

# Vayutron™

## Advance Space Sanitization Solution

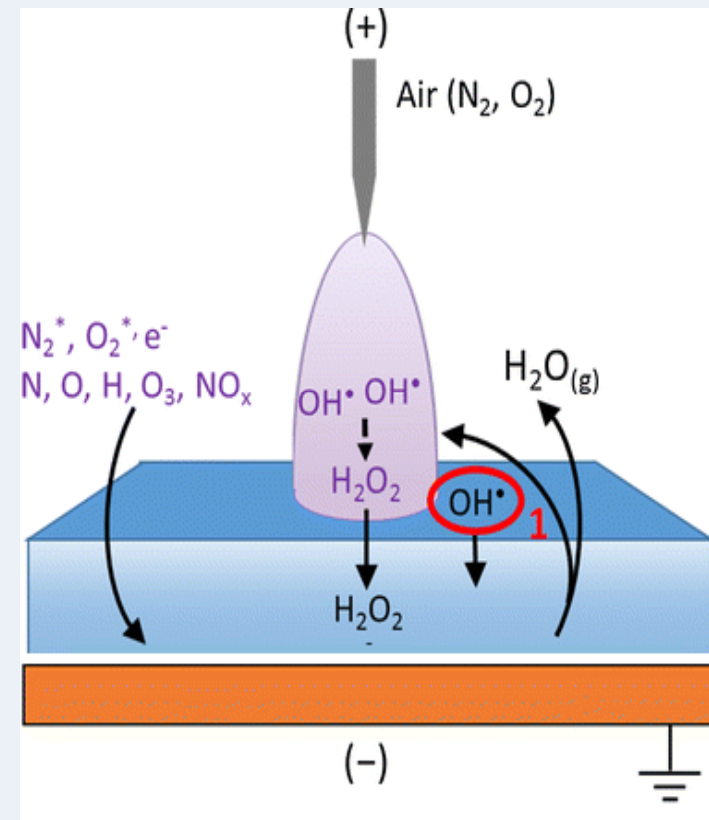


- Operating Principle
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# Operating Principle

1. HV Generator Produces High Energy Potential Difference between two Electrodes
2. Generated Corona Discharge can split gas Molecules into sub molecules and high voltage Electric Field Produces Ions
3. Ambient Air is passed through the electrode Set
4. Gas Molecules in the Air Gets Ionized and Molecules Like H<sub>2</sub>O (Water Vapors from Humidity) split into Hydroxyl Ions
5. The Generated Radical Ion Mixture is highly Reactive; but has definite lifetime in free Air
6. The Mixture Is spread in the ambient Air, reacting with Suspended Particles in Air and on surfaces coming in Contact
7. Hydroxyl Ions when come in contact with Protein Layer on Virus Body Shell, react and dissolves it, rendering the Virus Inactive, losing its ability to multiply





**The Ions Form Cluster Around Suspended Particles such as Dust, Pollen, Allergens, Smoke and these particles settle down**

**The Hydroxyl Ions React with Viruses, Bacteria, Molds, Bad Odor Causing Molecules and convert them in neutral form**





# Features

- Configurable Area Size from 100 to 1000 Sq Feet  
(Sanitization Time Depends on Configured Area Ranging from 20 min to 90 Minuets)
- Configurable Schedule based Operation, 8 Schedules can be configured, ensure sanitized space 24x7.
- Two Operating models to suit user preference and type of Sanitization required
  - Normal Mode: De-activates Virus, Bacteria, Molds, Bad Odor Perform at least one cycle in this mode per day
  - Mild Mode: De-activates Bad Odor, Suspended Particles in Air, Smoke etc
- Convenient Wall Mount or Table top usage, no special installation required.
- Automatic Operation 24x7, once configured
- Consumes 50VA during Normal Mode, 25VA during Mild Mode and Less than 3 VA in standby, no other chemical or user replaceable filter accessories etc required



# How to Use It?

- Mount it on High Wall: Ions are heavier than air tend to settle down, higher position will provide more reach
- Configure Schedule matching your requirement, select appropriate mode, by Selecting “Timer Menu”
- Configure the Area Size, Set Clock and Select Mode for Manual Operation from Menu
- Use at least one Normal Mode Disinfection Cycle once Day, prefer no Humans and Pets Around. It might be uncomfortable for few!
- The area needs to be closed, so that no fresh air enters during the cycle. Make provision for external air circulation using ceiling fan or pedestal fan, so that the Ions reach in all places and Corners.
- Ideally in Normal Mode once before Office Starts and one after office hours.
- Mild Mode can be programmed multiple times at a regular interval.



## FAQ

### Vayutron is an Air Purifier?

Vayutron don't filter the Air, just Generate Ions from Air Intake and spreads in the Air back from Exhaust

### The Generated Ions are Harmful to Children or Food?

Rest Assured , the Ions are not harmful in fact after disinfection cycle the area smells fresh. Ionization is very old technique and used in many Medical and industrial applications.

### Why No Humans, Pets preferred in “Normal Mode” Operation?

In Normal Mode Disinfection Cycle the area is closed from fresh Air and during Ionization free Oxygen Level reduces, few people might not feel “Normal” and extended exposure might lead to headache and nausea.

### Does it Generate Hazardous “Ozone”?

Vayutron being Ionizer does generate Ozone, but the level is well below allowable Safe Limit for exposure to Humans.



## Competition: wellisair



- Generates Hydroxyl Ions
- Cartridges are required to be replaced every 3 months
- Patents, Certificates and Customers Installations certificates available.
- Test Report from Lilavati Hospital, Microbiology Research Centre on nCov2 Virus Disinfection





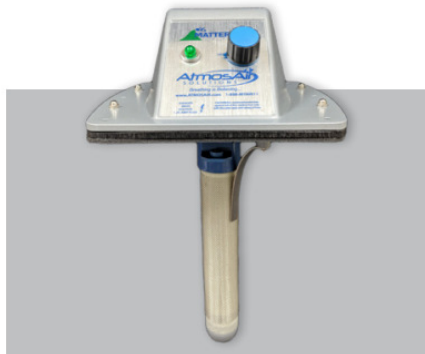
# Competition: Atmosair

- UL Certified Product
- Patents, Customer Testimonials, Certifications available
- Suitable model for retrofit on Central Air Conditioning Systems

the AtmosAir Matterhorn Series device against Human Coronavirus Strain 229E at contact times of 30 minutes, 60 minutes, and 120 minutes. The researchers observed the viruses activity on a controlled surface and on a surface treated with the AtmosAir Matterhorn Series at varying temperatures.

## Matterhorn 1000

ATMOSAIR  
SOLUTIONS



### SPECIFICATIONS

#### General Product Information

Air Flow Rating	Up to 2500 CFM
Pressure Drop	See Figure 1
Housing Material	Flame-Rated, High Impact ABS (Underwriters Laboratories Inc. pending as plenum-rated per UL 1995, 867; file # 313742. Energy Star Certified.)
Weight	6.0 lbs
Max Operation Temp.	200°F (~93°C)

#### Electrical

MICROCHEM LABORATORY,  
FOUND THAT:

*The presence of coronavirus was reduced by **99.92% within 30 minutes** of exposure to AtmosAir's bi-polar ionization technology*