



*American Energy Management, 221 Boston Post Road East, Marlborough, MA 01752  
 Phone 508/480-8200 Fax 508/485-0669*

June 25, 2020

Mr. Tim Rivers  
 Buildings and Grounds  
 Framingham Public Schools  
 454 Water Street  
 Framingham, MA 01701

Dear Mr. Rivers:

Thank you for the opportunity to provide pricing for the installation of GPS Needlepoint Bipolar Ionization systems in the Framingham Public Schools. The GPS system helps to clean the air by discharging positive and negative ions into the air stream and plays an important role in a comprehensive air quality strategy. Ionization has been around for many years but this particular technology is less than 15 years old. It involves installing ionizers that generate positively and negatively charged particles to be circulated through the HVAC system into the conditioned airstream. The primary benefits are elimination of dust, odors, allergens and pathogens (including bacteria and virus).

For the purposes of this proposal we have broken down the HVAC systems by Univent, Small Air Handler (less than 5000 CFM) and Large Air Handler (over 5000 CFM). A summary of the systems and cost follows:

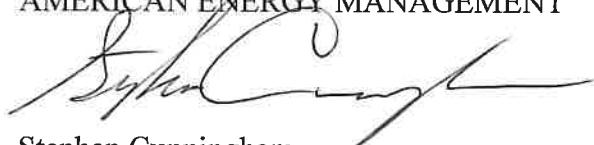
#	Location	Univents	Small AHU	Large AHU	Cost
1	High School	0	17	24	\$186,860
2	Walsh	67	10	4	\$64,220
3	Cameron	0	1	6	\$43,175
4	Wilson	0	1	6	\$43,175
5	Barbieri	0	1	12	\$79,420
6	McCarthy	41	5	2	\$43,990
7	Fuller	81	8	4	\$79,430
8	Stapleton	33	1	0	\$31,310
9	Hemenway	31	7	0	\$31,240
10	King	25	2	0	\$21,650
11	Juniper Hill	24	1	0	\$19,965
12	Dunning	31	2	0	\$26,250
13	Potter Road	32	5	0	\$50,620
14	Brophy	31	7	0	\$32,360
	<b>Totals</b>	<b>396</b>	<b>68</b>	<b>58</b>	<b>\$753,665</b>

These systems can be retrofitted fairly easily to most types of HVAC equipment and have very low long-term operating and maintenance cost. A major ancillary benefit is that it reduces the amount of fresh air needed to satisfy ASHRAE 62.1. The needlepoint version of this technology is self-cleaning and creates no ozone, solving problems inherent with earlier ionization solutions. The equipment is readily available, with a standard lead time of 2-3 weeks.

AEM will provide the GPS systems, necessary site evaluations, installation, and testing.

If you have any questions regarding this, or if you need anything else, please don't hesitate to call me. Thank you for your continued support and cooperation.

Very truly yours,  
AMERICAN ENERGY MANAGEMENT

A handwritten signature in black ink, appearing to read "Stephen Cunningham". The signature is fluid and cursive, with a large initial "S" and "C".

Stephen Cunningham  
Vice President of Sales



## **Global Plasma Solutions Virtually Eliminates Static SARS-CoV-2 with Proprietary NPBI™ Technology**

***Global Plasma Solutions is the first air purification solution to test SARS-CoV-2, achieving a 99.4% reduction of the surface strain within 30 minutes***

June 10, 2020 02:30 PM Eastern Daylight Time

CHARLOTTE, N.C.--(BUSINESS WIRE)--[Global Plasma Solutions](#), the leader in Indoor Air Quality, announced today industry-leading ionization testing results, demonstrating a 99.4% reduction rate on a SARS-CoV-2 (COVID-19) surface strain within 30 minutes, the first instance in which an air purification company has effectively neutralized SARS-CoV-2. Following initial testing of coronavirus 229E in March 2020, Global Plasma Solutions utilized its proprietary [needlepoint bipolar ionization](#) to inactivate SARS-CoV-2. The study was jointly executed with [Aviation Clean Air](#).

In this laboratory study, Aviation Clean Air designed a test to mimic ionization conditions like that of a commercial aircraft's fuselage. Based on viral titrations, it was determined that at 10 minutes, 84.2% of the virus was inactivated. At 15 minutes, 92.6% of the virus was inactivated, and at 30 minutes, 99.4% of the virus was inactivated.

"The testing results we achieved through our proprietary needlepoint bipolar ionization technology clearly demonstrate that Global Plasma Solutions is the gold standard in air purification," said Global Plasma Solutions Founder and Chief Technology Officer, Charles Waddell. "For any kind of facility from commercial buildings to aircrafts, delivering the cleanest, safest indoor air environment will only become increasingly more important, and our ozone-free technology is one of the most sophisticated products on the market."

### **Understanding needlepoint bipolar ionization**

Needlepoint bipolar ionization works to safely clean indoor air, leveraging an electronic charge to create a high concentration of positive and negative ions. These ions travel through the air continuously seeking out and attaching to particles. This sets in motion a continuous pattern of particle combination. As these particles become larger, they are eliminated from the air more rapidly.

Additionally, positive and negative ions have microbicidal effects on pathogens, ultimately reducing the infectivity of the virus. Global Plasma Solutions' needlepoint bipolar ionization is ozone-free and the only kind in its category to pass the RCTA DO-160 standard for aircraft. Traditional bipolar ionization systems produce harmful ozone as a byproduct.

### **About Global Plasma Solutions**

Global Plasma Solutions (GPS) is the leader in Indoor Air Quality, with over 30 patents and more than 150,000 installations worldwide using our needlepoint bipolar ionization (NPBI) technology to deliver clean indoor air that is safe and healthy – producing neither ozone nor other harmful by-products. All of our NPBI products are UL and CE certified and registered and use NPBI to purify the air by eliminating airborne particulates, odors and pathogens. GPS was founded in 2008 and is headquartered in Charlotte, North Carolina.

## Contacts

Kevin Boyle

[kevin.boyle@globalplasmasolutions.com](mailto:kevin.boyle@globalplasmasolutions.com)

(980) 214 2021

# Sales Order 273954-A

Customer No. FRAMPS

\*\*\*\* THIS IS A BID/ESTIMATE \*\*\*\*

**Airex Filter Corporation**

17 Executive Dr  
Hudson, NH 03051  
Fax # 603-821-3070  
Telephone 800/660-2298

Bill To:

**FRAMINGHAM PUBLIC SCHOOLS  
ACCOUNTING DEPARTMENT  
31 FLAGG DR., #2  
FRAMINGHAM, MA 01702-5928**

Ship To:

**QUOTE  
FRAMINGHAM, MA 01702-5928**

**APRIL 2015: FULLER MIDDLE SCHOOL'S ODD SIZES MUST BE ES !!!!!  
PM'S 2/16 PM'S Tim said 82r's are too restrictive**

Date		Ship Via		F.O.B.		Salesperson		Order Payment Terms		
06/26/20		OUR TRUCK		EXEC DRIVE		DB		NET 30 DAYS		
Purchase Order Number			Order Date		Freight Billing Terms		Freight Account Number		Our Order Number	
QUOTE			06/26/20						None	
Required	Shipped	Back Ord.	No. Ctns	Item Number	Estimated Date	Unit Price	Amount			
				Description						
4				PMX16242 16X24X2 PMX-HC MERV 8 PLEAT	07/13/20	3.73	14.92			
76				PMX20202 20X20X2 PMX-HC MERV 8 PLEAT *	07/13/20	3.37	256.12			
20				PMX20242 20X24X2 PMX-HC MERV 8 PLEAT	07/13/20	4.32	86.40			
76				PMX20252 20X25X2 PMX-HC MERV 8 PLEAT *	07/13/20	3.83	291.08			
38				PMX12242 12X24X2 PMX-HC MERV 8 PLEAT	07/13/20	2.70	102.60			
92				PMX24242 24X24X2 PMX-HC MERV 8 PLEAT	07/13/20	4.28	393.76			
48				AP950012HP 20X20X12 95% POLY AIRPAK W/HDR	07/13/20	44.73	2147.04			
59				AP950412HP 20X24X12 95% POLY AIRPAK W/ HDR	07/13/20	44.73	2639.07			
41				AP952412HP 12X24X12 95% POLY AIRPAK W/HDR	07/13/20	35.32	1448.12			
86				AP954412HP 24X24X12 95% POLY AIRPAK W/HDR	07/13/20	46.43	3992.98			

**ATTENTION: All new orders will be held until next business day before entering production. Any changes, including adding items must be done before 9AM of the following day. Once in production no changes can be made.**

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Date	Ship Via	F.O.B.	Salesperson	Order Payment Terms			
06/26/20	OUR TRUCK	EXEC DRIVE	DB	NET 30 DAYS			
Purchase Order Number	Order Date	Freight Billing Terms	Freight Account Number	Our Order Number			
QUOTE	06/26/20			None			
Required	Shipped	Back Ord.	No. Ctns	Item Number	Estimated Date	Unit Price	Amount
				Description			
78				GP10016202 16X20X2 MERV 13 GREEN PLEAT	07/13/20	5.78	450.84
14				GP10016252 16X25X2 MERV 13 GREEN PLEAT	07/13/20	6.86	96.04
58				GP10020202 20X20X2 MERV 13 GREEN PLEAT	07/13/20	6.93	401.94
38				GP10020242 20X24X2 MERV 13 GREEN PLEAT	07/13/20	8.96	340.48
139				GP10020252 20X25X2 MERV 13 GREEN PLEAT	07/13/20	8.31	1155.09
8				GP10012242 12X24X2 MERV 13 GREEN PLEAT	07/13/20	5.35	42.80
4				GP10024242 24X24X2 MERV 13 GREEN PLEAT	07/13/20	9.16	36.64
1				SHIP SHIPPING AND HANDLING CHARGES	07/13/20	0.00	0.00

**ATTENTION: All new orders will be held until next business day before entering production. Any changes, including adding items must be done before 9AM of the following day. Once in production no changes can be made.**

NonTaxable Subtotal	13895.92
Taxable Subtotal	0.00
Tax	0.00
<b>Total Order</b>	<b>13895.92</b>

[Home](#) / [Heating, Venting & Cooling](#) / [Air Quality](#) / [Air Purifiers](#)

Internet #206997034    Model # 116102    Store SO SKU #1001773704



[Save to Favorites](#)

### Winix

5500-2 Air Cleaner with PlasmaWave Technology


(285) [Write a Review](#)

(\$168.99 /unit)

# \$168.99

Save up to \$100<sup>o</sup> on your qualifying purchase.  
[Apply for a Home Depot Consumer Card](#)

#### How to Get It

 <p><b>Ship to Store</b> Pickup Jun 30 - Jul 3</p> <p><b>FREE</b></p>	<p><b>Ship to Home</b> Get it by Wed, Jul 1</p> <p><b>FREE</b></p>	<p><b>Scheduled Delivery</b> Not available for this item</p>
--	--	--

We'll send it to **Natick** for **free pickup**.  
[Change Store](#)

**LET'S PROTECT THIS.**  
Add a 2-year Home Depot Protection Plan for \$22.50  
[Learn More](#)





Add to Cart

Your Fastest Checkout  
[Turn on Instant Checkout](#)

— or —

Buy now with

We're unable to ship this item to homes and stores in: AK, GU, ..., VI

## Product Overview

Cleans indoor air effectively

Washable filter

Fan operates at four speeds

**Model #:** 116102

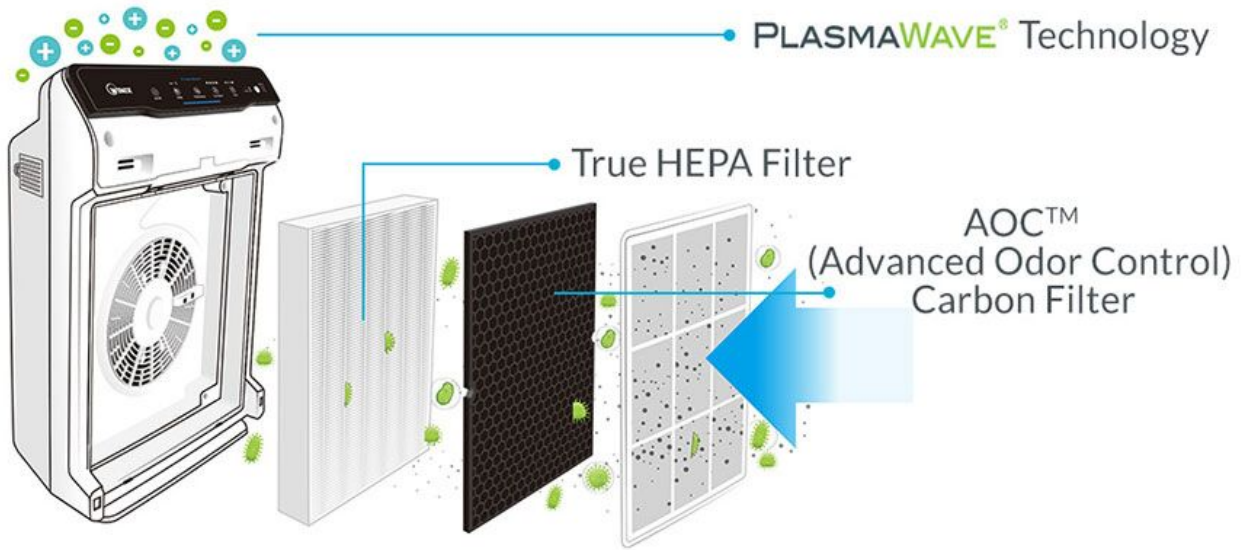
**Internet #:** 206997034

The Winix 5500-2 Air Cleaner replaces the wildly popular 5500-2 model; designed for any home environment and ready to capture Dust, Pollen, Pet Dander, Smoke, Mold Spores, Volatile Organic Compounds, and Household Odors. With a tremendous CADR (Clean Air Delivery Rate) rating from AHAM (Association of Home Appliances Manufacturers), this unit is best used for medium to large living spaces, kitchens, or bedrooms. The Winix 5500-2 uses a 3-Stage Air Cleaning System, featuring a Washable AOC Carbon Filter, 99.97% True HEPA Filter, and Winix PlasmaWave Technology. AHAM Rated for rooms up to 360 sq. ft.

- 3-stage filtration
- Washable AOC Carbon Filter, especially formulated to capture offensive smoke, cooking and other household odors; the filter also captures large particles like hair, carpet fibers and dust adding life to your filter
- True HEPA filter captures 99.97% of airborne pollutants and allergens as small as 0.3 microns
- PlasmaWave technology breaks apart pollutants at a molecular level without producing harmful ozone
- Air quality sensor provides set-and-forget operation
- ENERGY STAR certified
- Change filter alert
- AHAM CADR rating for rooms up to 360 sq. ft.
- Sleep mode: Puts unit at quiet fan speed and dims indicator lights
- Light Sensor- Automatically puts unit at quiet fan speed and dims indicator lights when room is dark
- 4 Fan Speeds (Quiet, Medium, High, Turbo)



## 3 Stage Air Purification System



### AOC™ (Advanced Odor Control) Carbon Filter

Great odor protection against; VOCs and household odors from cooking, pets and smoke.  
Washable to extend the life of the filter.

# Filter Replacement

Lights up when it's time to replace your filter



Check Filter



## PlasmaWave® Technology

creates Hydroxyls to instantly neutralize bacteria, VOCs, odors and gases; while emitting no harmful ozone



**WINIX**    Auto    PLASMAWAVE®    1hr 4hr 8hr    Smart Sensor

On/Off    Mode    PlasmaWave    Fan Speed    Timer    Check Filter    Reset

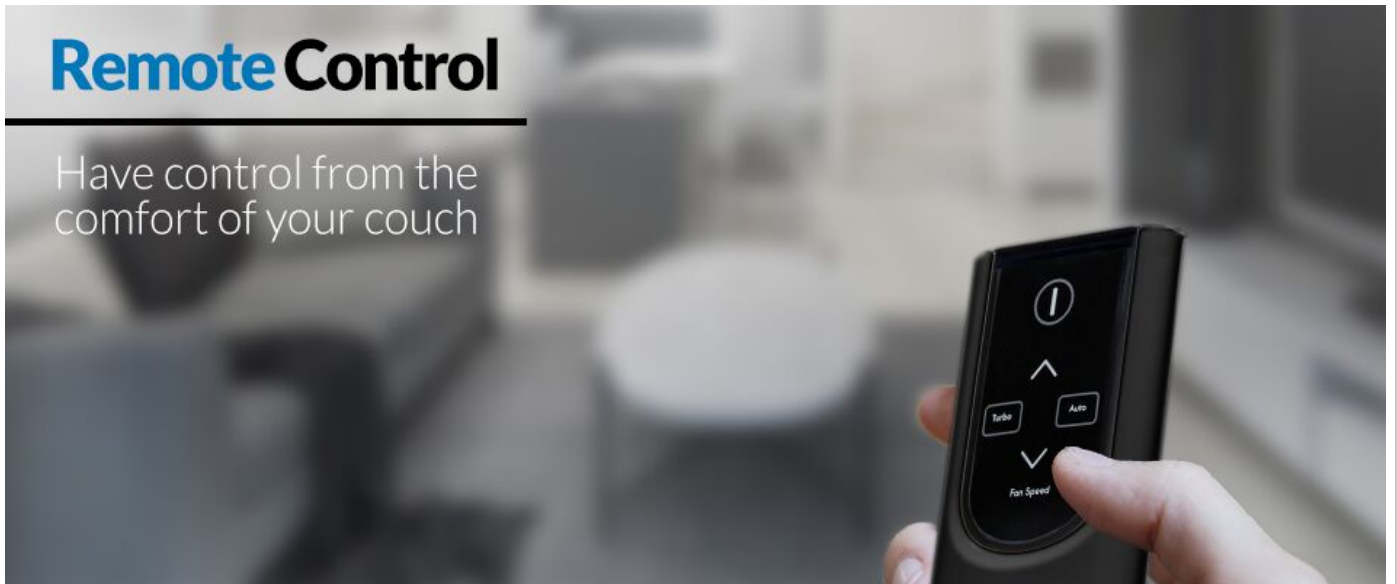
STEP. 1	STEP. 2	STEP. 3
Generates Plasma Ions	Ions Attach to Particles	Releases Clean Air





## Remote Control

Have control from the comfort of your couch



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- [Click here for more information on Electronic Recycling Programs](#)

### Info & Guides

- [Use and Care Manual](#)
- [Warranty](#)

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Specifications



Recently Viewed Items



**Winix 5500-2 Air Cleaner with PlasmaWave**

(284)



**Winix D480 3-Stage True HEPA Air Purifier**

(69)



**Winix 5300-2 Air Cleaner with PlasmaWave**

(221)



**Honeywell PowerPlus True HEPA 530 sq. ft.**

(9)