



3 Leading Ionization Technologies in the Market

Competitive Analysis

There are several solutions offered in the market today to help mitigate risks associated with airborne pollutants. Eagle X Pro offers a superior patented bipolar ionization technology with significant competitive edge. Eagle X Pro Bipolar Ionization Technology is set apart from other competitors and has obtained more beneficial results in a variety of aspects.

1

Corona Discharge based technology

Eagle X Pro Bipolar Ionization Technology is based on a Corona Discharge system. Corona Discharge is an electrical discharge that is caused by the ionization of fluid. It represents a local region where the air has undergone electrical breakdown and become conductive, allowing charge to continuously spread ions into the air. This method of generating ions has been around for decades but no one has managed to use this method to generate large amounts of + and - oxygen ions without generating ozone. Eagle X Pro Bipolar Ionization Technology greatest achievement is the ability to generate the most dense amount of ions while emitting zero, undetectable ozone.

2

Needle Point Bipolar Ionization (NPBI)

Needle Point Bipolar Ionization has been in the market since 2007. NPBI keeps the electron voltage potential (eV) used for ionizing the air at high amounts which creates ozone. NPBI can create high amounts of ozone levels and will only offer low to moderate ion output. Most companies using NPBI technology are licensing white labeling the technology.

3

Cold Plasma Discharge

Cold plasma discharge is a partially ionized gas consisting of ions, electrons, ultraviolet photons and reactive neutrals such as radicals, excited and ground-state molecules.

Out of the 3 technologies listed, Eagle X Pro Bipolar Ionization Technology is by far the most superior making it the best solution in the market today.

Eagle X Pro Bipolar Ionization Technology generates 10 billion to 1 trillion ions per second. Our products create the highest density of ions per cm^3 than any other product in the market - and successfully doing so in large spaces.

Our competitors generate between 25M-400M per second only.

The density of ions created indoors by Eagle X Pro Bipolar Ionization Technology is extremely effective compared to other products in the market.

The higher the density of ions, the better results.

NPBI, Cold Plasma Air technology and other ionizers do not generate enough ions therefore are not effective - low ion count in the space means low density, providing little to no results.

Eagle X Pro Bipolar Ionization Technology generates between 10-25 times more ions per cm^3 than our competitors, making our density significantly higher with better results.

Technology Comparison	Eagle X Pro Bipolar Ionization Technology	NPBI	Cold Plasma
Ions per/sec	10B-1T	25M-400M	160M-400M
Density	Up to 60,000	Up to 8,000	Up to 8,000
Density Average	4,000-25,000	1,000-1,500	1,000-1,500
Produces Ozone	Ozone Free (<0.001)	0.02-0.03	0.02-0.03
Maintenance	Self Cleaning No Maintenance Recommendation Every 2 years to check system	Self Cleaning	Requires maintenance, including part replacement every 6-12 months, imposing additional costs on clients
Control & Monitor	Yes - up to 247 units	No	No
Effective in large spaces	Yes	No	No

Major competitor: UV Technology



There are several products that are based on UV light technology. There also are products in the market that combine UV light technology and ionization technology. UV is a form of electromagnetic radiation with wavelength

from 10 nm (with a corresponding frequency of approximately 30 PHz) to 400 nm (750 THz), shorter than that of visible light but longer than X-rays. UV technology is highly vetted and accepted in the USA. It is surprising that

UV technology is highly accepted because research proves that they can have negative effects on humans and the environment.

- 1** UV lights produce a high level of Ozone and radiation, making it unsafe to people and damaging to the environment. **UV Light and Ionization technology products produce 20 times more Ozone than our products.**
- 2** UV lights are effective only in straight line places . Effects are diminished when there is no visual “eye contact” line, making this solution extremely less effective for the entire space it is installed in.
- 3** UV power reduction over time – maintenance is needed
- 4** UV light is harmful to the human eye
- 5** UV needs to be set inside the ducts in order to supply clean air and it’s not “actively” clearing the air once it leaves the A/C system.



Technology Comparison	Eagle X Pro Bipolar Ionization Technology	UV	Photocatalytic Oxidation	Media Filtration	Other Needlepoint Ionization	Carbon Filters	Electronic Air Cleaners	HEPA Filtration
Affect Contaminants Indoors	Yes	No	Yes	No	No	No	No	Yes
Effective Against Viruses	Yes	Yes	Yes	No	Yes	No	Yes	No
Effective Against Bacteria's, Fungus and Mold Spores	Yes	Yes	Yes	No	Yes	No	Yes	Yes
Reduces VOC's	Yes	No	No	No	Yes	Yes	No	No
Reduces Toxic Particles	Yes	Yes	No	Yes	No	Yes	Yes	No
Reduces Odors	Yes	No	No	No	Yes	No	No	No
Produces Ozone	No	Yes	Yes	No	No	No	Yes	No
Maintenance	Every 2 years	Annually	Annually	Quarterly	Bi-annually to 2 Years	Bi-annually	Monthly	Bi-annually
Chemicals or By-Products	No	Yes	Yes	No	No	Yes	No	No
Re-engineering of HVAC System Needed	No	No	No	Yes	No	Yes	Yes	Yes
Appropriate for any indoor space	Yes	No	No	No	No	No	No	No
Tested Containment Elimination in Occupied Space	Yes	No	No	No	No	No	No	No
Published & Peer Reviewed Research	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Creates "Forest- Effect"	Yes	No	No	No	No	No	No	No

Conclusion

Throughout our research, we concluded that there are no other products on the market that have the same advanced technological solutions that Eagle X Pro Bipolar Ionization Technology has to offer. Eagle X Pro Bipolar Ionization Technology creates the highest density of ions while emitting zero, undetectable ozone. Our goal is to increase the ambient space by 5-50x more ions with Eagle X Pro Bipolar Ionization Technology in the space. At Eagle X Pro, we provide a better, safer and cleaner indoor air environment.