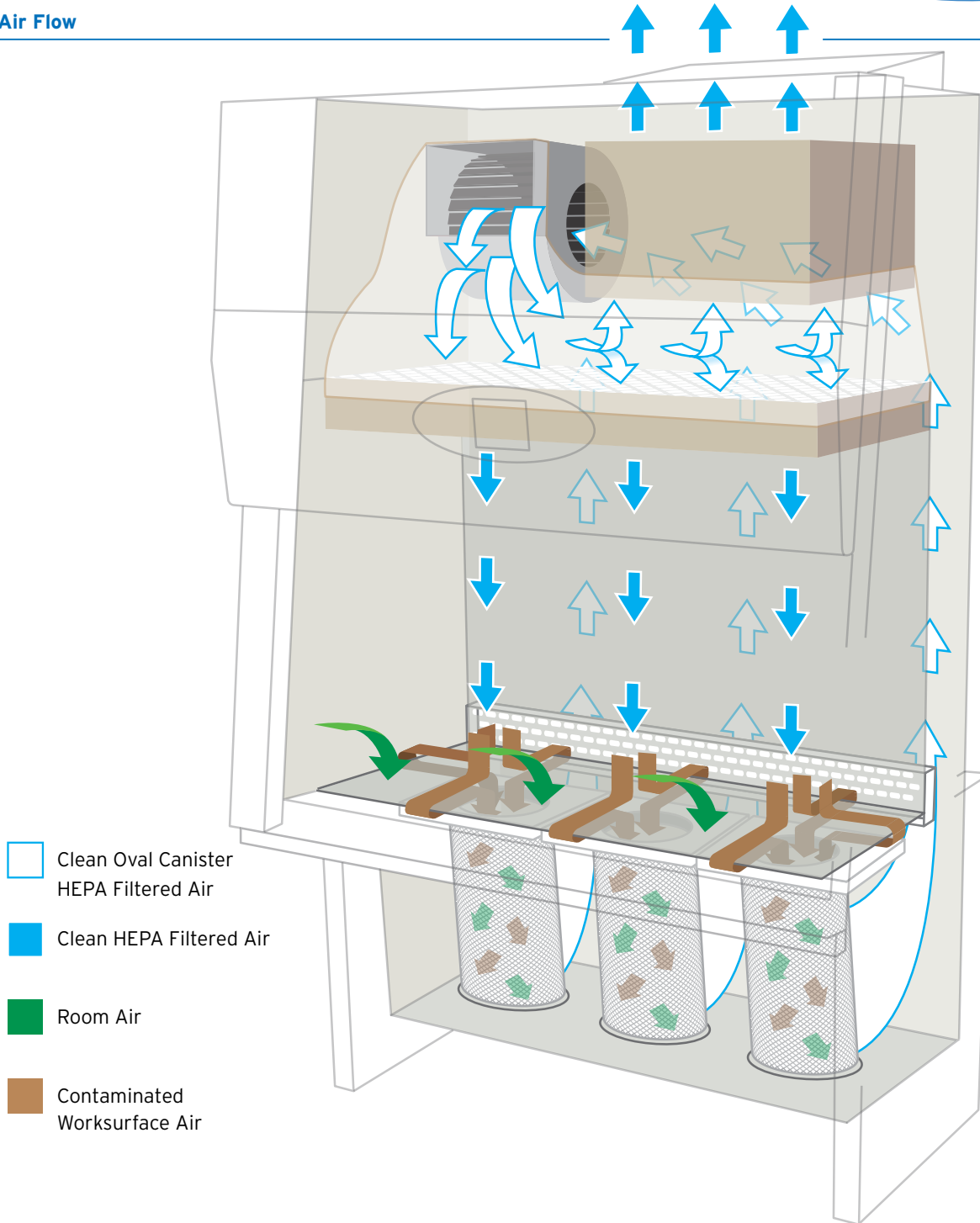
TOUCHLINK™ Electronic Control System

- 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 H14 with 99.995% @ 0,3 μ Particles Filter

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



critical cleaning components™

CellGard™ HD NU-481 Biological Safety Cabinet

Specifications

Catalog Number	NU-481-400E	NU-481-500E	NU-481-600E
	Nominal 1.2 m	Nominal 1.5 m	Nominal 1.8 m
Performance Specifications:	NSF/ANSI 49 EN 12469 DIN 12980	NSF/ANSI 49 EN 12469 DIN 12980	NSF/ANSI 49 EN 12469 DIN 12980
EN 12469 Class	Class II	Class II	Class II
DIN 12980 Type	Type H	Type H	Type H
Style of Cabinet	Console w/basestand	Console w/basestand	Console w/basestand
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	HEPEX™ Seal	HEPEX™ Seal	HEPEX™ Seal
Exhaust Filter - 99.995% Eff. on 0.3 Microns	Neoprene	Neoprene	Neoprene
Oval Prefilters - 99.995% Eff. on 0.3 Microns	Neoprene	Neoprene	Neoprene
Fumigation: Automated per EN 12469, Annex J Procedure	Yes	Yes	Yes
Standard Services:			
Service Coupling (9.525 mm)	One, Right Sidewall	One, Right Sidewall	One, Right Sidewall
Gas Valve / Service Coupling (9.525 mm)	One, Right Sidewall	One, Right Sidewall	One, Right Sidewall
Outlet	Two, Backwall	Two, Backwall	Two, Backwall
Optional Services:			
Gas Cocks (9.525 mm)	Up to 3 each Sidewall	Up to 3 each Sidewall	Up to 3 each Sidewall
Remote Controlled Valves	Up to 3 each Sidewall	Up to 3 each Sidewall	Up to 3 each Sidewall
Ultraviolet Light	One, Backwall	One, Backwall	One, Backwall
Standard/Cup Sinks	Left or Right Work Surface	Left or Right Work Surface	Left or Right Work Surface
Cabinet Size (mm):			
Height (Fully Assembled), Min/Max	2232 / 2384	2232 / 2384	2232 / 2384
Height (Minimum for Transport)	2016	2016	2016
Width	1394	1699	2003
Depth (with Control Center and Armrest Removed)	838	838	838
Work Access Opening (mm):			
Standard Opening Height	203	203	203
Standard Inflow Velocity	.53 m/s	.53 m/s	.53 m/s
Work Zone (mm):			
Height	724	724	724
Width	1178	1483	1788
Depth measured at 203mm window height	664	664	664
Viewing Window (mm):			
Standard is safety plate sliding glass	Fully closed to 457 open	Fully closed to 457 open	Fully closed to 457 open
Required Exhaust CFM (CMH)	203 opening	203 opening	203 opening
Thimble (NU-906/908)	610	756	904
Thimble (NU-907)	660	806	955
Plant Duct Static Pressure	1.27-2.54mm H ₂ O	1.27-2.54mm H ₂ O	1.27-2.54mm H ₂ O
Heat Rejected, BTU, Per Hour			
(non-vented)	2669	2983	3140
(vented)	157	198	198
Electrical (CE marked):			
Volts, AC	230	230	230
+Amps: Blower/Lights	3.4	3.8	4.0
Amps: Outlets (each)	3	3	3
Amps: Total	10	11	11
12 ft. Power Cord (one)	14 GA - 3 Wire, 15A	14 GA - 3 Wire, 15A	14 GA - 3 Wire, 15A
Crated Shipping Weight****	340 kg.	381 kg.	422 kg.
Net Weight	318 kg.	358 kg.	399 kg.
Sound Pressure Level per ISO 4871***	Not to Exceed 58 db _n	Not to Exceed 59 db _n	Not to Exceed 60 db _n

ⁿReference the customer test report for procedure and results. ***Uncertainty is K = 2 db, measurement performed per ISO 11201 in normal running mode.

****Crated shipping weight does not include weight for accessories or options. +Based on cabinet with new filters running at 230 VAC.



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

