## The **BEST** Pathogen Elimination & Air Purification System for all **SCHOOLS**

### What is PlasmaGuard™?

All of PlasmaGuard's™ technologies utilize cold plasma, which produces an electrostatic charge, an agglomeration, and a nonthermal flameless plasma. This results in the independently proven deactivation of viruses, bacteria and pathogens. This is the safest and best air purification method available for use throughout all buildings and transportation vehicles.

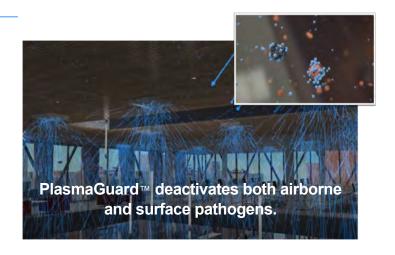
As 99% of homes, buildings and transportation vehicles currently use dust filters as defense systems, our proprietary and patented state-of-the-art air pollution control equipment has the highest possible removal rate and efficiency for toxic solid and liquid particles regardless of their chemical composition and size.



### **How it Works**

### The Patented Process Delivers Pure Air to Buildings and Transportation Vehicles.

PlasmaGuard™ is the first line of defense to protect and increase air quality. Our ions deactivate the outer protein lipid bi-layers of almost all pathogens. It is the ultimate solution for anyone suffering from asthma, allergies, migraines, and boosts overall health, wellness, energy and productivity. Our systems can be ceiling mounted, or connects to any existing air duct system before or after the main HVAC unit.





99.994%

PlasmaGuard PRO inactivates SARS-CoV-2 (COVID-19) to 99.994% within minutes

PlasmaGuard PRO™ reduced SARS-CoV-2 (COVID 19) viruses by 49.5% after15-minutes, and attained a 97% reduction after 30-minutes. At the 60-minute mark, the viral decay rate had already achieved 99.994% viral inactivation (>4 Log Reduction)

**FEWER** 

**HIGHER** 

Sick Building Symptoms and better environmental



perceptions

Scores

Increased 6.4% **Awareness** and Sleep Quality



Reduce Allergens and **Asthma Triggers** 

PlasmaGuard™ reduces 99.8% of all airborne allergens and 99.5% of all airborne asthma triggers including: dust, pollen, smoke, bacteria, viruses, pathogens, etc.



	PlasmaGuard ELT™ PlasmaGuard STAX™	PlasmaGuard PRO™	Typical Ionizers	Media Filtration	UV
Destroys all Pathogens on 1st Pass	<b>4</b>	×	×	×	×
Capture/Reduce Contaminants	~	~	×	¥	×
Significantly Reduces Surface Contamination	~	~	×	×	×
Continuously Disinfects Ducts	<b>~</b>	*	×	×	×
Reduces Odors	<b>~</b>	~	~	×	×
Reduces VOCs	<b>~</b>	4	~	×	×
Reduces Particles (PM)	<b>~</b>	~	~	~	×
Effective on Bacteria, Viruses and Germs	~	~	~	×	~
No Chemical or By-Products	<b>~</b>	~	~	~	×
Maintenance	NONE	Bi-Annually	Bi-Annually	Quarterly	Annuall

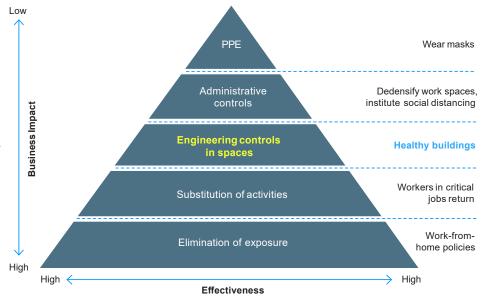
### **Above The Rest**

Traditional HEPA filters only seize pollutants and contaminants greater than 5 microns in size, but not efficient enough to capture highly harmful pathogens and contaminants that exist today. PlasmaGuard PRO™ works harmoniously with your HVAC unit and destroys harmful pathogens and contaminants as small as 0.05 microns in size, ensuring that the purest air possible is always available to you.

# The Role Of Healthy Buildings in Reopening

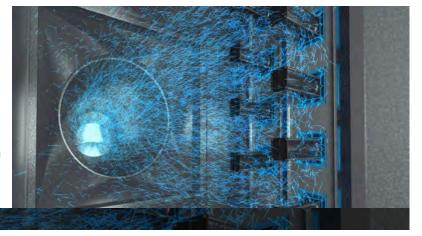
Creating a healthy building through engineering controls in spaces is a key component of combating COVID-19. It's a strategy that balances overall effectiveness with the financial impact it can have on the business.

Allen, J.G., & Macomber,J.D. (2020, April). "What Makes an Office Building "Healthy." Harvard Business Review



## **Protecting Our Education**

Our goal at PlasmaGuard™ is to protect our eduication system to allow our kids and country to grow. Using the air flow from your existing HVAC fan, the PlasmGuard PRO™ purification unit bombards the air with millions of aircleaning oxygen ions, removing particulates, eliminating germs, and breaking down VOCs. The result is that every vent in your home or small office becomes its own air purification unit, treating indoor airborne pollution problems at the source. The purification unit uses the power of nature to clean, refresh, and energizes the air you breathe.



## **Real-Time Monitoring**

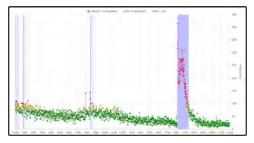
We are the only company that provides a sensor inside the room so you can visually detect and monitor our particles in the occupied space. As particulates from .3 mircons to 10 microns enter the room, the sensor will communicate with the PlasmaGuard generator to flood the room with lons to destroy the particles.





## **Monitor Your Air From Anywhere**

The PlasmaGuard™ system allows one to monitor your protected space 24/7 from your phone or computer. The PlasmaGuard™ systems continuously operating with your existing HVAC system. This ensures not only rapid pathogen/contaminant reduction, but also ensures that excess reactive ion species are always available in the air to rapidly respond to any air quality threat. This benefit ensures that your air is protected even before it enters the HVAC system. The PlasmaGuard™ systems are designed to give you the ultimate in confidence that you have provided the cleanest cycle of clean air possible.



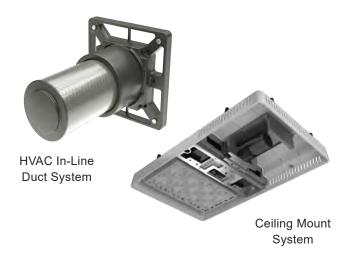




### **SPECIFICATIONS**

SPECIFICATION	PG-PRO		
Supply Voltage	100-240 VAC		
Energy to operate	<10 Watts		
Secondary Voltage (Ionization)	4K-5K V		
Capacity - Up to 3000 CFM	300-1500 CFM (UL Test); >3000 CFM Capability		
Capacity - Covers 2,000+ Square Feet	Yes		
Central Duct-Mounted Installation	Yes		
Method of Purification	Bi-Polar Cold Plasma Air Ionization		
Eliminates Indoor Ozone	Yes - Patented "Ozone Depletion Mode"		
Ozone Filtration	Yes - Patented Ozone Filter		
Works on Demand from actual IAQ sensor readings	Yes		
User Adjustable Clean Air Settings	Yes		
3rd Party Lab Validation on reduction of viruses, bacteria, pollens, etc	Yes		
Visual Display of Air Quality by Color Code	Yes		
Visual Display of Air Quality by Numeric Value	Yes		
Pairs with IAQ Sensor	Yes		
Built-in Ozone Sensor	Yes		
Built-in Air Particulate Sensor	Yes		
Real-Time Feedback	Yes		
Cloud-Based IoT Connection Capability	Yes		
Does System have ability to gather other sensor data of interest	Yes		
Can System directly integrate with Home Automation technology	Yes		
Can System directly integrate with Smart Phones	Yes		
Can System Status be sent to Owner / Operator by text or email	Yes		
Can System integrate with Smart Filter Sensor technology	Yes		
UL Listed Device	Yes for UL 867, UL 2043		
UL Tested Ozone Output below CARB Standards of 50ppb	Yes (<10 ppb max)		
FCC Compliance	Yes		

## We Deliver Air Security When and Where You Need it Most





PlasmaGuard PRO™ is an in-line HVAC or ceiling mounted air purification system. Our patented blend of high energy ions floods the area and begins the purification process immediately and attack air and surface contaminants while driving particles out of the air and neutralizing odors. Each unit will cover up to 3,000 sq ft of area, but can be combined with other units for larger spaces. This ensures that you and your family are always breathing the cleanest air possible.

## What We Protect and Serve

#### Students and Faculty



Classrooms

Lunchrooms



Bathrooms

#### **Families and Guests**



**Board Meetings** 



Sporting Events / Concerts



Graduations

### **Buildings and Transportation**



School Busses



Building with HVAC



**Buildings without HVAC** 

