

ACES



Anemostat *C*lean *E*nvironment **S**olution

 **Anemostat**[®]
A MESTEK COMPANY

Anemostat **C**lean **E**nvironment **S**olution

ACES is a portable, air cleansing device that both removes and kills many airborne pathogens, significantly improving the air quality in the space it is located.

Infection control professionals in health care facilities can remedy problem areas or convert zones quickly, economically, and effectively with **ACES**, and comply with standards and guidelines as set forth by CDC, AIA, HRSA, & JCAHO.

Utilizing state-of-the-art filtration and UV Germicidal Irradiation technologies, **ACES** superior design provides unparalleled *air-scrubbing* performance in spaces such as Airborne Infectious Isolation rooms (AII), Emergency Rooms (ER), Triage, Intensive Care Units, Waiting rooms, Bronchoscopy rooms, and others. **ACES** provides increased surge isolation room capacities in facilities to meet terrorism threats and potential biological, chemical, or nuclear contamination of patients. **ACES** can also assist in keeping contaminants down during facility construction.

ACES is configured for recirculation of room air, or can be fitted with an optional, easily installed exhaust collar assembly. By ducting the collar and discharging the air into an adjacent space, the negative room pressure can be increased. Easily moved to any space, **ACES** plugs into any standard 110 vac wall outlet to immediately start “scrubbing the air”.

Pre-Filter

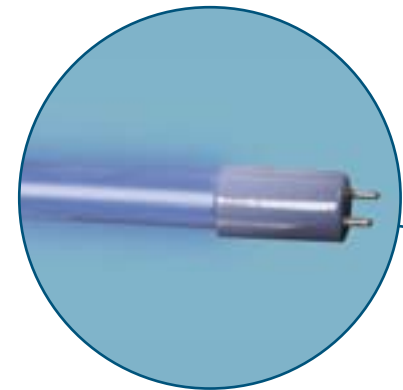
- Anti-Microbial filter kills trapped pathogens
- High efficiency **MERV 8 Pre-Filter**
- Thick 4" deep filter provides more media area for low pressure drop and longer life
- Removes larger particles while increasing life of HEPA filter



MERV 8 Pre-Filter

Germicidal Irradiation

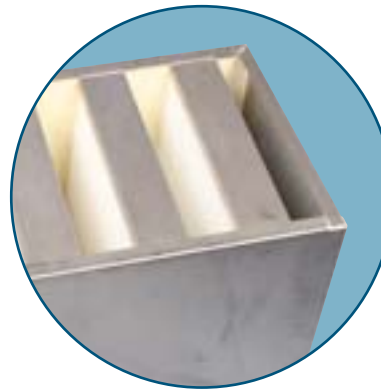
- (2) **UVC Bulbs** located in air stream between the pre-filter and HEPA filter
- Longest lasting bulbs in the industry – 3 to 4 times longer over many competitor's bulbs
- 4,400 microwatts/cm² of irradiating power
- UV-C wavelength targets DNA of microorganisms
- Kills or inactivates surface and airborne microorganisms that trigger allergy-asthma symptoms including mold and mold spores, solvents, and other VOC's. Also eliminates associated odors.
- Prevents the spread of infectious diseases caused by bacteria (including TB, Legionella, E.Coli, and whooping cough) and viruses (including colds, flu, measles, German measles, chicken pox, small pox, and SARS)
- Top panel easily removed for simple UV bulb replacement
- Electrical safety interlocks on panels to prevent exposure to UV lights while panels are removed.



UVC Bulbs

Final Filter

- **HEPA V-Bank Filtration** providing minimum efficiency of 99.99% @ 0.3 microns
- Filter housing constructed from corrosion resistant stainless steel
- Leak-proof seal between HEPA filter and frame eliminates air bypass
- Each filter is individually factory tested, labeled, and certified.
- Tested in accordance with IEST 001.4 Type H



HEPA V-Bank Filtration

Blower-Motor Assembly

- **High-efficiency, Brushless DC Motor** for years of trouble free service
- Thermal overload protection
- Sealed, lifetime ball bearings
- Direct drive assembly
- Variable air volume controlled by computer
- 850 CFM capacity



High-Efficiency Brushless DC Motor

Clean Environment



**SMART Pad
Controller**

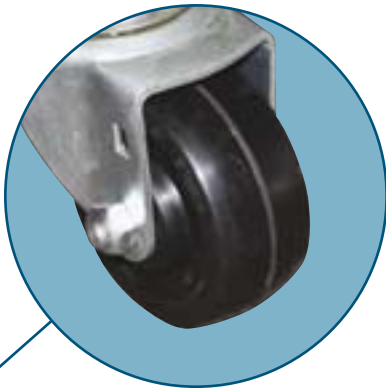


Solution

**Stainless Steel
Satin Polish Finish**

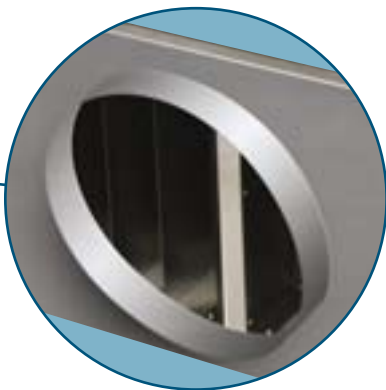


**Easy Open
Panel Latches**



3" Casters

**Exhaust
Outlet Grille**



**Optional 12"
Diameter
Collar Adapter**

SMART Pad Controller

- Computer-controlled system monitors and regulates all functions
- Intuitive, easy to use touch screen control pad for input data including room size and air change rate requirements
- Automatic calculation and regulation of air flow (CFM) for desired air change rate
- Pressure sensors monitor filter loading and air flow, and the vary fan speed to maintain flow rate
- Maintenance screens indicate status of filter and UVC Emitter bulbs & alerts user when to service these consumables
- Intelligent alarm screens provide the user with easy to understand alert text messages for operation and troubleshooting
- Hospital grade electronics satisfies electrical leakage requirements

Construction

- Durable, seam-welded 304 **Stainless Steel** construction superior to plastic materials
- **Satin Polish Finish** – no paint to chip or flake off
- Dual wall, insulated construction of outer panels reduces noise levels
- Overall dimensions 29-1/2" x 29-1/2" x 46" high
- Front panel removable also for further access inside filter cabinet
- Filter cabinet removable from main body for cleaning and maintenance.
- Large **3" Casters** makes transporting easy
- **Easy Open Panel Latches**

Application Flexibility

- Standard **Exhaust Outlet Grille** for recirculation applications
- **Optional 12" Diameter Collar Adapter** is easily installed for ducted exhaust applications including room pressurization

Electrical

- Requires 115v, single phase, 60 hz power source – 4 amps
- 10' Hospital Grade grounded plug



Part Number

ACES – 850 – G – 99.99

Nominal
Fan Capacity

HEPA Filter

☐ 99.99% @ 0.3μ

Discharge

☐ G - Grille

☐ C - Duct Collar

Replacement Parts & Accessories

15-108 – Anti-Microbial Pre-Filter

15-109 – UVC Germicidal Irradiation Bulb

15-110 – HEPA Filter, 99.99% Efficiency @ 0.3μ

15-111 – Duct Collar Assembly, Discharge 12"Ø

15-112 – Grille Assembly, Discharge

Infection Control References

CDC Center for Disease Control & Prevention (www.cdc.gov)

HICPAC Healthcare Infection Control Practices Advisory Committee

"Guidelines for Environmental Infection Control in Health Care Facilities"

AIA American Institute of Architects (www.aia.org)

"2006 Guidelines for Design & Construction of Health Care Facilities"

JCAHO Joint Commission on Accreditation of Healthcare Organizations (www.jointcommission.org)

"Infection Control Standards"

APIC Association for Professionals in Infection Control and Epidemiology

(American Journal of Infection Control) (www.apic.org)

"APIC Guidelines for Infection Control Practice"

HRSA Health Resources and Services Administration (www.hrsa.gov)

"National Bioterrorism Hospital Preparedness Program (NBHPP)"

It is the responsibility of the user to determine the suitability of ACES to meet a specific recommendation, guideline, or standard. Contact your local Anemostat representative for application assistance.