



BREATHE
EASIER

ion

AIR IONIZATION UNIT

FROM:
MEDIC AIR



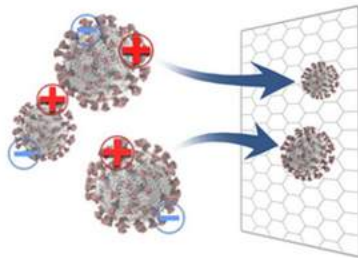
WHAT IS THE ion?

FROM
MEDIC AIR

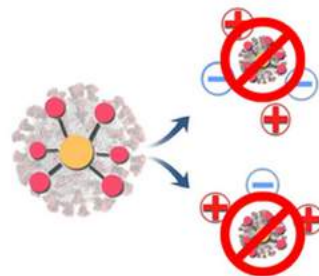
The MedicAir Ion is a major technological leap forward for the world of Post-COVID-19 Business. Using Ionization technology, The MedicAir Ion works in conjunction with your Air Conditioning or Air Purification System to capture contaminants and particles that are otherwise too small- scrubbing the air to help you breathe easier.

HOW IT WORKS

Much like sunlight does in the atmosphere, ionization technology produces a natural bio-climate rich in positive and negative oxygen ions. The negative ions contain an extra electron while the positive ions are missing an electron resulting in an unstable condition. In an effort to re-stabilize, these bipolar ions seek out atoms and molecules in the air to trade electrons with, effectively neutralizing particulate matter, bacteria and virus cells, odorous gases and aerosols, and VOCs.



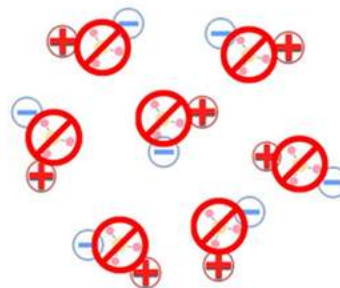
Airborne particles are charged by the ions causing them to cluster and be caught in filters



As they divide to reproduce, bacteria and virus cells bond with oxygen ions and are destroyed.



Odorous gases and aerosols oxidize on contact with oxygen ions and are neutralized.



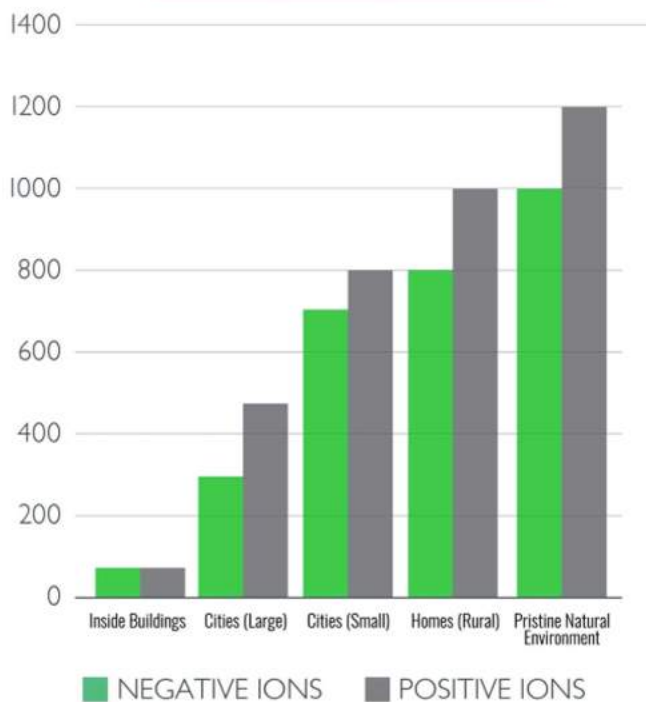
Oxygen ions cause a chemical reaction with VOCs breaking down their molecular structure.

STATISTICS

Specifications	
Input Voltage	24V
Power	≤2W
Frequency	50Hz/3.1KHz
Plasma Ion Concentration	10 Million / cm ³
Oxygen Supply	Below 1L/min
Anion Density	15000000pcs/m ³



Small Ion Count At Various Locations



WHAT ARE OXYGEN IONS?

Ions are molecules or atoms that contain an electrical charge and exist in nature in various sizes. Small ions only last between 30 and 300 seconds before losing their charge, but are extremely active.

Small ion densities range from 900 to 1,100 negative ions and 1,000 to 1,200 positive ions per cubic centimeter (ions/cm³) in pristine natural environments. At sea level ion density is typically around 500 negative and 600 positive ions/cm³. In cities and inside buildings ion levels drop by 80% to 95% and can be barely detectable in small spaces.

As ion density decreases, so does the air quality. By increasing the quantity of both positively and negatively charged small oxygen ions, air quality is improved. This is the basis of Plasma Air's bipolar ionization technology.

HOW DOES IT STACK UP?

The MedicAir Ion's bipolar ionization technology is the most efficient solution in air sanitizing technology – proactively treating the air in the occupied space at the source of contamination. Traditional end-of-pipe solutions utilize a reactive “pass-through” or “filtered” approach.

	ion	Particle Filtration	HEPA / Fine Grain Filters ¹	Carbon Filters ²	Ultraviolet ³	Biofilters	Chemical Scrubber	PCO ⁴
Description	BIPOLAR IONIZATION	PRE-FILTERS, BAG FILTERS, PRE-TREATED FILTERS, FIBERGLASS FILTERS FOR LARGER AIRBORNE PARTICLES	CAPTURES FINE AIRBORNE PARTICLES	ABSORBS AND FILTERS CHEMICALS	ULTRAVIOLET LIGHT KILLS GERMS AND REMOVES AIRBORNE PARTICLES	TREATS EXHAUSTED AIR THROUGH BIOLOGICAL MEDIA BY REACTING WITH CONTAMINANTS	TREATS EXHAUSTED AIR THROUGH BIOLOGICAL MEDIA BY REACTING WITH CONTAMINANTS	FILTERED MEDIA IS COATED WITH MATERIAL THAT REACTS WITH CHEMICALS
Energy Savings	UP TO 30%	NONE	NONE	NONE	NONE	NONE	NONE	NONE
Pressure Drop	MINOR	MINOR	LARGE	MEDIUM	NONE	VERY HIGH	HIGH	MEDIUM
Particle Size	SMALL	LARGE(> 5µm)	SMALL(< 0.01µm)	N/A	N/A	N/A	N/A	LARGE
Treats Air in Room	YES	NO	NO	NO	NO	NO	NO	NO
Treats Make-Up / Supply Air	YES	YES	YES	YES	YES	NO	NO	YES
Treats Return Air	YES	YES	YES	RARELY	YES	NO	NO	YES
Treats Exhaust Air	YES	RARELY	NO	YES	RARELY	YES	YES	RARELY
Capital Costs	LOW	LOW	MEDIUM	HIGH	MEDIUM	VERY HIGH	VERY HIGH	HIGH
O&M Costs	LOW	LOW	LOW TO MEDIUM	HIGH	MARGINAL	VERY HIGH	VERY HIGH	HIGH
Energy Costs	NONE	LOW	HIGH	HIGH	LOW	HIGH	HIGH	MEDIUM
Disposal Costs	NONE	LOW	DEPENDS ON CONTAMINATION	HIGH	MARGINAL	HIGH	HIGH	HIGH



The image shows the 'ion' logo in a stylized, lowercase font. The logo is set against a background of a complex, industrial-looking structure with various pipes, tanks, and machinery, rendered in a light blue and white color scheme. The logo itself is a dark blue color.