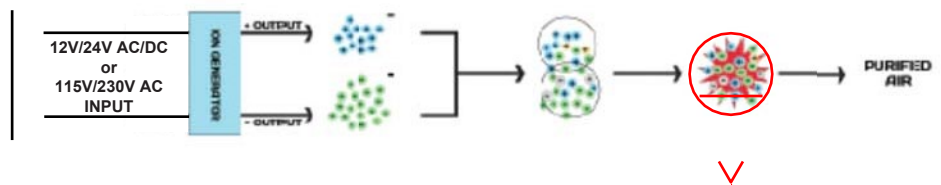


What is bipolar ionization and how does it work?

Bipolar ionization is an ozone-FREE process (certified by UL to standard 867) that is used to purify air.

Bipolar ionization works by using small amounts of electricity to create an “ion field” that becomes filled with both positively and negatively charged ions. Most longer molecule chains are positively charged and pick up a negative ion causing the molecule to break into smaller particles.



Most particles that are harmful to humans are longer molecules such as MOLD, BACTERIA and VIRUSES (just to name a few). The chart below shows independent test lab results showing the effect of ionization.

Independent Laboratory Tests			
Human Coronavirus Incubation Period - 60 Minutes Rate of Reduction - 90.0% Surrogate for Human Coronavirus SARS-CoV-2, actual strain tested was Human Coronavirus 229E ALG	Legionella Incubation Period - 30Minutes Rate of Reduction - 99.7% EMSL	E.coli Incubation Period - 15 Minutes Rate of Reduction - 99.6% EMSL	Tuberculosis Incubation Period - 60 Minutes Rate of Reduction - 69.0% EMSL
Staphylococcus Incubation Period - 30Minutes Rate of Reduction - 96.2% EMSL	Norovirus Incubation Period - 30Minutes Rate of Reduction - 93.5% Surrogate for Norovirus, actual strain tested was Feline Calicivirus, ATCC VR-782, Strain F-9 ATS LABS EXCELLENCE IN ANTIMICROBIAL TESTING	Clostridium Difficile Incubation Period - 30Minutes Rate of Reduction - 86.8% EMSL	MRSA Incubation Period - 30Minutes Rate of Reduction - 96.2% EMSL

The smaller particles tend to bind to the positively charged ions making them heavier than air and subsequently fall to the ground (or caught in filters).

The **iAIRE** ionization units can retrofit easily into existing HVAC systems with very low power consumption and low cost. Because of bipolar ionization’s ability to **actively** clean the air, bipolar ionization is becoming the most preferred method to clean indoor air.