ActiveAir
SOLUTIONS

Advanced Cold Plasma Needlepoint Ionization Technology

Raising the IQ in IAQ

www.ActiveAirSolutions.com

With over 30 patents* and more than 150,000 installations worldwide using our NEEDLEPOINT BIPOLAR IONIZATION technology, also known as NPBI, AAS is truly the Indoor Air Quality (IAQ) revolut**IONIZER**.

Our proven technology delivers clean indoor air that is safe and healthy – producing neither ozone nor other harmful by-products. All our NPBI products are *UL and *CE approved. Through NPBI, our products purify the air by eliminating airborne Particulates, Odors and Pathogens. All this while saving you 30% on Energy consumption and lowering your carbon footprint by reducing outdoor air intake by up to 75%.

AAS **FACT**: AAS can be installed in any system in any building...

- Agriculture
- Animal Care
- Banks
- Child Care
- Fitness
- Healthcare
- Hospitals
- Manufacturing
- Retail
- Senior Care
- Theater
- Airports
- Arenas & Stadiums
- Casinos
- Convention Centers
- Food Service
- Hospitality
- Institutional
- Office Building
- Schools & Universities
- Transportation
- Worship

IAQ - Revolut**IONIZER**

Pioneering Innovations: **1st ...**

... with universal power supply
... with auto self-cleaning
... duct-mounted design
... to use carbon fiber brush needlepoint emitters
... with ionization bar
... with flexible ionization strip
... with modular ionization bar
... to achieve UL867 Ozone Standard (Peak/Chamber)
... and only to pass the RCTA DO-160 std for aircraft
... to be installed on a commercial jet
... to be FAA Certified
... to be installed on commercial hand dryers
... AND ONLY to have UL2998 Ozone FREE Certification
... to receive OSHPD Seismic (OSP) Certification

Why AAS ?

AAS Delivers significant benefits:

Particle Reduction

The AAS NPBI technology reduces airborne particles (i.e., dust, pet dander, pollen) through agglomeration. The ions attach to the airborne particles. The particles are subsequently attracted to one another, effectively increasing their mass and size. The air filtration system easily captures the larger particles, increasing the capture efficiency of your HVAC system.

Pathogen Reduction

During the AAS cleaning process the NPBI technology attacks and kills viruses, mold spores and bacteria. The ions steal away hydrogen from the pathogens, leaving them to die, and leaving you with clean and healthy indoor air.

Odor Reduction

During the AAS cleaning process chemical, pet, cooking, and other odors are broken down into basic harmless compounds, leaving the indoor air fresh smelling and free of odor causing VOCs.

Energy Saving

AAS environmentally friendly cleaning process allows commercial buildings to significantly reduce the amount of outdoor air required to operate. This equates to a safer, more comfortable environment that requires up to 30% less energy to condition.

THE AAS ADVANTAGE

	AAS NPBI	Other BPI	Corona Discharge	HEPA Filters	Carbon Filters	Ultraviolet UV	UV - PCO
Produces Harmful Byproducts	None	Yes	Yes	No	No	Yes	Yes
Reduces Airborne Particles	✔	Yes	Yes	Yes	No	No	No
Destroys VOCs	✔	Yes	Yes	No	Captures	No	Yes
Kills Pathogens	✔	Yes	Yes	No	Captures	Yes	Yes
Reduces Energy Cost	30%	Yes	Yes	No	No	No	No
UL 2998 No-Ozone Certified	✔	No	No	N/A	N/A	N/A	N/A
Treats In-Room Air	✔	Yes	Yes	No	No	No	No
No Replacement Parts	✔	No	No	No	No	No	No
Auto Self-Cleaning	✔	No	No	No	No	No	No
Simple to Install	✔	No	No	No	No	No	No
Low Total Cost	✔	Yes	No	No	No	No	No

AUTO SELF-CLEANING TECHNOLOGY

UNIVERSAL VOLTAGE

AAS-FC4800-iClean

An automatic self-cleaning, lightweight NPBI system that handles up to 4,800 CFM or 12 tons. Designed for multiple mounting options including fan inlet, interior duct walls or floors. The composite construction allows for mounting in corrosive environments.

Features

- > 400 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts

MAINTENANCE FREE

AAS-FC2400-iClean

An automatic self-cleaning, lightweight NPBI system that handles up to 2,400 CFM or 6 tons. Designed for multiple mounting options including fan inlet, interior duct walls or floors. The composite construction allows for mounting in corrosive environments.

Features

- > 300 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts

CARBON FIBER EMITTERS

APPLICATIONS

- Agriculture
- Airports
- Animal Care
- Arenas & Stadiums
- Banks
- Casinos
- Child Care
- Convention Centers
- Fitness
- Food Service
- Healthcare
- Hospitality
- Hospitals
- Institutional
- Manufacturing
- Office Building
- Retail
- Schools & Universities
- Senior Care
- Transportation
- Theaters
- Worship

AUTO SELF-CLEANING

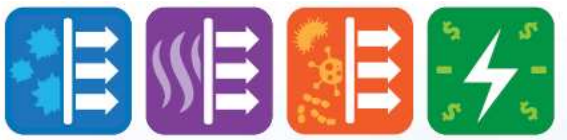
AAS-DM4800-iClean

2016 IAQ GOLD AWARD WINNER

The world's first automatic self-cleaning, duct mounted, lightweight NPBI electronic air cleaner. The maintenance free unit is designed for indoor or outdoor duct mounting and can handle up to 4,800 CFM or 12 tons.

Features

- > 400 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts
- 3/4 Quick-Turn Duct Adapter



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BARS & STRIPS

AAS-iMOD/AirRail

The AAS-iMOD/AirRail is a modular NPBI system that is field assembled to any length up to 240 inches in 6-inch increments. The fiberglass composite and carbon fiber AAS-iMOD/AirRail can be mounted in corrosive environments. It can treat 50 – 250 CFM per inch of bar, depending on the application.

Features

- > 140 Million + and - Ions Per Inch/cc/sec
- Universal Voltage Selector Switch
- Six HV Output Ports
- Alarm Contacts
- Illuminated On/Off Switch
- Plasma on Indication Light
- UL 2998 Ozone Free

OSHPD

AAS-iRIB® 18/36

The AAS-iRIB is available in 18” and 36” lengths. They are made from a flexible chemical, heat and cold resistant Kapton® material containing a circuit with special carbon fiber ion emitters soldered into the circuit traces. This mechanism is engineered to deliver the highest level of ionization with the least amount of energy in the most compact size. Designed for 3200 CFM or 8 tons.

Features

- > 35 Million + and - Ions Per Foot/cc/sec
- Fold-To-Length Circuit
- Local LED Power Indication
- Integral Control Relay for BAS Interface
- Velcro® for Easy Installation
- Voltage Input 110VAC to 240VAC

Perfect For

- Traditional Split Systems
- Ductless Mini Splits
- Heat Pump PTACs
- Ducted Modules
- Fan Coils

AAS-NEMA4-OE

The AAS-NEMA4-OE is a NEMA 4X-rated fiberglass enclosure designed to house one AAS-iMOD/AirRail power supply. The panel adds a superior finished look to any project while providing the required protection against foreign substances, such as water and dust, when power supplies are mounted in non-NEMA 1 rated environment.

COMPACT NPBI

AAS-SCR1200-1 / AAS-SCR1200-2

The AAS-SCR series is designed to be mounted inside fan coils, heat pumps, PTACs, ductless mini-splits and air handlers up to 1,200 CFM or 3 tons. Their compact size allows them to be mounted almost anywhere in just a few minutes.

Features

- **> 25 Million + and – Ions Per cc/sec**
- **AAS-SCR1200-1 Powered by 110 - 120 Volts AC**
- **AAS-SCR1200-2 Powered by 208 – 240 Volts AC**
- **Carbon Fiber Brushes**
- **LED Operation Status**
- **Carbon Fiber Brush Emitters**

AAS-SCR3200(3)-BAS

The AAS-SCR-3-BAS unit is designed to be mounted inside fan coils, heat pumps, PTACs, ductless mini-splits, and air handlers up to 3,200 CFM or 8 tons. Its compact size and simple mounting requirements allow it to be quickly mounted almost anywhere.

Features

- **> 170 Million + and – Ions Per cc/sec**
- **SCR3200(3)-BAS 24 Volts AC**
- **SCR3200(3)-T-BAS 110-240 Volts AC**
- **BAS Alarm Contacts**
- **LED Operation Status**
- *** Carbon Fiber Brush Emitters**

SENSORS & MEASUREMENTS

AAS-iMEASURE

The AAS-iMEASURE is the first commercially available ion detector that can be permanently mounted in the space to measure ion levels in real time and report back to a BAS.

AAS-iMEASURE-D

The AAS-iMEASURE-D ion detector is permanently mounted in the duct downstream of any AAS ionization device. It measures ion levels in real time and reports back to a BAS. It includes three sensitivity levels: 20,000/200,000/2,000,000 ions/cc/sec that can be set based on the application and in-duct location.

AAS-iDETECT-P

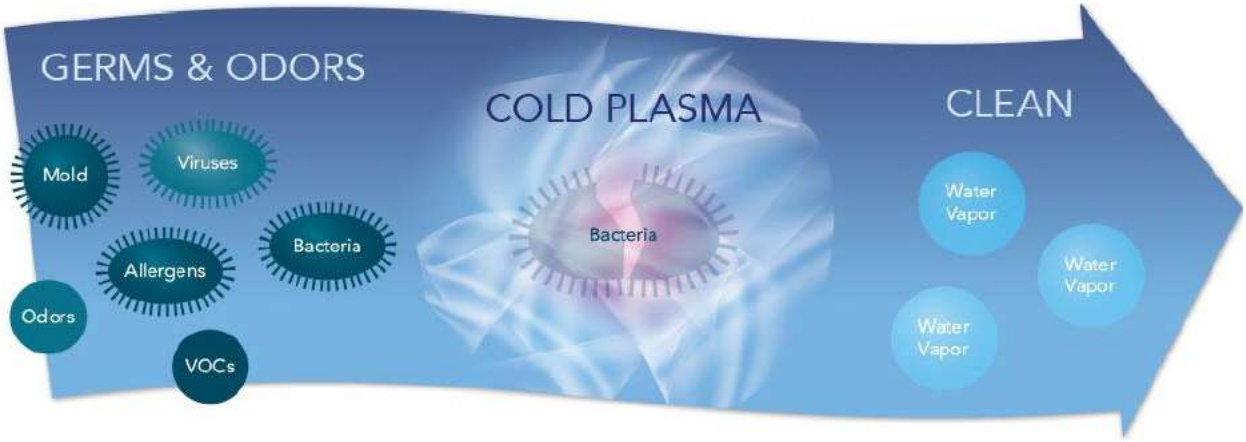
The AAS-iDETECT-P is a plenum-mounted ionization detector that confirms the output from the AAS-iMod/ AirRail. The AAS-iDETECT-P provides the ability to monitor ionization status in a plenum to confirm that the ionization equipment is working properly.

Features

- Universal Voltage Input
- 1,000 – 200,000,000 Ions/cc (+ or -)
- 0-100% Humidity

How Ionization Works

AAS NPBI technology works to safely clean the air inside industrial, commercial and residential buildings. The patented technology uses an electronic charge to create a plasma field filled with a high concentration of + and - ions. As these ions travel with the air stream they attach to particles, pathogens and gas molecules. The ions help to agglomerate fine submicron particles, making them filterable. The ions kill pathogens by robbing them of life-sustaining hydrogen. The ions breakdown harmful VOCs with an Electron Volt Potential under twelve (eV<12) into harmless compounds like O_2, CO_2, N_2, and H_2O. The ions produced travel within the air stream into the occupied spaces, cleaning the air everywhere the ions travel, even in spaces unseen.



What is an Ion you may ask?

An ion is a molecule or atom that is positively or negatively charged, meaning that it has electrons to give or needs electrons to become uncharged, thus becoming stable.

Mother Nature's Way of Cleaning

AAS technology generates the same ions as Mother Nature creates with lightning, waterfalls, and ocean waves. Mother Nature uses energy to break apart molecules. It is nature's way of cleansing the air naturally and creating a healthy environment. The only difference is that AAS technology does it without forming ozone or other harmful byproducts.

AAS* NPBI technology has been certified* by UL 867 and UL 2998 to be ozone free.

ActiveAir SOLUTIONS

3rd Party Testing Summary

Pathogen	Time in Chamber	Kill Rate	Test Agency
Tuberculosis	60 minutes	69.09%	EMSL
Clostridium Difficile	30 minutes	86.87%	EMSL
Norovirus	30 minutes	93.50%	ATS Labs
MRSA	30 minutes	96.24%	EMSL
Staphylococcus	30 minutes	96.24%	EMSL
Mold Spores	24 hours	99.50%	GCA
E.coli	15 minutes	99.68%	EMSL
Legionella	30 minutes	99.71%	EMSL

Airborne Mold Spores Reduced by 95%

EMSL ATS LABS EXCELLENCE IN ANTIMICROBIAL TESTING

Owned by Accuratus Lab Services

AAS NBPI PRODUCT CHART

AUTO-CLEANING LINE	VOLTAGE	CFM RATING	IONS/cc/sec
AAS-FC2400-iClean	24-240vac	2,400	>300 million
AAS-FC4800-iClean	24-240vac	4,800	>400 million
AAS-DM4800-iClean	24-240vac	4,800	>400 million
COMPACT LINE	**VOLTAGE**	**CFM RATING**	**IONS/cc/sec**
AAS-SCR1200-1	110-120vac	1,200	>25 million
AAS-SCR1200-2	208-240vac	1,200	>25 million
AAS-SCR3200(3)-BAS	24vac	3,200	>170 million
AAS-SCR3200(3)-T-BAS	110-240vac	3,200	>170 million
BARS & STRIPS LINE	**VOLTAGE**	**CFM RATING**	**IONS/cc/sec**
AAS-iMod, up to 240” Length	24-240vac	50-25cfm/in	>140m/in
AAS-iRib18	110-240vac	3,200	>35m/ft
AAS-iRib36	110-240vac	3,200	>35m/ft

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