

Bi-Polar Ionization

Innovative technology that actively enriches indoor air quality.

HOW DOES IT WORK?

1



ION CLUSTER

STERIONIZER™ uses a discharge system to generate large amounts of oxygen molecules O₂⁺ and O₂⁻.

2



PEROXIDE (H₂O₂)

These molecules have a very high chemical activity, and when reacting with water molecules (H₂O) in the air, hydrogen peroxide (H₂O₂) is formed.

3



OXYGEN IONS

Hydrogen Peroxide (H₂O₂) when combined with water molecules cluster around harmful particles.

4



DISCHARGE SYSTEM

A chemical reaction occurs and oxidants break down the protein structure of pollutants, rendering them harmless.

PROVEN. SAFE. EFFECTIVE.

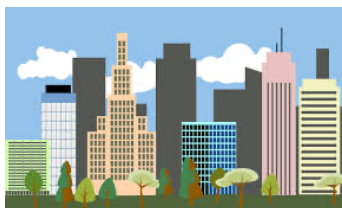
The EXP technology can be integrated into a variety of systems, utilized for numerous applications, and can be controlled through the A/C monitoring system.

IONS IN NATURE

Oxygen ions are molecules or atoms that contain an electrical charge and exist in nature. Our technology produces a natural bio-climate, rich in positive and negative oxygen ions, imitating the natural process happening in nature.



Mountains: 15,000 i/cm³



Urban Area: 500 i/cm³



Indoor Area: <100 i/cm³

EXP. VS OTHER SOLUTIONS

Technology Comparison	EXP Bi-Polar Ionization	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, 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