

EXPERIENCE THE POWER AND BEYOND

Powered by QuadSystem™ Technology, the NanoLab Pro™ Air Sterilizer NAS12000i will effectively purify, ionize and sterilize your surrounding air for the highest air security protection. Be assured of complete air quality management as the unit eliminates airborne bacteria and viruses over a large coverage area. Used in homes, clinics, childcare centres, offices, trust in the NAS12000i to give optimum and protected indoor air and beyond every day.

One of a kind in the world, an air cleaner with an ozone generator function.











THE KEY SPACES

WE STAY IN OR VISIT MOST FREQUENTLY

**INDOOR AIR QUALITY CAN BE 2 TO 5 TIMES, OR
OCCASIONALLY 100 TIMES MORE POLLUTED THAN THE AIR OUTSIDE.**



THE COMMON TYPES OF INDOOR AIRBORNE CONTAMINANTS

Virus Size: 0.003 – 0.05 µm 	Sources <ul style="list-style-type: none"> • Small respiratory droplets that become aerosolized when an infected person sneezes or coughs 	Dust Size: 1 – 100 µm 	Sources <ul style="list-style-type: none"> • Wall-to-wall carpet • Blinds • Down-filled blankets • Feather pillows • Heating vents with forced hot air • Dogs and cats • Closets full of clothes 	Pollen Size: 10 – 100 µm 	Sources <ul style="list-style-type: none"> • Outdoor/ Indoor plants • From grasses, trees, flowers and weeds
Tobacco Smoke Size: 0.01 to 1 µm 	Sources <ul style="list-style-type: none"> • Cigarette • Tobacco pipes • Cigars 	Haze Particulates Size: ≤ 2.5 µm 	Sources <ul style="list-style-type: none"> • Agriculture fires • Fine dust, particulates and smoke accumulates in relatively dry air 	Mold Spores Size: 10 – 30 µm 	Sources <ul style="list-style-type: none"> • Survives under harsh environmental conditions or dry conditions
Bacteria Size: 0.3 – 30 µm 	Sources <ul style="list-style-type: none"> • Toilet • Kitchen/Pantry • Sponges • Garbage disposal • Dish towel 	Animal Dander Size: Approx. 2.5 µm 	Sources <ul style="list-style-type: none"> • From pets • Sticky and light, it easily attaches itself to clothes, shoes, and hair 	Plant Spores Size: 10 – 30 µm 	Sources <ul style="list-style-type: none"> • Outdoor/ Indoor Plants • Typically transported between plants either by insects or wind
Skin Flakes 5-10 microns 	Sources <ul style="list-style-type: none"> • Mattress • Pillow • Long-fibred carpets • Upholstered furniture 	Textile fibres Size: 10 – 1000 µm 	Sources <ul style="list-style-type: none"> • Natural sources (animal fur, plant based and insect cocoons) • Synthetic methods that uses polymer-based materials 	Dust Mites Size: 100 – 300 µm 	Sources <ul style="list-style-type: none"> • Carpets • Soft/plush toys • Beddings • Upholstered furniture

DO YOU KNOW?

A SINGLE SNEEZE can produce up to 40,000 respiratory secretion droplets. Within these secretion droplets, it may contain high volumes of infectious viruses/bacteria. Though insignificant in size, these viruses and bacteria are ever ready to infect.

STUDIES HAVE SHOWN that pathogenic viruses can survive for minutes to hours on surfaces, while bacteria can survive for days to weeks. Many of us spend a large portion of our time indoors. Yet, little do we understand about the microbial diversity on indoor surfaces.

EXAMPLE

Influenza

It is a highly contagious respiratory disease that can affect any individual.

Commonly transmitted from person to person via respiratory droplets.

WHAT IS INFLUENZA?

Influenza is caused by the three main types of viruses, namely, Type A, Type B and Type C

WHAT ARE THE SYMPTOMS?

HIGH FEVER . SORE THROAT . COUGHING . HEADACHE . MUSCLE ACHES . STUFFY NOSE . FATIGUE



Persistent high fever from 38°C to 41°C, severe headaches and extreme exhaustion are common symptom for flu.

NOT JUST AIRBORNE GERMS AND ALLERGENS. POSSIBLE SURFACE-BOUND BACTERIA & VIRUSES FOUND ON COMMON SURFACES.



WASHING
AREA



CLEANING
CLOTH/SPONGES



BATH/WASH
ROOMS



SHARED
TOYS



HANDHELD
REMOTES



TOUCH
SCREENS



OFFICE
EQUIPMENTS



ELEVATOR
BUTTONS

EXAMPLE

Hand, Foot and Mouth Disease (HFMD)

It has been prevalent in Singapore in recent years, affecting young children.
Commonly transmitted through personal contact and air droplets.

WHAT IS HAND FOOT MOUTH DISEASE?

HFMD is an illness caused by intestinal
viruses, the common strains being

COXSACKIE VIRUS A16

and

ENTEROVIRUS EV71

WHAT ARE THE SYMPTOMS?

FEVER . SORE THROAT . DECREASED APPETITE . LETHARGY . RASH . ULCERS



Sores or blisters may appear in or on the mouth and
on the hands, feet, and sometimes the buttocks.

*Suppressing the bacteria that causes aerosolized bacteria,
infections, pollen, and other air pollutants.*

*Up to 99.95% of particle matter size 2.5 (PM2.5) virus can be suppressed.
This machine can keep the room environment clean by using ozone.*

"Ozone can suppress the coronavirus..."
EVIDENCE FROM NARA MEDICAL UNIVERSITY IN JAPAN.

Hospital air purifiers/ fresher/cleaner/Generator/ Ionizer/ Anion Generator/HEPA filter, Air cleaner

Model No.: NAS12000i

Function:

1. With 8 kind of filter system, make sure to give you a good quality air;

HEPA net + Hight density active carbon + Cold Catalyst + Honeycomb activated carbon +
Light Catalyst Net + ozone/anion sterilization;

2. The most advanced cold catalyst technology;

can absorb and decompose formaldehyde, break down
formaldehyde and other toxic gas into carbon dioxide and water.

3. Advanced UV Nano Photo Catalytic Oxidation:

ULTRAVIOLET LIGHT AND TITANIUM DIOXIDE (TiO₂) CATALYST BOOSTS THE UNIT'S AIR
PURIFYING CAPACITY. PRODUCING HYDROXYL RADICAL (OH•) AND SUPEROXIDE ANION(O₂⁻),
AIRBORNE GERMS AND VOLATILE ORGANIC COMPOUNDS (VOCS) ARE EFFECTIVELY
OXIDIZED AND ELIMINATED, KEEPING THE SURROUNDING AIR FREE FROM HARMFUL
POLLUTANTS.

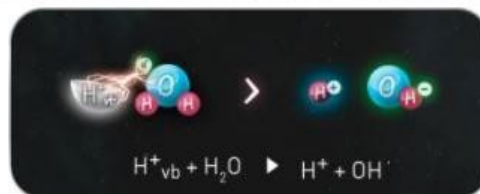
ADVANCED UV NANO PHOTOCATALYTIC-OXIDATION

Results from the interaction between UV light rays and Titanium dioxide TiO₂ filter. Reactive oxidants such as Hydroxyl radical (OH•) and Superoxide anion (O₂⁻) produced in the process
attached instantly onto airborne germs and eliminate them by oxidizing and weakening their cell membrane and protein coat.

FORMATION OF HYDROXYL RADICALS (OH•) AND SUPEROXIDE ANION (O₂⁻)



UV light rays react with Titanium Dioxide (TiO₂) to form
valence band hole (H⁺_{vb}) and conduction band electron
(e⁻_{cb}). Simultaneously, they will react respectively with the
water molecules (H₂O) and oxygen molecules (O₂) in the
air.



The valence band hole (H⁺_{vb}) extracts electron from
water molecules (H₂O) to form Hydroxyl radical (OH•).



Oxygen present in the air receives the conduction band
electron (e⁻_{cb}) and form Superoxide anion (O₂⁻).

4. With LCD screen + Touch Button + Remote control, Easy to operation;

5. Timing function, 1/ 2/ 4/ 8 hours you can choose;

6. 2 operation model: Auto and Manual;

Auto mode: the device will auto adjust the motor/fan speed according to the air quality, make
sure to give you the fresh air, and make full use of the auto function.

Manual mode: you can adjust the motor/ fan speed manually;

NanoLab SG PVT LTD.

7. Auto protection function

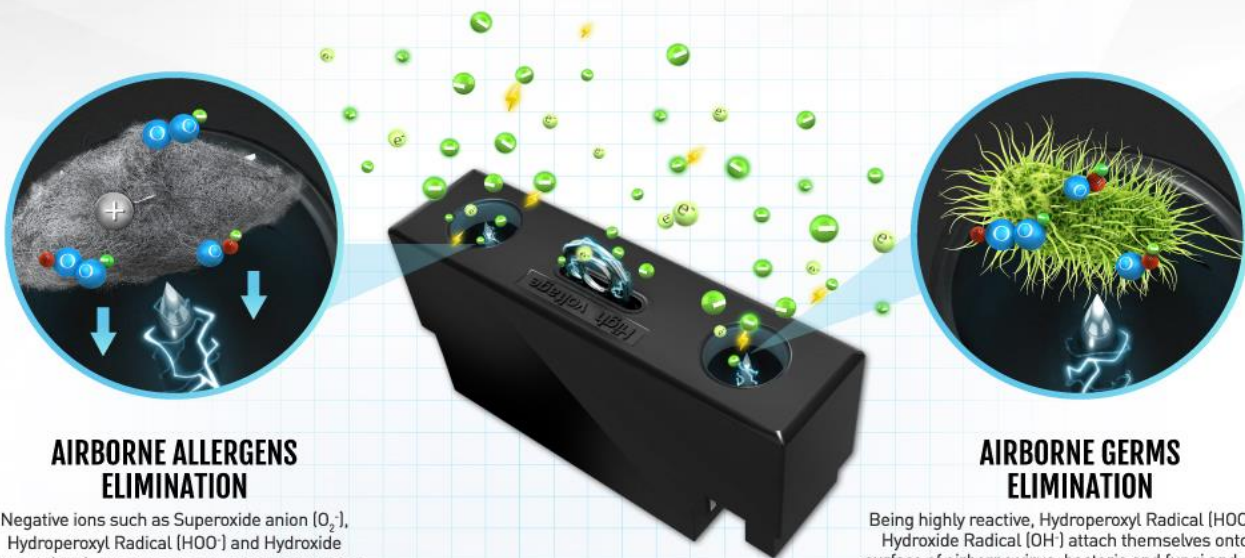
when the front suddenly be moved, the device will auto power off.
(we suggest to power off before you move the front cover)

8. Negative Ions

Producing **millions of Negative Ions per cm^3** to purify your surrounding air and eliminate **airborne allergens and germs**. Negative Ions attaches onto Positively charged airborne allergens making them too Heavy to remain in our Breathing zone. Concurrently, Hydroxide Radical & Hydroperoxyl Radical breakdown the **cell membrane and protein coat** of airborne germs. **Negative ions also aid in stress relief, boost energy levels and increase overall alertness**. 30 minutes after negative ion intake, the lung is able to inhale 20% more oxygen and exhale 14.5% more carbon dioxide, they greatly benefit people's health and everyday routine, which can facilitate body growth and disease prevention.

COUNT ON THESE NEGATIVE IONS

FOR CLEANER AND FRESHER INDOOR AIR QUALITY!



AIRBORNE ALLERGENS ELIMINATION

Negative ions such as Superoxide anion (O_2^-), Hydroperoxyl Radical (HOO^\cdot) and Hydroxide Radical (OH^\cdot), rid airborne allergens by attaching on to positively charged allergens, making them too heavy to remain in our breathing zone,

AIRBORNE GERMS ELIMINATION

Being highly reactive, Hydroperoxyl Radical (HOO^\cdot) and Hydroxide Radical (OH^\cdot) attach themselves onto the surface of airborne virus, bacteria and fungi and extract the Hydrogen Atoms (H) from their protein coat and cell membrane. Ultimately, with the damaged protein coat and cell membrane, airborne germs are unable to survive and thoroughly eliminated.

Water vapour (H_2O) is formed and dispersed back into the air as a result of the combination of extracted Hydrogen Atoms (H) and Hydroxide Radicals (OH^\cdot).

Air Pollution Occurs... outdoors, but it also appears in the examination and hospital rooms. Invisible to the naked eye, the air in these presumably sterile rooms are also Contaminated.

6 BENEFITS OF NEGATIVE IONS

01

KEEP AIRBORNE
ALLERGENS &
GERMS AT BAY

02

CLEAN AND FRESH
INDOOR AIR
QUALITY ALL YEAR
ROUND

05

RELIEVE STRESS &
DROWSINESS

06

BOOST ENERGY
AND IMPROVE
ALERTNESS

04

REVEL IN AN
OVERALL CALMING
EFFECT

03

NEUTRALISES POSITIVE
IONS GENERATED BY
ELECTRONIC
APPLIANCES



Negative ion and ozone function



This unit can produce Negative Ion, which abounds in our natural environments such as forests, waterfalls, mountains and seaside. Negative ions are useful for enhancing the metabolism and homeostasis of the human body. effective in removing pollen, dust, mold spores and other harmful particles from the air and are able to improve mood.

The machine also has ozonen function ,ozone plays a important role in removing the odor in the air, It is much more effective inn removing pollutants and odors, and is a powerful oxidant that kills lower organism like bacteria, mold and viruses.

Features:

Adopts the high efficiency filtrate net which is made of fiberglass, can filtrate small particle with the size less than 0.0001mm, such as dust, bacillus, farina, virus and so on which can cause decease, it also has active carbon filtrate net which can effectively get rid of smoke and peculiar smell in the air to reach higher fresh air output (CADR) with the high air current design of purify machine.

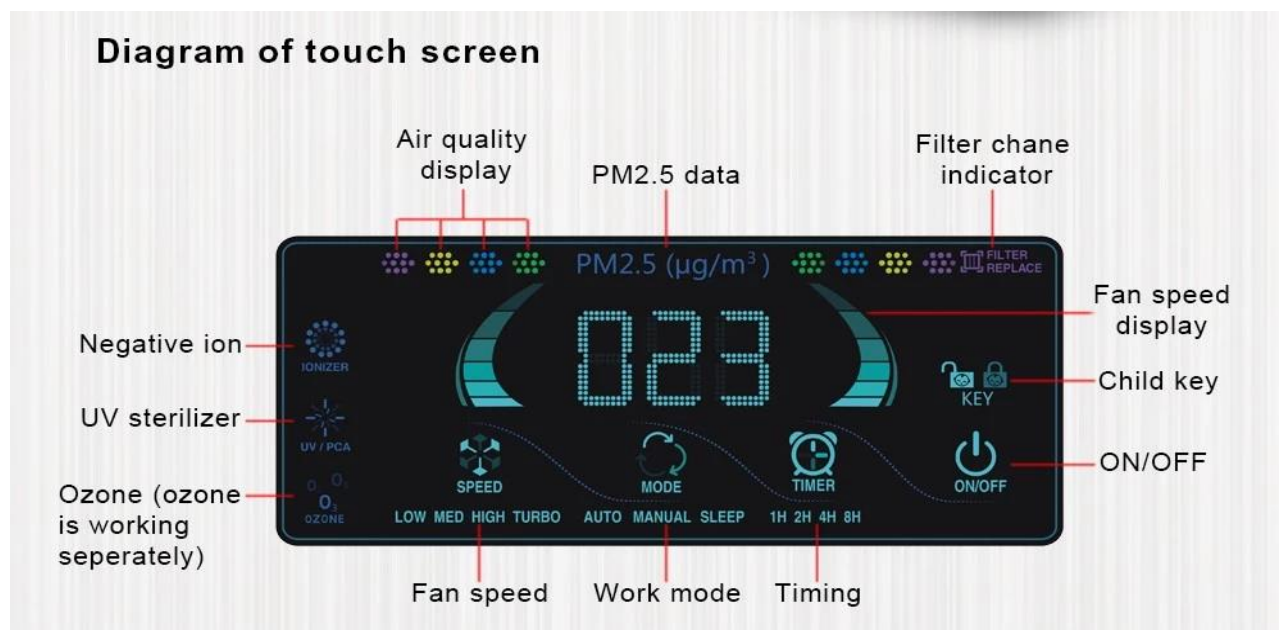
Micro computer control, five-layer filter and over oxygen device, with high level, mid-level and low-level wind, Temperature and humidity sensor, Air quality induction, Air volume working state display, LCD display temperature and humidity, Air quality status display + touch-key control, Timing function, Sensor, touch screen, remote control.

This machine creates ozone from oxygen in the air, defusing it into a high concentration. Ozone gas, by its abundant oxidizing power, suppresses viruses and pathogens that adheres surfaces.

Upon completion, the machine automatically identifies the ozone within the air and produces oxygen. the ozone will work 3 mins every 17 mins after turning on.

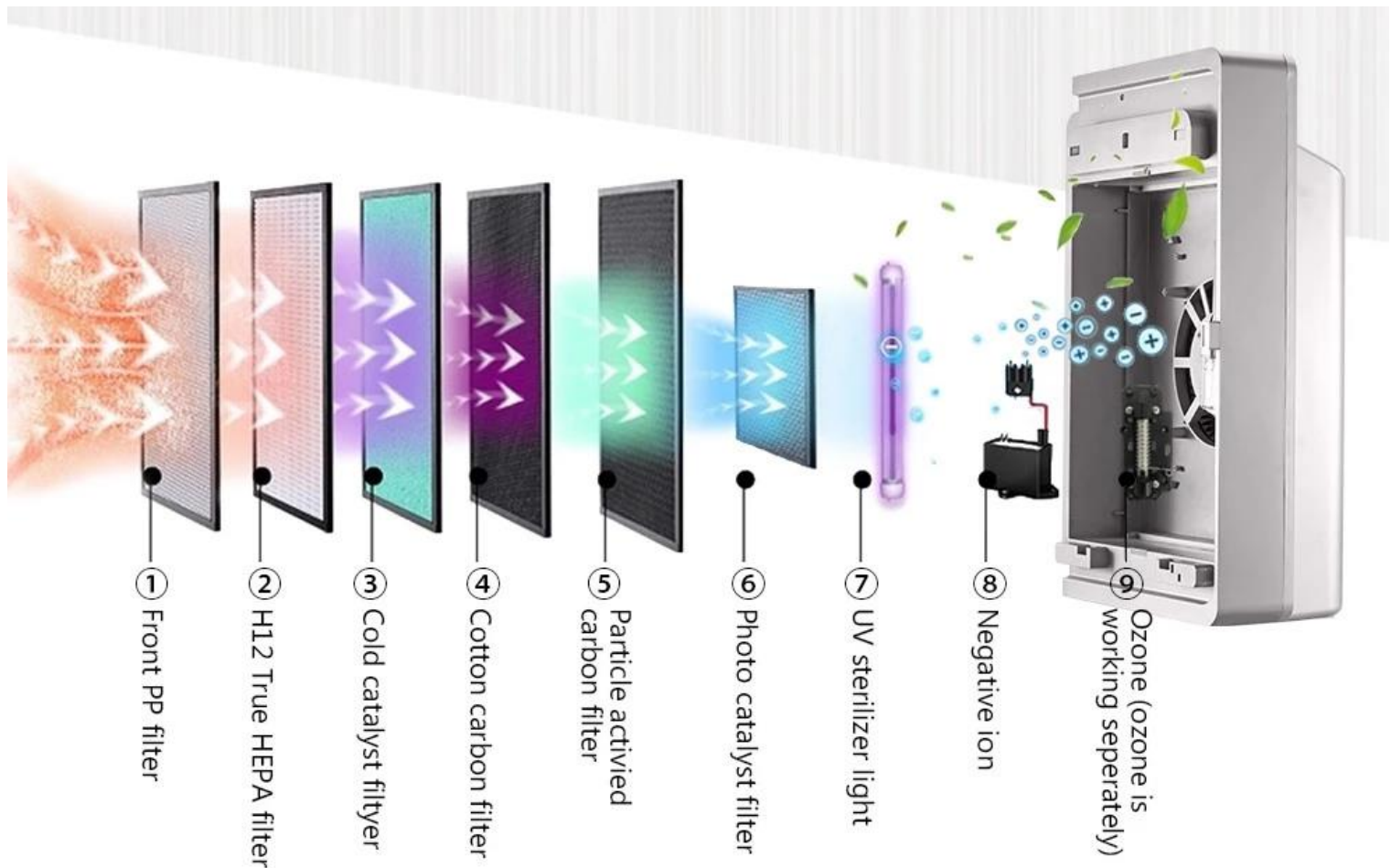
The sterilizer can suppress the influenza virus, and MRSA (methicillin-resistant staphylococcus aureus).

Also for the Covid-19 virus, it was confirmed that this ozone can suppress the coronavirus with evidence from Nara Medical University in Japan.



Sensing range:

- | smoke, Incense, cooking and pet odours
- | cosmetics, alcohol
- | Spray PM 2.5 and PM 10 respiratory particles.



- ①.PP early effect filters,Preliminary filtration 20 microns hair, larger particles, can be repeated washing, reducing replacement costs;
- ②.HEPA filter, filtering the 0.03 micron particle in air ;
- ③.Cold catalyst filter , decomposition & absorption formaldehyde;
- ④.Activated carbon sponge, preliminary adsorption formaldehyde and other harmful substances;
- ⑤.Granular carbon & formaldehyde adsorption filter ,adsorption formaldehyde, benzene and other harmful substances;
- ⑥.Photo-catalyst net, partially oxidized decomposition of various organic and inorganic substances, with a strong anti-fouling, sterilization and deodorization function;
- ⑦.254nm UV light, kill mold spores, E. coli, staphylococcus&other bacteria/viruses;
- ⑧.High negative ions , can quickly absorb harmful substances, degradation of various types of pollution;
- ⑨.Ozone effectively remove indoor smoke or odor, dust sterilization decorative materials, increasing oxygen, fresh air.

Product details



90 degree adjust fan speed



4 side air input



Magnet adsorption
in front cover



Handle in the back
of machine



Auto power off when
open the front cover



Remote control

CE, Rohs, FCC approved.

Multifunction including Ionizer, Ozone, Anion, UV, HEPA, Active Carbone.

With Remote Control

Fashion Touchable Screen

Specifications

Voltage/Frequency	220 V / 50 Hz			
Speed Setting	Turbo	High	Medium	Low
Power Consumption	100 watts	78 Watts	68 Watts	58 Watts
Air Flow Rate m ³ /hr	600	530	480	400
Noise Level	63 dB	58 dB	50 dB	46 dB
Air Purification Recommended Coverage	Up to 750 ft²			
Air Sterilization Recommended Coverage	Up to 1200 ft²			
CADR (Smoke PM2.5)	400 m ³ /hr.			
Net Weight	10 Kg			
WIFI Function	Not Available.			
Dimensions (W x D x H)	640 mm x 400 mm x 240 mm			
System Technology	Step 1: 2-in-1 PuriPRO [®] Filter			
	Step 2: Advanced UV Nano Photocatalytic-Oxidation			
	Step 3: Advanced Electron Spray Ionization			
	Step 4: Advanced Corona Discharge			
Negative Ions Density	Up to 20 Million/cm³			
Away Mode Ozone Emission	Up to 500 mg/hr. (Cycled)			

Recommended Coverage based on 2.5 meter or 8.2 feet ceiling height.

Select manual Ozone mode on basis of the coverage area in unoccupied room.

Air Sterilization		
Coverage Area	Away Mode Operating Duration	Ozone Emission
300 ft ²	60 minutes	500 mg/hr.
500 ft ²	120 minutes	
1200 ft ²	240 minutes	

