APCO®-ONE

DIVERSITECH®

- Neutralize airborne mold, bacteria, viruses, odors and VOCs
- Maintain a healthy and clean evaporator coil free from efficiency robbing mold and biofilm
- Advanced 2-year UVC lamp and EverCarbon ™ catalyst
- LED light bars monitor system operation and UV lamp life
- Quick-and-easy installation
- Validated to UL2998 zero-ozone
- Lifetime warranty
- 24V operation with incl. Packard 120/208/240VAC transformer

SOLID BLUE = NORMAL OPERATION

FLASHING BLUE = REPLACE UV LAMP

FLASHING RED = UV LAMP EXPIRED

SOLID RED = UV LAMP FAILURE

APCO-ONE #TUV-APCO-ONE will replace:

- TUV-APCO-DER**
- TUV-APCO-DER2**
- TUV-APCO-DI2-P**
- TUV-APCO-ER
- TUV-APCO-ER2
  TUV-APCO-SI2-P

** we recommend APCO-ONE plus an additional Blue-Tube model

APCO®-ONE

DIVERSITECH®

FRESH-AIRE UV
The Indoor Air Quality Expert

APCO-ONE
AIR TREATMENT SYSTEM

THE ONE IAQ SOLUTION FOR YOUR HOME!

The APCO-ONE system is designed to improve air quality and HVAC equipment performance and efficiency. Everything you expect from APCO®, now with a polycarbonate housing and lamp status indicator. 24V with included 120V transformer.

FEATURES/BENEFITS

Continuously improves Indoor Air Quality	Continuously treats the air in the entire home and is virtually maintenance free (2-year UVC lamp replacement only)
Keeps coil & drain pan clean	Long lasting, safe and effective
Increases HVAC life & efficiency	For up-flow, down-flow & horizontal installations
UL2998 validated for zero ozone	Scientifically tested ensuring safety
Continuously treats the whole-system	Disinfects HVAC equipment (which is prone to mold and biofilm). Microbial contamination robs system efficiency and performance and contributes to poor IAQ
Advanced UVC lamp	2-year advanced encapsulated quartz UVC lamp
LED Lamp-life status indicator	Indicates when to replace lamp
Polycarbonate housing	Strong, lightweight and reliable
24V and 120V operation	Packard 120V transformer included

LED STATUS INDICATOR

SOLID BLUE = NORMAL OPERATION

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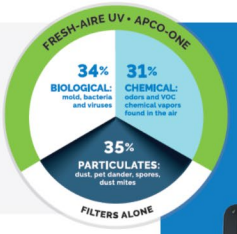
SAFELY AND EFFECTIVELY TREAT THE OTHER 2/3RDS

Conventional filters are only effective against particulates, like dust. APCO-ONE is proven to safely reduce both biological and chemical contaminants inside the air system and throughout the building. Together, they address 99+% of the contaminants in the air.



CLEANS THE COIL AND DRAIN PAN

Helps keep the HVAC system running efficiently and extend its life.

APCO-ONE Helps Neutralize Mold, Bacteria, Viruses, and Allergens

FRESH-AIRE UV
The Indoor Air Quality Expert

APCO-ONE
AIR TREATMENT SYSTEM

APCO-ONE Specs	
UV Lamp	254 nm UVC, quartz hot filament
Dimensions	Cell & Lamp: 3.3"W x 3.3"H x 14"D Enclosure: 6"L x 6"W x 2.43"D
Electrical	TUV-APCO-ONE: 24V, 0.80A, 19.2 WATTS
Transformer	Packard 120V transformer included
Pressure Drop	<0.01" w.c. @ 400 FPM
Warranty	Lifetime for all parts except lamp

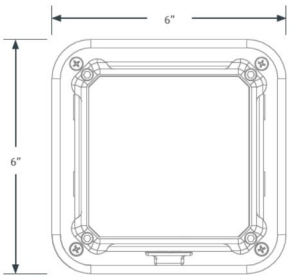
Part Numbers

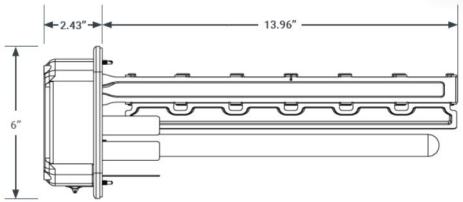
Model	Electrical	Replacement Lamp
TUV-APCO-ONE	18-32 VAC	TUVL-215

We are committed to developing and validating our products. APCO product testing achieved incredible results:

* % Reduction of common indoor air contaminants over 4 hours. Tested at airflow velocity of 492 fpm (0.9 gr/m3/sec)

DUAL VOLTAGE 24V or 120V TRANSFORMER INCLUDED





FRESHAIREUV LIFETIME WARRANTY* ALL PARTS EXCEPT LAMPS

* See manual for details

FRESHAIREUV OZONE FREE

VALIDATED

DESIGNED & ASSEMBLED IN THE U.S.A.

FRESHAIREUV.COM

DIVERSITECH

APCO-X ULTRA

DIVERSITECH®

- Our most powerful system designed to neutralize airborne mold, bacteria, viruses, odors and VOCs
- Disinfect the evaporator coil improving equipment efficiency
- Advanced 3-year UVC lamp and larger EverCarbon™ catalyst
- LED monitors system operation and UV lamp life
- Validated to UL2998 zero-ozone
- Lifetime warranty
- 24V operation with incl. Packard 120/208/240VAC transformer
- Also available as DUAL LAMP model

SOLID BLUE = NORMAL OPERATION

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APCO-X ULTRA (SINGLE) #TUV-APCOX-U will replace:

- TUV-APCOX-ER3
- TUV-APCOX-SI3-P

APCO-X ULTRA (DUAL) #TUV-APCOX-UD will replace:

- TUV-APCOX-DER3
- TUV-APCOX-DI3-P

APCO-X ULTRA

DIVERSITECH®

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APCO-X ULTRA

DIVERSITECH®

FRESHAIREUV

APCO-X ULTRA

AIR TREATMENT SYSTEM

Reduce indoor air pollution and extend the life of your HVAC system with APCO-X ULTRA, our most powerful air and coil treatment system from Fresh-Aire UV. Now with lamp-life monitoring and LED status indicator.

REVOLUTIONARY IAQ TECHNOLOGY

FEATURES/BENEFITS

Continuously improves Indoor Air Quality	Treats the air in the entire home all the time and is virtually maintenance free (3-year UVC lamp replacement only)
Keeps coil & drain pan clean	Long lasting, safe and effective
Increases HVAC life & efficiency	For up-flow, down-flow & horizontal installations
UL2998 validated for zero ozone	Scientifically tested ensuring safety
Continuously treats the whole-system	Disinfects HVAC equipment (which is prone to mold and biofilm). Microbial contamination robs system efficiency and performance and contributes to poor IAQ
Advanced UVC lamp	3-year advanced encapsulated quartz UVC lamp
Lamp-life status indicator	Indicates when to replace lamp
24V and 120V operation	Packard 120V transformer included

LED STATUS INDICATOR

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SAFELY AND EFFECTIVELY TREAT THE OTHER 2/3RDS

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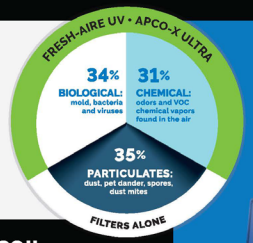

CLEANS THE COIL AND DRAIN PAN

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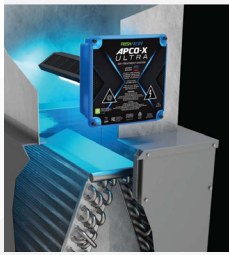

CLEAN AIR

APCO-X ULTRA Helps Neutralize Mold, Bacteria, Viruses, and Allergens

FRESHAIREUV

APCO-X ULTRA

AIR TREATMENT SYSTEM

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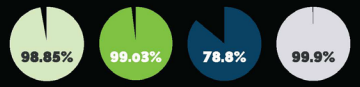
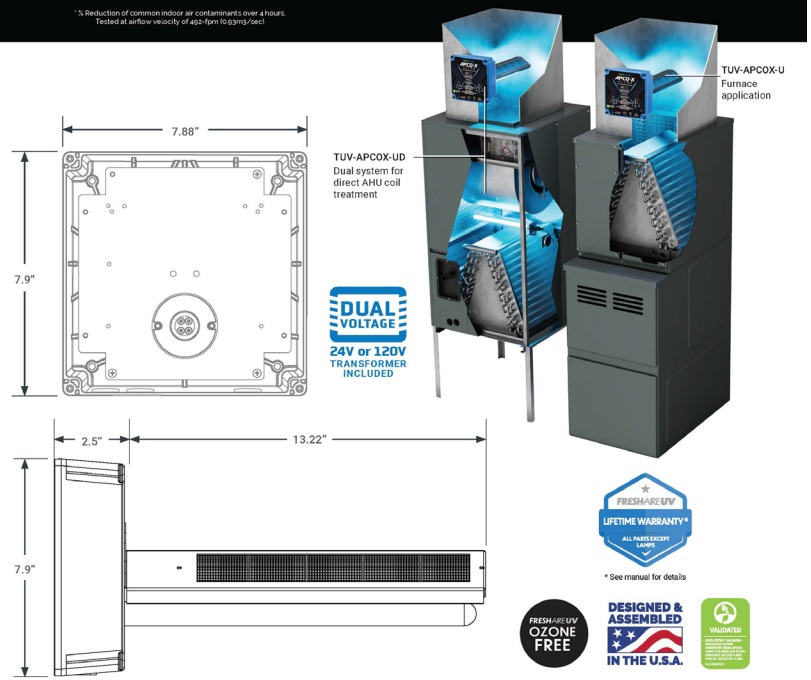


* % Reduction of common indoor air contaminants over 4 hours. Tested at airflow velocity of 492-fpm (0.63m3/sec)

APCO-X Ultra Specs	
UV Lamp	254nm advanced UVC, quartz glass
Dimensions	Cell & Lamp: 5.8"W x 3.25"H x 13.2"D Enclosure: 7.6"L x 7.6"W x 2.2"D
Electrical	TUV-APCOX-U: 0.80A, 19.2 WATTS (single) TUV-APCOX-UD: 1.60A, 38.4 WATTS (dual)
Transformer	Packard 120V transformer included
Pressure Drop	<0.01" w.c. @ 400 FPM
Warranty	Lifetime all parts, UVC lamp 3-years

Part Numbers		
Model	Electrical	Replacement Lamp
TUV-APCOX-U (single)	18-32 VAC	TUVL-315
Model	Electrical	Replacement Lamp
TUV-APCOX-UD (dual)	18-32 VAC	TUVL-315 (2)



LIT-FAUV-APCOX-U SPECS 111523

FRESHAIREUV.COM
800-741-1195

DIVERSITECH®

Tiered Product Strategies

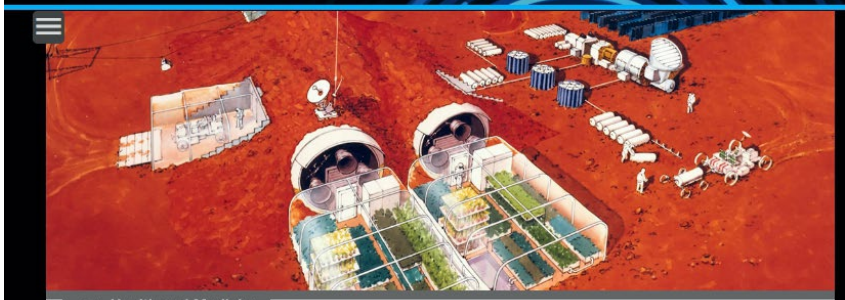
	Good	Better	Best
Air & coil treatment	 Blue-Tube UV / Blue-Tube UV-X	 APCO-ONE	 APCO-X ULTRA
	Blue-Tube UV / Blue-Tube UV-X WPL: $138.23 - $185.40	APCO-ONE WPL: $294.58	APCO-X ULTRA WPL: $360.29-$500.79
	▪ **Coil mount** ▪ Neutralize mold, bacteria and viruses ▪ Helps maintain a clean and efficient evaporator coil ▪ Available in either an 18-32V or 120-277V model	▪ **Coil mount / Duct mount** ▪ Neutralize mold, bacteria and viruses on the coil and in the airstream ▪ Reduce odors and VOCs ▪ Lifetime EverCarbon™ Catalyst and 2-year UV lamp ▪ Real-time LED status and lamp-life notification ▪ Available as a single lamp model ▪ 18-32V w/included 120V transformer	▪ **All the features of APCO-ONE Plus:** ▪ Larger unit with *60% more EverCarbon ™ Catalyst surface area ▪ 30% more effective for odor and VOC reduction ▪ 3-year UV lamp ▪ Available as a single and dual lamp model

2024's NASA Technology Transfer Program Innovator

https://spinoff.nasa.gov/Air_Treatment_Systems_Break_Down_Pollutants_Germs

NASA SPINOFF

NASA TECHNOLOGY TRANSFER PROGRAM



Health and Medicine

Air Treatment Systems Break Down Pollutants, Germs

Technology pioneered for space plant-growth chambers cleans indoor air

Originally published 01/29/2024

By 2020, Fresh-Aire UV had been growing its line of air purification products for 20 years, but no product debut had brought the kind of attention that came with an airborne viral pandemic.

"You always look for ways to bring awareness to the technology. You don't really want it to be a pandemic, but in this case, it was," said Chris Willette, the company's former president and founder. "That was when the general public got introduced to a lot of the technologies we use for cleaning air."

Among the latest of these in the Fresh-Aire UV line was a technique for eliminating organic contaminants that had begun with NASA funding in the 1990s. Known as photocatalytic oxidation (PCO), it became key to helping the Jupiter, Florida-based company's products fight SARS-CoV-2, the virus that causes the COVID-19 disease.

Fresh-Aire UV adopted PCO 10 years earlier to treat rising levels of volatile

Fresh-Aire UV of Jupiter, Florida, developed a line of air purifiers that break down organic contaminants with a process called photocatalytic oxidation (PCO). The company gets its nanoparticulate titania suspension, one of the key ingredients for PCO, from a company that developed it under the researcher who invented PCO with NASA funding in the 1990s.

Related Stories

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UV adopted PCO 10 years earlier to treat rising levels of volatile mpounds (VOCs) in modern indoor spaces. As buildings have ore airtight to increase their efficiency, they trap more and more utants. According to the EPA, indoor air is often five times – and up s – more polluted than outside air, said Aaron Engel, vice president s development at Fresh-Aire UV.

ed that this trend followed the spread of synthetic building and aterials such as laminated composite countertops and engineered hich can release formaldehyde, acetone, and other VOCs. Together, ls have contributed to rising rates of asthma and allergies, they nany VOCs are known carcinogens.

e spend so much time indoors, and many of these contaminants gh conventional HVAC filters, you want to be able to address those d Engel. "Filters address one-third of contaminants in the air – dust . The other two-thirds, such as microbes and VOCs, pass through a nd through a tennis racket. Our systems address those two-thirds."

riginally invented to eliminate the organic compound ethylene from ant-growth chambers in space. The work was pioneered at the Center for Space Automation and Robotics at the University of Madison, with funding from NASA's Marshall Space Flight Center in Alabama. University researchers, led by Professor Marc Anderson, onting a problem unique to space: In the absence of gravity, there's no convection to keep air circulating. So ethylene, a plant hormone that accelerates aging and ripening, builds up around plants, causing them to wither prematurely.

Anderson wanted to break down ethylene using a technique that was in its

Fresh-Aire UV of Jupiter, Florida, developed a line of air purifiers that break down organic contaminants with a process called photocatalytic oxidation (PCO). The company gets its nanoparticulate titania suspension, one of the key ingredients for PCO, from a company that developed it under the researcher who invented PCO with NASA funding in the 1990s.

Astronaut Peggy Whitson checks on soybean plants growing in the Advanced Astroculture plant-growth chamber, which went into use on the International Space Station in 2001. The NASA-funded Wisconsin Center for Space Automation and Robotics invented an ethylene scrubber that kept the plants from withering prematurely and became the basis for Fresh-Aire UV's air purifiers. Credit: NASA