



BENEFITS

BREATHE-SAFE™ & SURFACE-SAFE™ UVGI SYSTEMS



Ultraviolet Light from the sun is nature's way of killing harmful viruses, bacteria, mold and fungi that cause disease in humans.

Tests show the health benefit of our UVGI Systems on the germs and harmful pathogens listed below.

Germ/Pathogen	Tested Kill Rate
1. CORONAVIRUS COVID-19 (229E, NL63, OC43, HKU1)	99.999999%
2. Psdomonas Aeruginosa	99.999999%
3. Staphylococcus Aureus	99.999999%
4. MRSA (Methicillin-Resistant Staphylococcus Aureus)	99.999999%
5. VRE (Vancomycin-Resistant Enterococcus Spp.)	99.999999%
6. Legionella Pneumonia	99.999999%
7. MS-2 Escherichia Coli (Surrogates Viral Pathogens)	99.999999%
8. PRD-1 Salmonella Typhimurium (Surrogates Harmful Virus Pathogens)	99.999999%
9. H1N1-ATCC VR1469	99.999999%
10. Poliovirus-L Sc Chat Strain VR 1562	99.999999%
11. Salmonella – Six Species (Surrogates Harmful Gram-Negative Bacteria)	99.999999%
12. Chicken POX	99.999999%
13. Anthrax	99.999999%
14. FLU Strains	99.999999%

For an extended list of Airborne Germs/Pathogens our UV Systems kill, Email us: info@SanUVAire.com

Whether in various types of occupied facilities, Mass Transit Vehicles, schools, hospitals, etc..., these spaces have high levels of airborne infectious diseases. Pursuant to EPA-Homeland Security and CDC Testing, when air passes over an air-handling system equipped with our Breathe-Safe UV Systems, there is a 96% to 99% kill rate of the infectious diseases.

This is a very simple and effective way to provide a Safe, Healthy and comfortable environment to all occupants. *The better the Quality of Air you breathe, the better the Quality of the life you live!!*



Mechanical Engineering: 143 HVAC Systems and Components: 5.9
States that UVGI Light (C band) lamps shall be Incorporated downstream of
all cooling Coils and above Drip Pans



BREATHE-SAFE SYSTEM PROVEN RETURN ON INVESTMENT FOR TRANSIT- ANNUAL ROI PER BUS/RAIL

DRIVER SAVINGS

SanUVAire estimates the saving of just one day per year from driver illness based on an average yearly wage with benefits of \$50,000.00 and a 200-work day year equals the loss of \$250 per day for the driver plus the cost of a replacement driver at potentially time and a half wage rate or \$375 per work day.

MAINTENANCE SAVINGS

HVAC Evaporator Cleaning is estimated conservatively as follows:

1. 1 ½ hours per HVAC unit, \$50.00 labor rate per hour equals \$75.00.
2. Four (4) cleanings per year (x \$75.00) equals **\$300.00 per year per bus.**
3. Average cost of cleaning product \$10.00 x 4 cleanings equals **\$40.00 per year per bus.**

FUEL SAVINGS

Estimating a conservative average of 50,000 miles per vehicle per year as follows:

1. 200 days of operation at 250 miles per day and an estimated 4.0 miles per gallon diesel equals an average 62.5 gallons of diesel per day.
2. With an average 280-horse power engine, the A/C compressor requires approximately 10% of engine horse power for operation.
3. The compressor power requirement is reduced by 1 hour per day (10-hour day) through continuously clean evaporators for both heat and cooling which equals 10% x 62.5 gallons or 6.25 gallons of diesel fuel savings per day.
4. The yearly fuel savings: 6.25 gallons of diesel fuel savings per day times 200 days of operation (6.25 x 200) equals **\$1,250.00 per year per bus savings.**

TOTAL COST SAVING PER BUS ANNUALLY

a. One day less driver absenteeism	\$250.00
b. One day less driver replacement	\$350.00
c. Labor cleaning evaporators	\$300.00
d. Cleaning Material	\$40.00
e. Fuel Saving	<u>\$1250.00</u>
TOTAL	\$2,190.00

Total Cost Savings Per Bus Annually Estimated Total is \$2,190.00.

A 100-bus fleet equipped with BREATHE-SAFE SYSTEMS savings:

100 x 2190 = \$219,000.00 Annually

Can Your Agency Afford Not To Equip Its Fleet?

QUALITATIVE COST SAVINGS THAT CAN BE FURTHER QUANTIFIED

- Bus interior odors are eliminated.
- Less pollution by reducing diesel fuel use.
- Fewer passenger complaints.
- Safer operating environment for drivers and passengers.
- Less engine maintenance, longer life because of less demand.
- Longer HVAC component life.

MARKET SHARE

SanUVAire, LLC is the leader in transit industry usage of UVGI technology with over 4000 vehicle installations alone and many ongoing contracts fulfillment, all types of vehicles (bus, rail, trolley, etc). No other company has a transit tested, tried, and proven UVGI product capable of withstanding exposure to the harsh environment of a transit vehicle.

Transit officials may obtain references by contacting SanUVAire at info@SanUVAire.com

Breathe-Safe™ System - Air Purification In-HVAC (Roof Top/Rear Mount) Coil Disinfection Bus/Rail Car/Boat/Marine Applications

Did you know?
Mold thrives in the cool moist interior of your AC system.

It robs efficiency & shortens the life of the system.



Moldy AC Coils



The Breathe-Safe™ System is a patented system that provides new Ultraviolet Germicidal Irradiation Technology (UVGI) for Transit Vehicles Motor Coach and Marine Vessels

Kills harmful viruses, bacteria, and mold that are present in the air of a Vehicle/Vessel. The System is designed per Vehicle and HVAC system (Roof Top or Rear Mount configurations) specifications.

Our Design-Build Models include all the standard system power components and mounting hardware for an easy installation.

System Models - *Check Models Brochure Below for further details*

12vdc (Para-Transit/Cut Away)

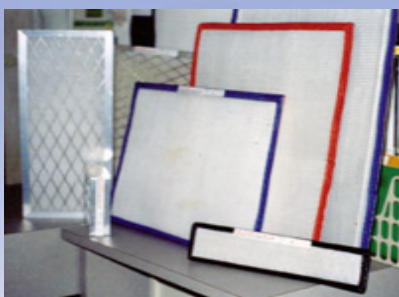
24vdc or **110/120vac** (Medium/Heavy Duty Buses)

37.5vdc or **110/120vac** (Rail Cars)

Standard Components (As applicable to each Model):

- Ballast(s): 12vdc or 24vdc or 37.5vdc or 110/120vac – 3yrs warranty
- Lamp(s): High output, Teflon sleeved for shatter proof, safety and protection – 1-yr or 2-yrs Models. **OZONE Free!**
- S-Filter - 5yrs Warranty
- All Accessories & Mounting Hardware

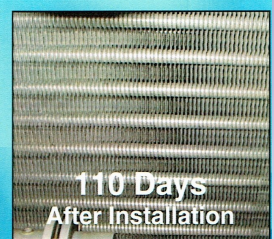
S-Filter Series



Electrostatic-ally Charged/UVC Resistant/Washable/Reusable

Check S-Filter Brochure for more details

Air Conditioner Evaporators



Breathe-Safe™ System - Air Purification & Coil Disinfection Models

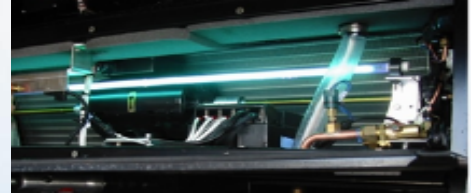
12vdc Models - Trolleys/Para-Transit/Cut Away Buses

M/N: BS 1000RM-CA (For Overhead Rear Ceiling Mount HVAC Coils Configurations)

P/N: SUVARE-BS-BS1000RM-CA

M/N: BS 2000RT-CA (For Roof Top HVAC Split Coils Configurations - (2) Systems per HVAC)

P/N: SUVARE-BS2000RT-CA



24vdc & 110/120vac Models - Medium/Heavy Duty Buses (110vac available for buses equipped with a dedicated 110vac circuit)

M/N: BS 1000RM-HMD (For Rear Mount HVAC Coils Configurations)

P/N: SUVARE-BS1000RM-HMD

M/N: BS 2000RT-HMD (For Roof Top HVAC Coils Configurations - (2) Systems per HVAC)

P/N: SUVARE-BS2000RT-HMD



37.5vdc & 110/120vac Models - Trains/Rail Cars

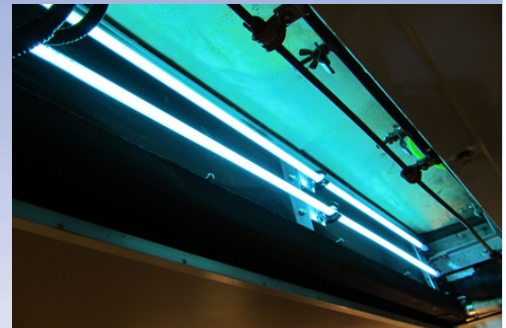
(110vac available for Cars equipped with a dedicated 110vac circuit)

M/N: BS 1000RM-RC (For Rear Mount HVAC Coils Configurations)

P/N: SUVARE-BS1000RM-RC

M/N: BS 2000RT-RC (For Roof Top HVAC Coils Configurations - (2) Systems per HVAC)

P/N: SUVARE-BS2000RT-RC



Note: All Systems are custom designed unless It is an existing design!



Breathe-Safe™ System - Air Purification Coil Disinfection - **BENEFITS SUMMARY**

SanUVAire UVGI Technology is GREEN!

HVAC System Kept in "Like New" Condition!

Longer HVAC Components life, Reduced Service Costs!

Increased Public SAFETY for Passengers and Drivers!

Air Quality Improvements: Cleaner Air!

Reduced Exposure to Airborne Diseases!

Reduce Drivers Absenteeism!

Reduce Employees & Ridership Insurance Claims!

Keep Filters Clean!

Reduced Employee Exposure to Hazardous Germs Trapped in the "AIR FILTER": Air Filters Trap and Provide a Breeding Ground for Harmful Bacteria, Mold, Fungi, and Viruses. The UVC System Kills The Biohazard Germs and Makes it SAFER to Handle the Filters.

SAFER Working Conditions for HVAC Personnel!

The UVC System Kills The Biohazard Germs Accumulated on The HVAC System Components

COILS are Disinfected and Remain Clean. HVAC System Uses Less energy!

Reduced Fuel/Power Consumption as The HVAC System is Kept in "Like New" Condition!

Reduced Emissions!

Eliminate the Use of TOXIC CHEMICALS for Cleaning Evaporators!

Reduced Chemical Exposure to STAFF!

Eliminate Chemical Waste water Used in Cleaning Evaporators!

Longer Bus /Rail Car Life!

Reduce Maintenance Cost, Increased \$AVING\$: \$2200/yr/Bus!

Quick ROI: 1 Year

LOW Total Cost of Ownership!





UVC germicidal light is effective at disrupting the cellular membrane of the microorganism causing irreparable damage to the DNA resulting in the sterilization of the microorganism.

S-PURIFYER™

UVGI Air Sterilization System - is an "All-in-One" cost effective UVGI air purification system designed for small & pransit buses, ambulances, and marine vessels where it is not possible to perform an in-HVAC install.

Protect drivers, riders and EMT staff from Airborne viruses and diseases.

The S-PURIFYER™ design uses our innovative UVGI Technology for indoor air purification. This is a discrete space saver system that can be easily installed. It is suitable for small to to medium size Vehicles.

The S-PURIFYER™ comes with unique and quiet design internally that allows the air to slowly circulate and be fully exposed to the High output UV lamp, which is intensified by the reflective housing, which in turn, maximizes effectiveness to eliminate many contaminants & VOCs that affect the environment within the vehicle.

The S-PURIFYER™ is the ideal solution for what's commonly known as the "Sick Vehicle" Syndrome.



System Features

- ⌚ Perfect Solution for small to to medium size Vehicles
- ⌚ Eliminates bacteria, viruses, germs, mold, allergens, VOCs
- ⌚ 13in. Quartz UVC/UVV "U" shaped Lamp
- ⌚ 10,000 micro-watts per/cm2 of UV intensity
- ⌚ Reflective Housing to maximizes UV intensity
- ⌚ Warranty: Lamp 16,000hrs/2yrs. Motor 2yrs, Ballast 3yrs Filter 5yrs (Washable/Reusable - UV Resistant)
- ⌚ Backed by SanUVAire's Quality Assurance
- ⌚ Patented Design
- ⌚ ETL certified
- ⌚ Operates on 12/24vdc system power with built-in voltage cutout
- ⌚ Safety Disconnect Switch For maintenance access
- ⌚ Easy install



888.611.6660

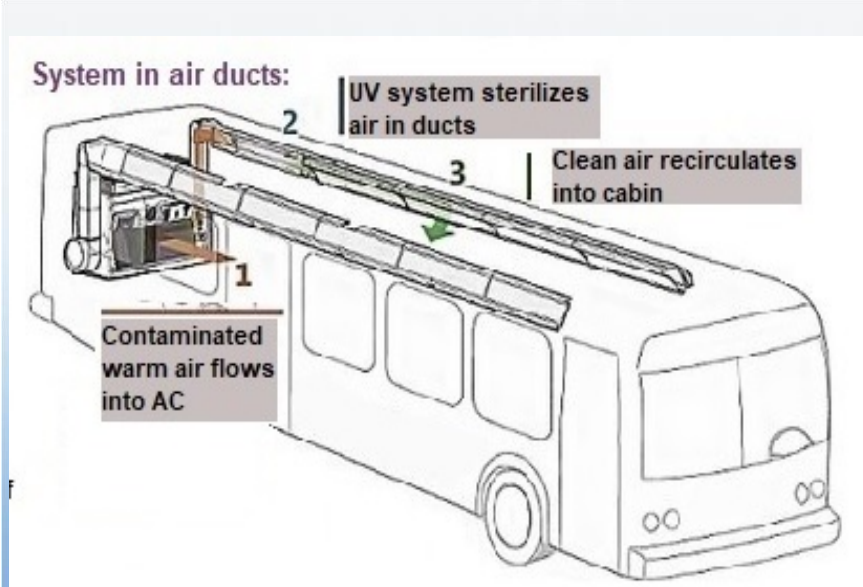
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TRANSIT/MARINE PRODUCTS

Breathe-Safe™ System - Air Purification In-DUCT Bus & Rail Car Application

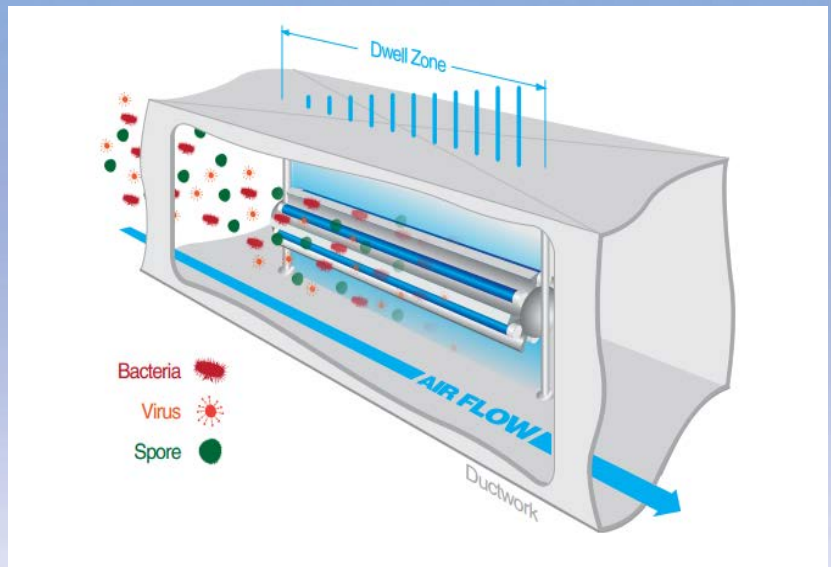


The Breathe-Safe™ In -Duct discrete System is a patented system that provides new Ultraviolet Germicidal Irradiation Technology (UVGI) for transit vehicles.

This new technology kills harmful viruses, bacteria, and mold that are present in the air of a transit vehicle. The System is designed per specifications and includes all the standard system power components and mounting hardware for a simple and easy installation.

Standard system components are:

- Remote Ballast(s): 12vdc or 24vdc or 37.5vdc – 2-yrs warranty
- Lamp(s): High output Teflon sleeved for shatter proof, safety and protection – 1-yr and 2-yrs Models. **OZONE Free!**
- Mounting Hardware
- HVAC Filter (Strongly Recommended)



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S-FILTER™

The Re-usable, Washable & Recyclable Filter. **GO GREEN!**

DID YOU KNOW?

Over 6000 throw away filters are being disposed of by Transit Agencies. Most transit properties use throw away air filters of approximately one (1) filter per month or 12 per year per bus. That is 1200 Filters per year for every 100 buses!

You can reduce and eliminate the wastefulness by using our lifetime recyclable S-Filter™

By Using The S-Filter Your Organization can BECOME...

GREENER & MORE SUSTAINABLE: By Reducing Energy consumption & Greenhouse Gases for Manufacturing and Disposal of smaller amount of filters.

GREAT COST SAVINGS & LOW TCO: Cost savings of \$24,000 annually per 100 bus fleet! Less money spent on filter ordering, replacements and cleaning.

HEALTHIER: Less dust, pollen, mold and bacteria. No Harmful Emissions!

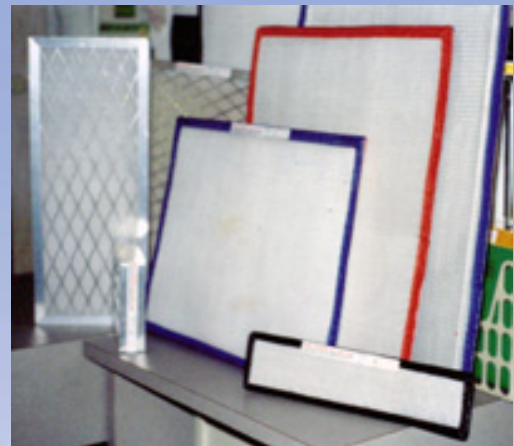


Filter Specifications

- UVC resistant
- Constructed of 100% woven AAA 81591 TN Polypropylene in the front and back layers
- 100% woven AAA 7154WL Polypropylene in the accumulation layer.
- Holding capacity of ASHRAE 120grams,
- Dust arresntance of 88% ASHRAE
- Initial resistance of 0.14in. W.G @1200CFM across all layers.
- Commercial/Industrial Quality
- Reusable & Easy to clean with water
- 5-yr warranty - However will usually outlast your equipment. Only the best materials used.

Health Benefits & Performance

- ❖ Highly Effective - traps dust, pollen, mold and bacteria.
- ❖ Electrostatic/Self Charging - No harmful emissions which are common with electronic air cleaners. No electrical hook-ups required.
- ❖ Easy to Install - Just slide into your unit.
- ❖ Easy to Clean - Just clean with water, shake and return.
- ❖ Built to Last - Workmanship & Materials
- ❖ Cost Effective - Savings of hundreds of \$\$\$



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COMMERCIAL PRODUCTS



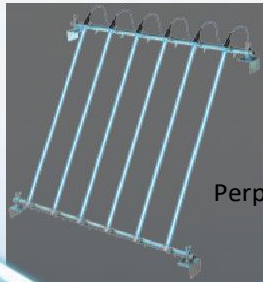
Breathe-Safe™ Standard Commercial UV Light System

L-brackets or panel mount for easy installation.

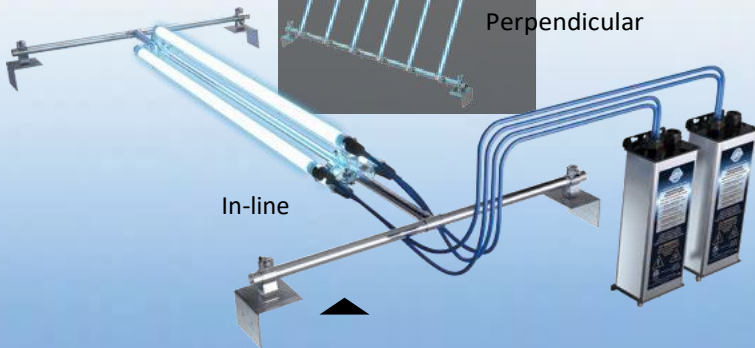


Breathe-Safe™ Rack System

Mounts using 1/2" EMT tubing for cost-effective, flexible installations.



Perpendicular



In-line

Breathe-Safe™ Airborne Duct System

High output lamps for maximum airborne kill. Mounts In-line with, or perpendicular to, the duct with optional APCO modules.

Breathe-Safe™ PCO® Rack System

Our most advanced system. Award-winning APCO® technology fights odors and VOCs. Normal or high output lamps (for duct mounting).



Breathe-Safe™ Tight-Space Kit™

Ideal for PTACs, fan coils, & wall-mount systems.



Breathe-Safe ICE The first germicidal UV light system for ice machines. ICE UV works around the clock, killing germs and saving money on ice machine maintenance.



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SanUVAire 500-CX™

UVC germicidal light is effective at disrupting the cellular membrane of the microorganism causing irreparable damage to the DNA resulting in the sterilization of the microorganism.

SANUVAIRE 500-CX™

UVGI Air sterilization system - Ceiling Mount Tile

The SanUVAire 500-CX™ Ceiling Mount design uses our innovative UVGI Technology for indoor air purification. This is a discrete space saver system that can be easily installed. It is suitable for small to to medium size areas such as offices, schools, hospital patient rooms, daycare, Pet Care, assisted living and other institutional facilities.

The SanUVAire 500-CX™ comes with unique and quiet design internally that allows the air to slowly circulate and be fully exposed to the High output UV lamp, which is intensified by the reflective housing, which in turn, maximizes effectiveness to eliminate many contaminants & VOCs that affect the environment for a space of about 500SQFT (per unit).

The SanUVAire 500-CX™ is the ideal solution for what's commonly known as the "Sick House" or "Sick Building" Syndrome.

System Features

- ⌚ Perfect Solution for small to to medium size areas such as offices, schools, hospital patient rooms, daycare, Pet Care, assisted living and other institutional facilities.
- ⌚ Eliminates bacteria, viruses, germs, mold, allergens, VOCs
- ⌚ 13in. Quartz UVC/UVV "U" shaped Lamp
- ⌚ 10,000 micro-watts per/cm2 of UV intensity
- ⌚ Reflective Housing to maximizes UV intensity
- ⌚ Warranty: Lamp 16,000hrs/2yrs. Motor 2yrs, Ballast 3yrs
- ⌚ Filter 5yrs (Washable/Reusable - UV Resistant)
- ⌚ Backed by SanUVAire's Quality Assurance
- ⌚ Patented Design
- ⌚ ETL certified



RESIDENTIAL PRODUCTS



Breathe-Safe™ PCO In-Duct Air Purifier

PCO features UV light combined with activated carbon cells for **Advanced PhotoCatalytic Oxidation**. This ozone-free system is effective on odor causing and toxic VOCs as well as microbial contaminants.

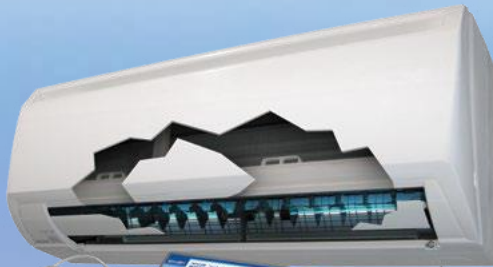
Breathe-Safe™ Tube

The most popular germicidal UV light product in the world. Keeps the central air system clean and reduces airborne contaminants. Choose from high or low voltage power supplies and several lamp options. Includes magnetic mounting bracket for easy, flexible installation.



Breathe-Safe™ Mini

Award-winning UV light system for mini-splits & other limited-space applications features a miniature shielded UV lamp only 9" long with a 3/8" diameter - small enough to fit in the tightest of spaces.



Breathe-Safe™ AHU Series

1 Comes with a heavy-duty water-resistant power supply that can support dual, triple, and quad lamps.



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