

We focus on your
Respiratory health
continues to innovate



EddaAir

Plasma Air Disinfection System

Breathe Nature Indoors



Catalog

Company Profile

Shenzhen Lideng Environmental Engineering Co., Ltd Adhering to the concept of "serving the society and benefiting the people", we mainly deal with plasma air disinfection and purification equipment, providing economical, environmentally friendly, efficient and fast solutions for disinfection, sterilization and air purification needs in different scenarios.

The company's R&D team focuses on developing high-end plasma air disinfection and purification technologies that meet international standards and are widely used in various medical institutions, industries, businesses and homes. The team always adheres to the business philosophy of "rigorous and pragmatic, quality first", and has achieved a number of practical patents in the field of plasma air disinfection and purification equipment, which is at the leading level in China.

In the company's gradual and stable development, we will sum up the experience, firm concepts, keep the spirit of innovation, and strive to push the company's development strategy to a higher stage, and continue to forge ahead and open up new horizons.

The factory has passed UL, CC, CB, FDA, ISO9001, SGS, FCC, EPA, CNAS, CMA, CE certification, and obtained the test report of each authority for efficient killing of epidemic virus and bacteria. Our products are exported to all over the world and have won the recognition of our customers.



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PLASMA IN THE AIR



Air purification itself exists in nature, and the perfection and infinite creativity of the natural purification process establish the operation scale, process and result of anything, so as to guide us to understand its mystery.

The process of air ionization is to imitate nature and develop different products according to the different indoor environment. And according to the ion concentration OF nature, make THE ion in INDOOR air always gets supplement. The natural concentration of ions is 800 ions per cm³, of which 400 are positive and 400 are negative.

Using ionization technology, the high efficiency and harmless ionization process of natural air self-purification can be realized artificially, and the ion activity can be maintained at about 2.5 hours, and the ion concentration can be controlled according to the requirements. Thus, positive and negative ions similar to nature can be produced to purify indoor air pollution and make indoor air reach the level of urban park air quality.

Waterfalls, mountains, beaches and fresh air after a rainstorm because it is rich in active ions. Plasma disinfection and purification system can produce a large number of positive and negative ions and control their number. Negative ions have an extra electron, and positive ions lack an electron. This unstable electron ensures the ion activity, thus ensuring the best disinfection and air purification effect of positive and negative ions.

PLASMA IN THE AIR

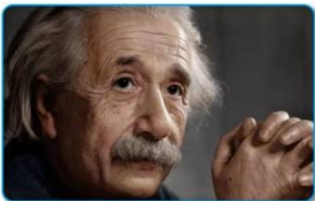


Air purification itself exists in nature, and the perfection and infinite creativity of nature's purification process establishes the scale of operation, process and result of anything, thus guiding us to understand its mysteries.

Using ionization technology, it is possible to artificially achieve an efficient and harmless ionization process for natural air self-purification, keeping the ion activity at about 2.5 hours and controlling the ion concentration as required. This generates positive and negative ions similar to those found in nature to purify polluted indoor air and bring indoor air to city park air quality levels.

Fresh air after waterfalls, mountains, beaches and rainstorms because it is rich in active ions. The plasma disinfection and purification system generates a large number of positive and negative ions and controls their number. Negative ions contain one extra electron, while positive ions lack one electron. This unstable electron ensures that the ions are active, thus guaranteeing the best disinfection and air purification effect of positive and negative ions.

Origin of plasma disinfection technology



Plasma Air Disinfection and Purification System - Applying knowledge in physics, chemistry, biology and environmental engineering, the plasma air disinfection and purification technology was created, successfully realizing Einstein's ionization theory. By simulating nature's air environment, indoor air quality is significantly improved, while various harmful pollutants are quickly and effectively removed and decomposed. This is our belief that "forest-like air can be enjoyed at home".

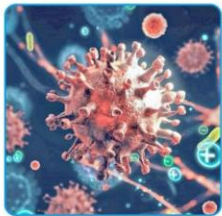


Our technology solves the negative problems of many traditional disinfection technologies such as activated carbon, light ion generators, ozone generators, high pressure electrostatic, and photocatalysts. It is an effective way to clean and purify the air by quickly disinfecting, reducing airborne dust, neutralizing and decomposing airborne pollutants, and removing volatile organic compounds!

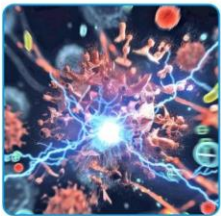
WORKING PRINCIPLE



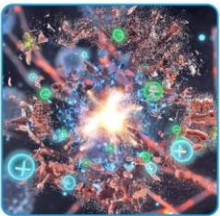
Plasma tube
Generate a large number of positive and negative ions



Charged ion clusters
Proactively collide and attack viral bacteria



Disruption of cell membranes
Viral DNA and proteins



Causes rapid inactivation
Until killed & decomposed

Plasma ionized air (Plasma ions) ionization systems work on a specific voltage principle, forcing an electrical discharge trigger through the inner/outer electrodes of positive and negative ion generators (separated from each other by insulators), which then generate ion clusters similar to those found in nature. These millions of charged ion clusters actively collide with airborne bacteria, viruses, and other harmful substances, penetrating cell membranes, DNA, and proteins, causing them to rapidly break down and become inactive, until they are killed and decomposed, in a manner known as air ionization technology.

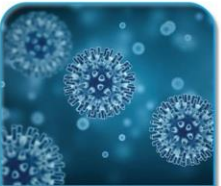
Benefits of these unstable ions



Reduction of dust particles / haze
Particles of dust and pollen in the air are bound by ionic bonds. These charged particles condense quickly into particles, increasing their size and making them easy to remove by filters, reducing bacteria in the respiratory zone.



Odor neutralization /deodorization
The gas that has peculiar smell can be oxidized by active ion combination, peculiar smell, bad smell and other pollution air can be quickly neutralized by positive and negative ions and finally eliminated.



Disinfection/Sterilization
In a balanced atmosphere of positive and negative ions, the discharge of an electron pulse will produce a certain amount of energy, which is the same or similar to the energy of the chemical bonds, will break these bonds, and viruses and bacteria can no longer reproduce.

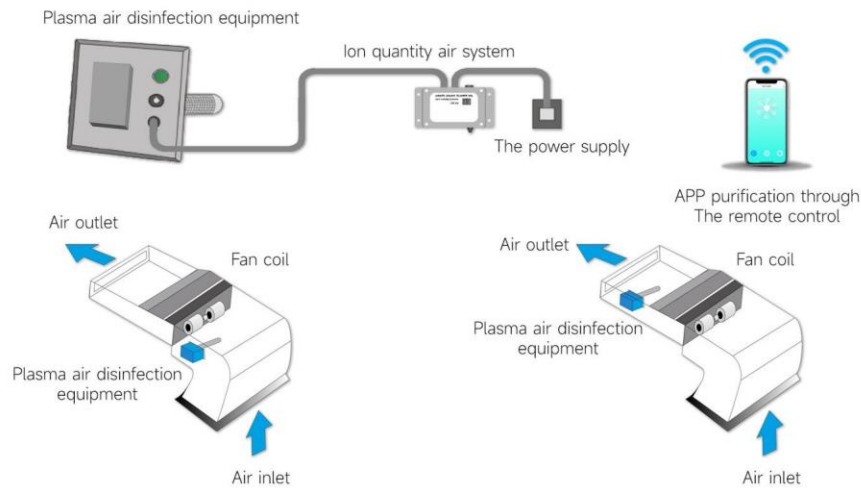


Formaldehyde/ TVOC/Benzene Removal
Carpet, building materials, furniture, paint, solvents or pesticides contain a variety of volatile organic compounds, plasma can stimulate its atomic and molecular free groups, play the role of activation or direct degradation, jointly promote the degradation of TVOC, CO₂ and H₂O.

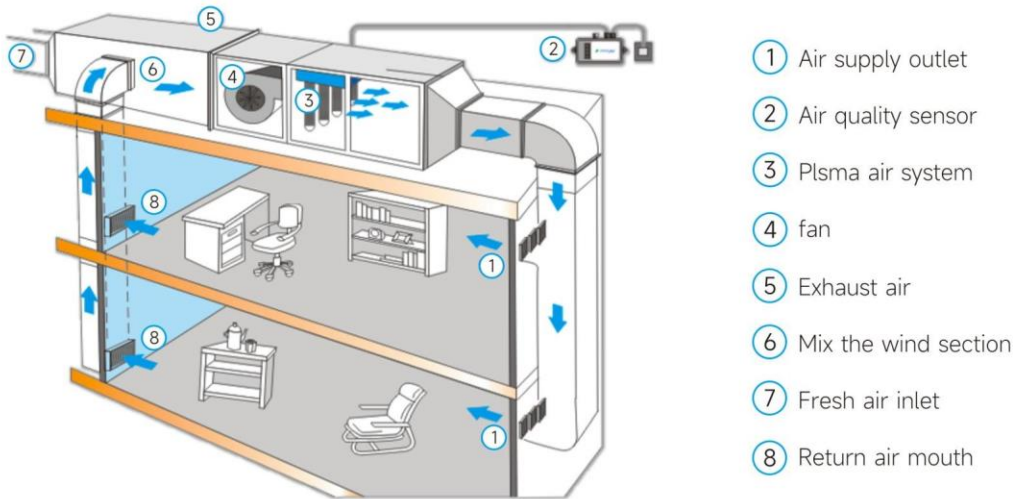
Plasma air versus conventional purifiers

Function	Disinfection way	Plasma Air of plasma	Activated carbon filter	Ultraviolet (uv) light	The ozone machine
1 minute detoxication (Coronavirus)		Fast	No	Slow	Slow
The man-machine coexistence		Yes	Yes	No	No
Eliminate airborne transmission By bacteria		Optimal	Invalid	Slow	Slow
Degrade particles < 0.3 micron in diameter		Optimal	Invalid	Invalid	General
Elimination of harmful gases		Fast	General	A little	General
Elimination of harmful pollutants		Fast	General	A little	Good
Eliminate a bad smell		Fast	General	General	Good
coverage		Widely	General	General	General
Safety and Reliability		Optimal	Good	Poor	Poor

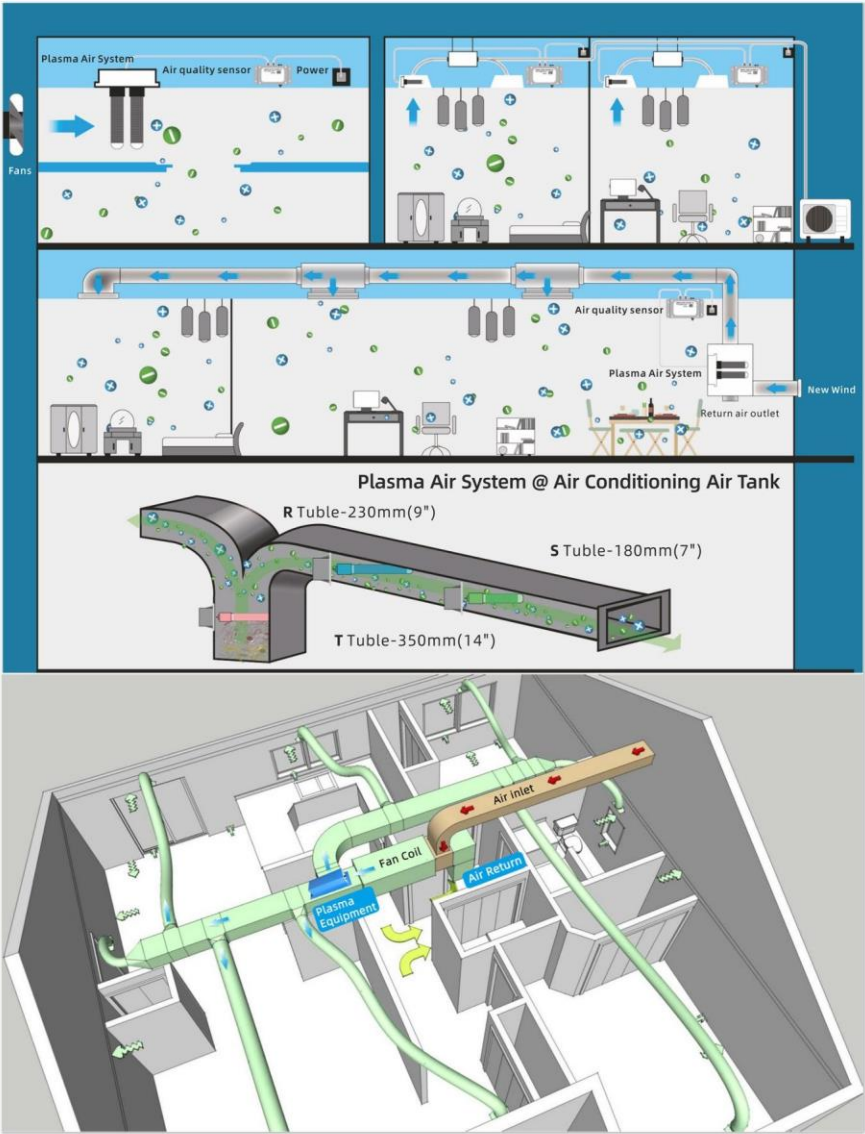
Schematic diagram of fan coil system installation



Plasma air ventilation system circulation diagram



Plasma air disinfection & purification system diagram





Safe and efficient
Suitable for a variety of environments and sites



CB Certification
Qualified certification of electrical products



UL Certification
Safety testing and identification agencies



MODEL PS-501T

CAUTION: For continued Protection, operation of the repaired unit must be done by a qualified person.

1000V MAXIMUM
50/60Hz AC
DANGER HIGH VOLTAGE



Human-machine coexistence
No harm to humans and animals when disinfected



Disinfection and sterilization
Kills bacteria and destroys DNA structure



Continuous Protection
Protecting you and your family Breathing Health

CB Certification

Certificate Number: KR-KTL-10995



CE Certified Products

CE Certificate Number: ISETC.001 120200610



Ducted purifiers

Ducted products can be installed directly in the current air conditioning system, new air duct system, including air cabinet (AHU or PAU), Fan Coil and cooling ducts, ionization tube release a large number of positive and negative ions, in the case of [human-machine coexistence], active sterilization, neutralization and degradation of various odors and pollutants, targeted control of indoor environmental pollution sources, quickly solve a variety of indoor air problems, to help us improve air quality.



Ducted purifiers IN-DUCT





A PS-300

B PS-400

Adaptable air volume: A: 300CFM/510m³/h
B: 500CFM/850m³/h

Weight: A: 100g
B: 115g

Voltage: DC 12V

Power: A: 4.0W
B: 5.0W

Noise: ≤10dB

Shell material: ABS flame retardant material

Applicable area: A: 20m²
B: 40m²

Product Size: A: 128*57*34mm
B: 163*57*34mm

Ion tube size: A: 30mm (1.0")
B: 60mm (2.4")

Number of ion tubes: 1 pcs

Ion tube lifetime: 17000 Hours

A PS-500
Vertical SectionB PS-500
Horizontal Section

Adaptable air volume: 700CFM/1200m³/h

Weight: 450g

Voltage: DC 12V/24V
AC 110/220V

Power: 5.0 W

Noise: ≤10dB

Shell material: ABS flame retardant material

Applicable area: 30 ~50 m²

Product Size: A: 133*70*154mm
B: 200*70*50mm

Ion tube size: 80mm (3.0")

Number of ion tubes: 1 pcs

Ion tube lifetime: 17000 Hours



A PS-501S

B PS-502S

Adaptable air volume: A: 1000CFM/1700m³/h
B: 1800CFM/3100m³/h

Weight: A: 2.55 kg
B: 2.7 kg

Voltage: AC 110V/AC 220V

Power: A: 6.0W
B: 8.0W

Noise: ≤20dB

Shell material: SPCC

Applicable area: A: 80m²
B: 150m²

Product Size: 178*103*260mm

Ion tube size: 180mm (7.0")

Number of ion tubes: A: 1 pcs
B: 2 pcs

Ion tube lifetime: 17000 Hours

Product Frequency: 50/60Hz



A PS-501T

B PS-502T

Adaptable air volume: A: 1800CFM/3100m³/h
B: 3500CFM/6000m³/h

Weight: A: 2.85 kg
B: 3.1 kg

Voltage: AC 110V/AC 220V

Power: A: 10.0 W
B: 14.0 W

Noise: ≤20dB

Shell material: SPCC

Applicable area: A: 100m²
B: 200m²

Product Size: 192*192*430mm

Ion tube size: 350mm (14.0")

Number of ion tubes: A: 1 pcs
B: 2 pcs

Ion tube lifetime: 17000 Hours

Product Frequency: 50/60Hz

A PS-504T
Horizontal SectionB PS-504T
Vertical Section

Adaptable air volume: 6500CFM/11000m³/h

Weight: A: 8.0 kg
B: 5.8 kg

Voltage: AC 110V/AC 220V

Power: 20W

Noise: ≤20dB

Shell material: SPCC

Applicable area: 400 m²

Product Size: A: 545*280*230mm
B: 280*280*460mm

Ion tube size: 350mm (14.0")

Number of ion tubes: 4pcs

Ion tube lifetime: 17000 Hours

Product Frequency: 50/60Hz



A PS-505T

B PS-505TT

Adaptable air volume: A: 7500CFM/12750m³/h
B: 9000CFM/15300m³/h

Weight: A: 8.3kg
B: 12.4kg

Voltage: AC 110V/AC 220V

Power: A: 34W
B: 42W

Noise: ≤20dB

Shell material: SPCC

Applicable area: A: 500m²
B: 700m²

Product Size: A: 545*280*220mm
B: 710*280*220mm

Ion tube size: A: 350mm(14.0")
B: 520mm(20.5")

Number of ion tubes: 5 pcs

Ion tube lifetime: 17000 Hours

Product Frequency: 50/60Hz



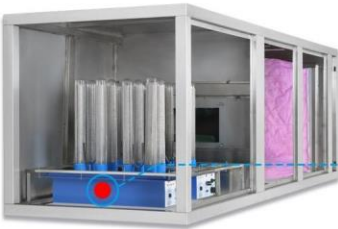
PS-508T

Adaptable air volume:	9500CFM/16150m³/h	Applicable area:	800m²
Weight:	11.2kg	Product Size:	545*280*450mm
Voltage:	AC 110V/AC 220V	Ion tube size:	350mm (14.0 ")
Power:	47 W	Number of ion tubes:	8 pcs
Noise:	≤20dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Product Frequency:	50/60Hz

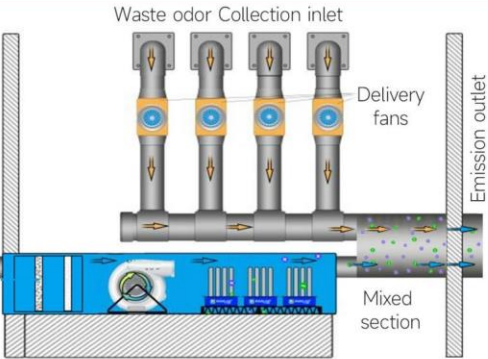


PS-509TT

Adaptable air volume:	16000CFM/27200m³/h	Applicable area:	1300m²
Weight:	15.5 kg	Product Size:	710*280*320mm
Voltage:	AC 110V/AC 220V	Ion tube size:	520mm (20.5 ")
Power:	67W	Number of ion tubes:	9pcs
Noise:	≤20dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Product Frequency:	50/60Hz



Air Cabinet Type
Plasma Air Disinfection System



Wastewater treatment / organic waste / odor treatment solutions

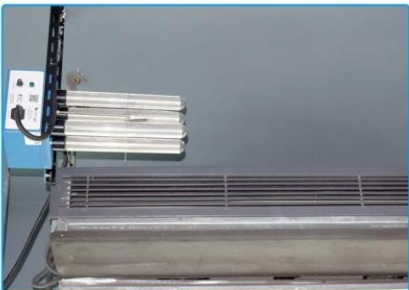
IN Duct Type Case Diagram



Hotels PS-501S



Hospitals PS-501T



Malls PS-504T



Factories PS-509TT

Ducted products can be installed directly in the current air conditioning system, new air duct system, including air cabinet (AHU or PAU) Fan Coil and air conditioning ducts, ionization tube release a large number of positive and negative ions, in the case of [human-machine coexistence] active sterilization, neutralization and degradation of various odors and pollutants, targeted control of indoor environmental pollution sources, quickly solve a variety of indoor air problems, to help us improve air quality.

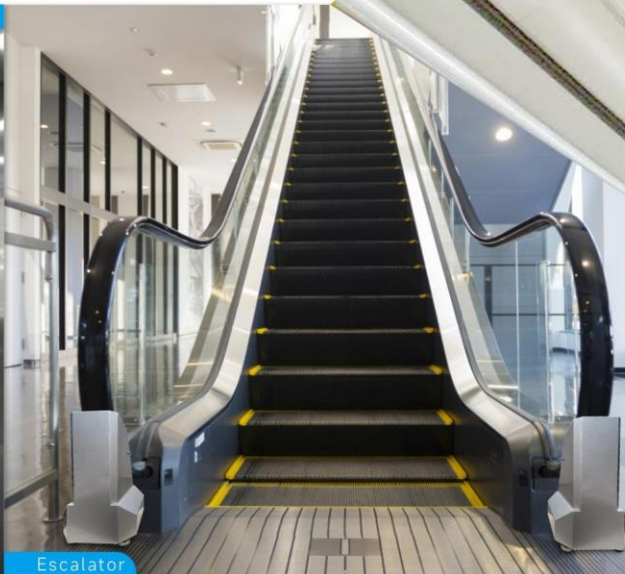
Wall-mounted purifiers

Suitable for various public transportation, car elevators, escalators, hotels, homes, hospitals, nursing homes, schools, Internet cafes, supermarkets, restaurants, airports, offices, entertainment venues, public toilets, food processing and preservation, animal breeding and slaughterhouses, dry goods storage, cold storage, warehouses, sewage treatment plants, waste transfer stations, chemical plants prone to volatile organic compounds (TVOC), commercial facilities and other places.

Car elevator



Escalator



Bus disinfection case





A PS-400T1

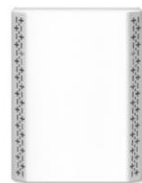
B PS-500T4

Air volume:	A: 15m³/h B: 80m³/h	Applicable area:	A: 5 ~ 15m²
Weight:	A: 300 g B: 5.7 kg	Product Size:	A: 195*100*60mm B: 280*260*430mm
Voltage:	DC 12V	Ion tube size:	A: 60mm(2.4") B: 80mm(3.0")
Power:	A: 6 W B: 7 W	Number of ion tubes:	A: 1 pcs B: 2 pcs
Noise:	≤30 dB	Ion tube lifetime:	17000 Hours
Shell material:	A: Aluminum alloy B: SPCC		



PS-500T1

Air volume:	60m³/h	Applicable area:	20 ~ 30m²
Weight:	1.0 kg	Product Size:	260*175*60mm
Voltage:	DC 12V/DC 24V	Ion tube size:	80mm (3.0")
Power:	7W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Aluminum alloy	Filter type	Primary filter



PS-501TX

Air volume:	80 m³/h	Applicable area:	20 ~ 40m²
Weight:	1.4 kg	Product Size:	180*100*240mm
Voltage:	DC 12V	Ion tube size:	80mm (3.0")
Power:	7W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Aluminum alloy	Filter type:	Primary filter



PS-500T2

Air volume:	220m³/h	Applicable area:	50 ~ 80m²
Weight:	3.0 kg	Product Size:	500*340*60mm
Voltage:	DC 24V	Ion tube size:	80mm (3.0")
Power:	26.0W	Number of ion tubes:	2 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Aluminum alloy	Filter type:	Primary filter



PS-500T3

Air volume:	0 ~ 138m³/h	Applicable area:	50 ~ 70m²
Weight:	2.2 kg	Product Size:	355*235*100mm
Voltage:	DC 24V	Ion tube size:	80mm(3.0")
Power:	45.0W	Number of ion tubes:	2 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Aluminum alloy	Filter type	Primary filter



PS-501TY

Air volume:	0 ~ 850m³/h	Applicable area:	50 ~ 150m²
Weight:	15.5 kg	Product Size:	730*180*405mm
Voltage:	AC 110V/AC 220V	Ion tube size:	520mm (20.5")
Power:	70.0 W	Number of ion tubes:	2 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Stainless steel	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		



Ⓐ PS-501TW

Ⓑ PS-501TR

Air volume:	A: 200m³/h B: 0~460m³/h	Applicable area:	50 ~ 80m²
Weight:	A: 9.5 kg B: 8.7 kg	Product Size:	A: 450*124*330mm B: 425*125*320mm
Voltage:	AC 110V/AC 220V	Ion tube size:	A: 350mm (14.0") B: 180mm (7.0")
Power:	A: 77.0 W B: 72.0 W	Number of ion tubes:	A: 1 pcs B: 2 pcs
Noise:	≤50 dB	Ion tube lifetime:	17000 Hours
Shell material:	Stainless steel	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		

Wall-mounted case diagram



Public toilets are prone to bad odors (hydrogen sulfide), ammonia, and other odors, as well as a large number of bacteria and germs, which pose a great threat to people's health. To keep public toilets clean, it is not enough to pay attention to hygiene alone, especially in public toilets with high traffic. Installation of plasma disinfection sterilization deodorization equipment can greatly reduce the concentration of hydrogen sulfide and ammonia and other odors, while effectively preventing the cross-transmission of various diseases between people.





PS-501T2

Air volume:	0 ~ 850m³/h	Applicable area:	50 ~ 100m²
Weight:	22.35kg	Product Size:	370*255*865mm
Voltage:	AC 110V/AC 220V	Ion tube size:	520mm (20.5 ")
Power:	60.0 W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		



PS-501T6

Air volume:	1200/1400m³/h 1600/1800m³/h	Applicable area:	200 ~ 300m²
Weight:	60kg	Product Size:	630*383*1760mm
Voltage:	AC 110V/AC 220V	Ion tube size:	520mm (20.5 ")
Power:	299.0 W	Number of ion tubes:	3 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		



PS-501TC



Face recognition Thermometer

Air volume:	200m³/h*2	Product Size:	1320*980*2100mm
Weight:	190kg	Ion tube size:	520mm (20.5 ")
Voltage:	AC 110V/AC 220V	Number of ion tubes:	2 pcs
Power:	180.0 W	Ion tube lifetime:	17000 Hours
Noise:	≤50dB	Frequency:	50/60Hz
Shell material:	Stainless steel	Thermometer:	1 pcs
Filter type	2 high efficiency filters	Number of UV Lamps:	2 pcs



PS-504T0



Smart Operation Panel

Air volume:	1800m³/h	Applicable area:	related to the actual venue
Weight:	58kg	Product Size:	450*450*1080mm
Voltage:	DC 42V	Ion tube size:	300mm (12.0 ")
Noise:	≤50dB	Number of ion tubes:	4 pcs
Shell material:	Plastic	Ion tube lifetime:	17000 Hours
Filter type	Primary/High Efficiency Filter (Optional)	Optional accessories:	APP/ PS-501 PS-502

Movable Case Diagram



Food factory/gym PS-501T6



Bank/school office PS-501T2

Indoor air exists a variety of bacteria, viruses, odors and formaldehyde, volatile organic compounds TVOC harmful particles and other pollutants, as these pollutants continue to multiply and spread in various parts of the room, the traditional air purification equipment has been unable to achieve the expected disinfection and purification effect. Plasma air disinfection machine can be in the case of [human-machine coexistence] efficient disinfection and sterilization, can quickly and effectively remove the formaldehyde, benzene, TVOC and other harmful gases and odors released by the decoration, to prevent the spread of various indoor bacteria and viruses between people and each other.

Ceiling-Mounted Series

Suitable for hotels, homes, hospitals, nursing homes, schools, Internet cafes, supermarkets, restaurants, airports, offices, entertainment venues, public toilets, public transportation, basement parking lots, food processing and preservation, animal breeding and slaughterhouses, dry storage, cold storage, warehouses, sewage treatment plants, waste transfer stations, chemical plants prone to volatile organic compounds (TVOC), commercial facilities and other places.



PS-501T1

Air volume:	0 - 420m³/h	Applicable area:	50 - 100m²
Weight:	16.5kg	Product Size:	625*625*210mm
Voltage:	AC 110V/AC 220V	Ion tube size:	350mm (14.0 ")
Power:	50.0 W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		



PS-501T4



PS-501T5

Air volume:	A: 1000m³/h B: 1100m³/h	Applicable area:	200 - 300m²
Weight:	A: 31.0kg B: 31.5kg	Product Size:	A: 1205*625*240mm B: 1208*620*265mm
Voltage:	AC 110V/AC 220V	Ion tube size:	A: 350mm (14.0 ") B: 520mm (20.5 ")
Power:	A: 220.0W B: 200.0 W	Number of ion tubes:	A: 4 pcs B: 3 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		



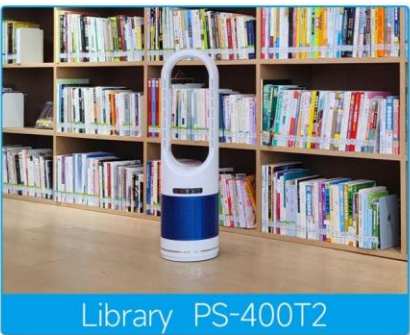
PS-501T3



PS-501T9

Air volume:	0 - 1000m³/h	Applicable area:	A: 80 - 150m² B: 200 - 800m²
Weight:	A: 21.5 kg B: 36.0kg	Product Size:	A: 730*450*280mm B: 1280*480*280mm
Voltage:	AC 110V/AC 220V	Ion tube size:	A: 350mm (14.0 ") B: 520mm (20.5 ")
Power:	A: 150.0W B: 215.0 W	Number of ion tubes:	A: 1 pcs B: 9 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary/High Efficiency Filter (Optional)		

Portable purifiers



PS-300T

Battery Capacity:	2600mAh	Applicable area:	3 ~ 15m ²
Weight:	150g	Product Size:	96*57*33mm
Voltage:	DC 5V	Ion tube size:	30mm (1.0 ")
Power:	1.0 W	Number of ion tubes:	1 pcs
Noise:	≤10dB	Ion tube lifetime:	17000 Hours
Shell material:	ABS flame retardant material		



PS-300T1

Air volume:	5m ³ /h	Applicable area:	30m ³
Weight:	260 g	Product Size:	66*66*180mm
Voltage:	DC 4V	Ion tube size:	30mm(1.0 ")
Power:	2W/0.4A	Number of ion tubes:	1 pcs
Noise:	≤30dB	Ion tube lifetime:	17000 Hours
Shell material:	Plastic	Battery Capacity:	6800 mAh



PS-400T2

Air volume:	400m ³ /h	Applicable area:	40m ²
Weight:	3.85kg	Product Size:	240*240*820mm
Voltage:	AC 110V/AC 220V	Ion tube size:	70mm (3.0 ")
Power:	30W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	ABS	Frequency:	50/60Hz
Filter type	1 high efficiency filters		



PS-501TV

Air volume:	0 ~ 138m ³ /h	Applicable area:	50 ~ 80m ²
Weight:	3.0kg	Product Size:	300*104*402mm
Voltage:	DC24V	Ion tube size:	180mm (7.0 ")
Power:	50W	Number of ion tubes:	1 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	Aluminum alloy	UV lamp:	1 pcs
Filter type	2 high efficiency filters		

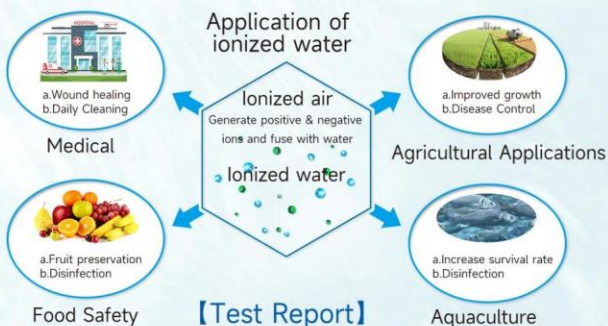


PS-501T4S

Air volume:	0 ~ 138m ³ /h	Applicable area:	50 ~ 100m ²
Weight:	7.4kg	Product Size:	530*160*225mm
Voltage:	AC 110V/AC 220V	Ion tube size:	180mm (7.0 ")
Power:	51.0 W	Number of ion tubes:	4 pcs
Noise:	≤50dB	Ion tube lifetime:	17000 Hours
Shell material:	SPCC	Frequency:	50/60Hz
Filter type	Primary filter		

Formation & action of ionized water

After ionizing the gas, the active material is sprayed into the water, and the water reacted is called ionized water, which is a novel and non-destructive technology. Current research has confirmed that ionized water has the effect of disinfection and sterilization or inhibition of pathogenic bacteria growth, and has been widely used in medical, aquaculture, swimming pool water treatment, food safety, industrial / agricultural and other fields.



THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED BY/ ON BEHALF OF THE CLIENTS AS:

Sample Name: Plasma Water Treatment Disinfection Device
Sample Specification: PS-501T
Batch No/ Date: /
Manufacturer: Shenzhen Lideng Environmental Protection Engineering Co., Ltd

TEST METHOD(S)

Customer supply method: steps from Startup commissioning to normal operation: 1. Adjust the test gear to third gear; 2. Turn on the power supply of the prototype, and the machine will introduce the plasma into 10L Escherichia coli liquid through the pipeline according to the principle of pressure pump oxygenation; 3. After working for 30 minutes, take water samples for Escherichia coli culture and counting according to ISO16649-2:2001.

TEST RESULT(S)

SAMPLE NO.	Standard solution (stock solution) (CFU/ml)	Water Sample (CFU/ml)	Killing Rate (%)
721672424	2.6×10 ³	<1	>99.9

Note:
1. CFU: Colony forming unit
2. This report is for internal use only such as internal scientific research, education, quality control, product R&D.
3. This report replaces report 721672424, 721672424 is obsolete

SAMPLE NO.	Test photos
721672424	

Fruit and vegetable preservation experiment



Ionized water ensures safe and clean water in the farm, while killing infectious bacteria and other pathogens, thus reducing the use of antibiotics and drugs, and ultimately ensuring that fish, etc. can grow healthily.



The water in swimming pools, bathtubs and spas should be free of pathogenic microorganisms. Ionized water not only disinfects and sterilizes, but also eliminates unpleasant odors such as chlorine/ammonia from the water, which helps prevent eye redness and skin and respiratory tract irritation.



Scope of application of ionized water

Schematic



The reuse of water is essential in the cultivation industry. Ionized water protects crops from bacteria, viruses and fungi such as Pythium and Fusarium.



The surfaces of fruits or vegetables are washed with ionized water for disinfection. In this way, Legionella, E. coli and other bacteria are killed, thus extending the freshness or storage period of fruits and vegetables, etc.

Purifier Accessories

Ionic quantity air system: When the ionic concentration of the whole space reaches the preset value, the linked plasma equipment stops working, and vice versa, it turns on working.

Wind pressure switch: When there is wind passing through the wind pressure switch, the linked plasma disinfection equipment automatically turns on, and automatically turns off if no wind passes through.

Timer: The linked plasma equipment will automatically turn on or off within a preset period of time, saving the trouble of manual adjustment.

Remote control: optionally installed in the plasma unit, it can turn on or off the plasma unit more easily and quickly.

APP: Remote control to turn on and off the plasma unit and other functions at any time.





PS-501
(Ion quantity control system)

Weight:	450 g	Load:	200W
Voltage:	AC 110V/AC 220V	Size:	132*69*50mm
Power:	3.0 W	Frequency:	50/60Hz
Shell material:	ABS		



PS-502
(Wind pressure switch)

Weight:	650 g	Load:	200W
Voltage:	AC 110V / 220V	Size:	152*90*55mm
Power:	4.0 W	Frequency:	50/60Hz
Shell material:	ABS		



Timer

Weight:	60 g	Size:	72*72*32 mm
Voltage:	12/24/110/220V	Battery:	1.2V / 40 mAh
Number of timings:	16 Group	Shell material:	ABS
Power:	< 2.0 W	Power Outage Memory:	60 days



Remote Controls

Weight:	20 g	Battery type:	CR2025
Battery Capacity:	3V/150mAh	Size:	86*40*7mm
Communication method:	Infrared	Shell material:	ABS

All Purify



APP

Versions:	3.0	Currently supported languages: Simplified Chinese / Traditional Chinese / English / French / German / Russian / Japanese / Italian / Korean / Spanish / Arabic / Czech / Dutch / Polish / Hungarian / Vietnamese / Swedish / Portuguese / Indonesian / Thai / Romanian / Slovak / Portuguese (Brazil) / Spanish (Latin America), etc.
Operating System:	Android/iOS	
Software Name:	All Purify	
Support Language:	Multilingual (customizable)	

APP software steps to connect the device



Apple Android Store
Search All Purify APP



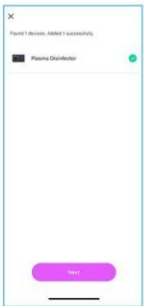
Open the software
Click Add Device



Press Figure 1 for 3 seconds
Automatic matching equipment



After adding a device
Enter WIFI password



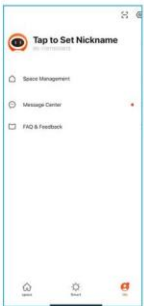
Waiting for the equipment
Complete the connection



Click on the device
Turning on the Remote Switch



The machine turns on
Releasing millions of plasma

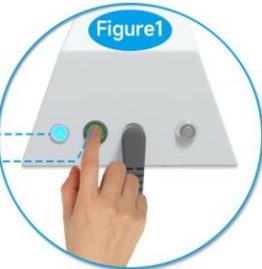


More functions
Download APP to use

Note: The phone and device must have a WiFi connection in order to match.



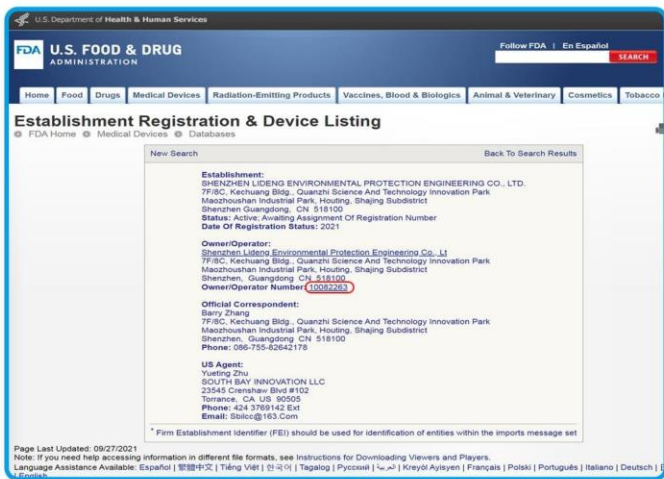
Indicator light blinking



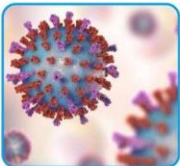
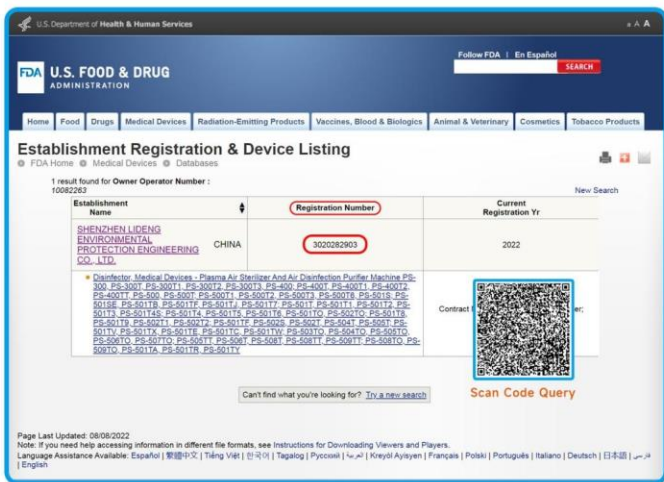
Press and hold for 3 seconds
to release the indicator

Qualification of Medical Products

It has been recognized by many authoritative institutions



FDA Registration Number:3020282903



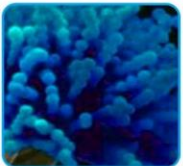
Coronavirus in one minute
Inactivated rate>99.99%



E. coli
Inactivated rate>99.99%



Staphylococcus aureus
Inactivated rate>99.99%



Aspergillus Niger
Inactivated rate>99.99%



微谱
WEIPU

Test Report

Report No : WP-21029109-JC-01EnR1 Page : 3 / 4

Sample Name

Plasma Ions Air Sterilize

Sample Received

2021.02.26

Date

Test Item

Antiviral Activity Value (GX_P2V)

Test Period

2021.02.26 ~ 2021.03.30

1. Test Result

Virus and host cell	Time	Group	Logarithm of infectivity titre of virus lgTCID ₅₀ /ml	Average titre infectivity of virus lgTCID ₅₀ /ml	Average infectivity titre of virus TCID ₅₀ /ml	Average logarithm reduction value	Virus inactivation ratio%
GX_P2V Vero-E6	1min	Control Group 1	5.58	5.55	3.58×10 ⁶	> 4.05	99.99%
		Control Group 2	5.52				
		Control Group 3	5.56				
		Test Group 1	< 1.50	< 1.50	< 31.6	> 4.05	> 99.99
		Test Group 2	< 1.50				
		Test Group 3	< 1.50				
GX_P2V Vero-E6	5min	Control Group 1	5.58	5.55	3.58×10 ⁶	> 4.05	> 99.99
		Control Group 2	5.52				
		Control Group 3	5.56				
		Test Group 1	< 1.50	< 1.50	< 31.6	> 4.05	> 99.99
		Test Group 2	< 1.50				
		Test Group 3	< 1.50				
GX_P2V	10min	Control Group 1	5.58	5.55	3.58×10 ⁶	> 4.05	> 99.99
		Control Group 2	5.52				
		Control Group 3	5.56				

Time

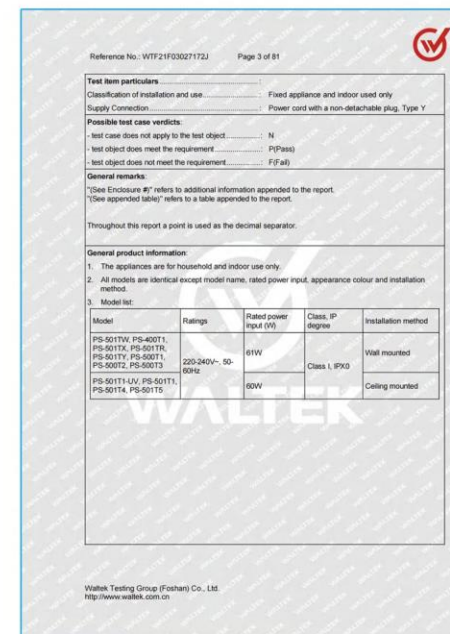
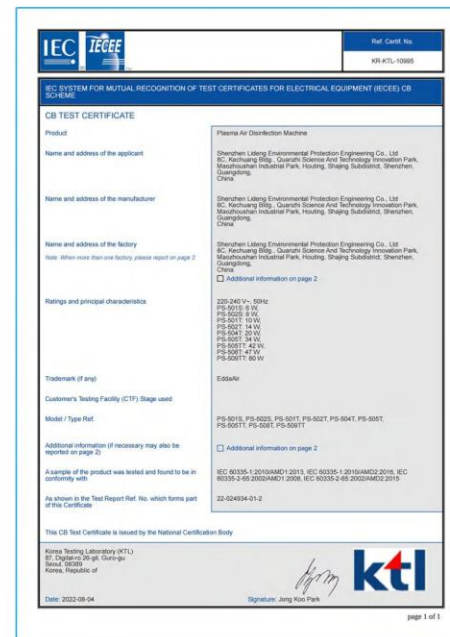
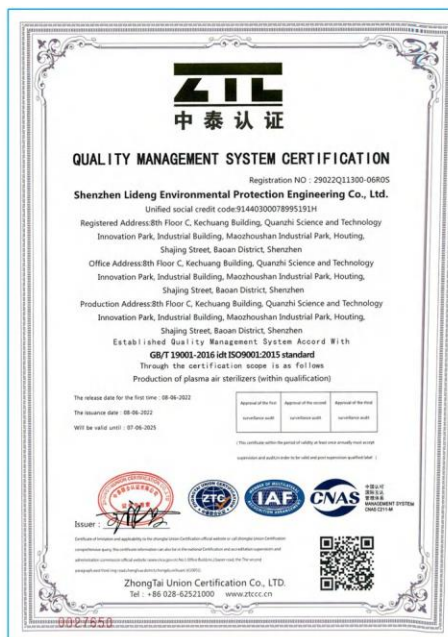
GX_P2V
Vero-E6

1min

Virus
inactivation
rate
99.99%

未
专
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Certificate





GUANGDONG DETECTION CENTER OF MICROBIOLOGY

ANALYSIS AND TEST RESULT

Report No.: 2019SP028R02E

Pollutants	Test Time	Test space	Test results		Rate of decline (%)	Test Method
			The concentration of the blank test compartment (cfu/m ³)	The concentration of the sample test compartment (cfu/m ³)		
Formaldehyde	24h	30m ³ Test chamber	1.02	0.18	82.4	Refer to QBT 2761-2006
Benzene	24h	30m ³ Test chamber	1.16	0.211	81.8	
TVOC	24h	30m ³ Test chamber	4.40	0.393	91.1	
Hydrogen sulfide	24h	1.5m ³ Test chamber	1.08	0.16	85.2	
Ammonia	24h	1.5m ³ Test chamber	2.02	0.21	89.6	

Sample photo:



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Page 4 of 7



Test No. KJ20204593

GUANG ZHOU INSTITUTE OF MICROBIOLOGY CO., LTD.

TEST REPORT

Date Received: Dec. 15, 2020
Date Analyzed: Dec. 31, 2020

Date Analyzed: Dec. 31, 2022

Test results		Control Group				Test Group		Rate K (%)	
Number of Sample	Test Strain	Time T ₀ (min)	Test Number	Original Bacteria Count F ₀ (cfu/ml)	Bacteria Count after Treatment F _t (cfu/ml)	Natural Decay Rate N _t (%)	Original Bacteria Count F ₀ (cfu/ml)		Bacteria Count after Treatment F _t (cfu/ml)
KJ20204593-1	<i>Staphylococcus aureus</i>	60	1	1.16×10 ³	9.83×10 ³	15.52	1.26×10 ³	35	99.97
			2	1.33×10 ³	1.06×10 ³	20.30	1.30×10 ³	35	99.97
			3	1.38×10 ³	1.78×10 ³	13.77	1.35×10 ³	41	99.96

Note: The negative control group was sterile growth.
To be continued

Page 4 of 7



GUANGDONG DETECTION CENTER OF MICROBIOLOGY

ANALYSIS AND TEST RESULT

Report No.: 2022SP024R01E

Disinfection efficiency for air (Simulated field test)

1. Type of test germ: Staphylococcus aureus 8032
2. Test Method: Technical Standard for Disinfection (2002 Ministry of Health P.R.China X 2.1.3)

3. Test results:

Test Time	Test groups	Control group		Test Group		Killing rate (%)
		Number of bacterial colonies in initial space air (cfu/m ³)	Number of bacteria in the air after sterilization (cfu/m ³)	Number of bacterial colonies in initial space air (cfu/m ³)	Number of bacteria in the air after sterilization (cfu/m ³)	
60min	1	1.1×10 ³	8.3×10 ³	8.3×10 ³	57	99.91
	2	7.8×10 ³	6.6×10 ³	9.5×10 ³	71	99.91
	3	9.3×10 ³	8.1×10 ³	9.3×10 ³	64	99.92
120min	1	1.1×10 ³	7.6×10 ³	8.3×10 ³	14	99.98
	2	7.8×10 ³	5.5×10 ³	9.5×10 ³	14	99.99
	3	9.3×10 ³	6.8×10 ³	9.3×10 ³	7	99.98

Test space: 20m³ experiment box

Environment relative humidity: <2%

Environment temperature: 24℃

Note: The result of bactericidal rate test has eliminated the effect of microbial natural decay in air photo of the sample:



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Page 4 of 5

Report No. 20211010

I. Detection Object

1. Samples Description: Edla Air® PS-50072 Plasma Ion Sterilizer
2. Generator Model (No.): PS-50072
3. Product Model: Edla Air® PS-50072 Plasma Ion Sterilizer
4. Detection Date: 31/10/2021
5. Sample Quantity: 2 (one plasma generator and one air sterilizer)
6. Production Company: Shenzhen Lideng Environmental Protection Engineering Co., Ltd

II. Detection Environment: 22℃(Temperature) - 45%(Relative humidity)

III. Summary of Measurement Data:

No.	Parameters	Detection & Calculation Results
1	Working Voltage (kV)	3.60
2	Working current (μA)	67
3	Working frequency (kHz)	22.68
4	breakdown voltage (kV)	3.20
5	Electron Temperature of Plasma (eV)	0.25
6	Electron Density of Plasma (×10 ¹⁹ m ⁻³)	6.43

Detection position	A	B	C	D	E	F	G	H
Charge leakage index δ	0.26	0.23	0.22	0.24	0.21	0.22	0.23	0.26

IV. Conclusions:

1. Plasma generator of PS-50072 model is efficient for air sterilization according to the above detection and calculation results of plasma electron density and temperature.
2. The charge leakage index δ is less than 0.5 of reasonable error range at every detection position, therefore no charges leak from plasma generator.

Person in charge:

Detecting person: [Signature]
[Red stamp]

GUANG ZHOU INSTITUTE OF MICROBIOLOGY CO., LTD.

TEST REPORT

Test No. KJ20204593

Date Received: Dec. 15, 2020
Date Analyzed: Dec. 31, 2020

Method for Testing Air Disinfection:

1. Test Equipment:
 - 1) Culture media: NA
 - 2) Sampling equipment: six-stage sieve sampler
 - 3) Test space: 30m³
2. Operation Conditions of the Machine:
 - 1) Test power on during the test.
3. Test Procedure:
 - 1) The equipment is placed in the test space, close the door, and collect natural bacteria by six-stage sieve sampler, as the bacterial count before disinfection.
 - 2) Shut the sample and shut it down after running for 60 min. The natural bacteria are collected by six-stage sieve sampler as the bacterial count after disinfection.
 - 3) In sampling, place the sampling equipment in the center of test chamber at the height 1.0 meter.
 - 4) Choose 2 NA plates (the same batch) as the negative control, and culture them in the same condition as the samples.
 - 5) The tests repeat three times, and calculate the death rate respectively.
4. Death Rate: $K(\%) = \frac{F_0 - F_1}{F_0} \times 100$
Where: F_0 = The Average Bacterial Count in Air before Disinfection;
 F_1 = The Average Bacterial Count in Air after Disinfection.

Number of Sample	Test Strain	Test Time (min)	Test Number	The Average Bacterial Count in Air before Disinfection		The Average Bacterial Count in Air after Disinfection		Death Rate K _i (%)
				F_0 (cfu/m ³)	F_1 (cfu/m ³)	F_0 (cfu/m ³)	F_1 (cfu/m ³)	
KJ20204593-1	Natural Bacteria in Air	60	1	2.93×10 ³	2.47×10 ³	1.53×10 ³	91.57	91.36
			2	1.77×10 ³	1.53×10 ³	1.53×10 ³	91.36	
			3	1.38×10 ³	1.06×10 ³	1.06×10 ³	92.32	

Note: The negative control group was sterile growth.
To be continued

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GUANG ZHOU INSTITUTE OF MICROBIOLOGY CO., LTD.

TEST REPORT

Test No. KJ20204593

Date Received: Dec. 15, 2020
Date Analyzed: May. 27, 2021

Method for Testing Ozone Concentration:

1. Test Equipment:
 - 1) Ozone Analyzer
 - 2) Operation Conditions of the Machine: Test power on during the test.
2. Test Procedures:
 - 1) Put the test sample into a clean space.
 - 2) Test the background concentration.
 - 3) After turning on the machine, test the ozone concentration 1.5 m above the ground as required by the standard. The measurement time is 1 h, and the results are averaged.

Number of Sample	Items	Units	Results	Standard Requirement (GB 18202-2000)
KJ20204593-1	Ozone Concentration	mg/m ³	<0.003	≤0.1

End of report

Editor: [Signature] Checker: [Signature] Issuer: [Signature] Date Reported: [Signature]



GUANG ZHOU INSTITUTE OF MICROBIOLOGY CO., LTD.

TEST REPORT

Test No. QX20210332

Date Received: May. 20, 2021
Date Analyzed: May. 27, 2021Method for Measuring Clean Air Delivery Rate of Particulate (PM_{2.5}):

1. Test Object:
 - 1) Cigarette smoke as PM_{2.5} dust source, the test particle size range (<2.5 μm total particles)
2. Test Conditions:
 - 1) Environment temperature: (25±2) °C
 - 2) Environment humidity: (50±10)% RH
3. Test Equipment:
 - 1) The volume of the test chamber: 30 m³, Dust detector (TSI 8530)
 - 2) Operation Conditions of the Machine: Set the switch to position "the highest wind speed", "negative ion".
4. Test Procedures:
 - 1) Place the air cleaner to be tested in the test chamber in accordance with standard request and set the air cleaner controls to the conditions for test. Test for proper operation, then turn off the air cleaner.
 - 2) Using the test chamber HEPA filter, allow the test chamber air to clean until the background concentration of particulate (PM_{2.5}) reaches a concentration of less than 0.03 mg/m³. Simultaneously operate the environmental control devices until the test chamber conditions.
 - 3) When an acceptable test chamber background concentration is achieved, record the background concentration, turn off the test chamber environmental control system.
 - 4) Connect the cigarette burner to light the cigarette and cover the burner, blow the cigarette smoke into the test compartment with low pressure air. After the smoke has occurred, the fan continues to stir for 10 min, so that the bulk particles are mixed evenly after switching off the mixing fan.
 - 5) Test the initial concentration of PM_{2.5}, denoted as C₀ that should reaches a concentration of 0.56-0.84 mg/m³.
 - 6) Open the air cleaner, the concentration of PM_{2.5} in the cabin was measured at intervals of 1 min at the time of C₀ and 10 consecutive times were measured.
 - 7) Test the natural decay according to the steps 1) ~ 6), except that the air cleaner is unpowered. Note: The final valid data points should be no less than nine, if the valid data points are less than nine, the measurement time and the test time can be shortened.
 8. Computational Formula:
CADR (L/s) = 60 × (C₀ - C_n) / (t - t₀)
Where: C₀ = total decay constant; C_n = Natural decay constant; t = volume of the test chamber, m³

Number of Sample	Pollutant	Natural Decay Constant		Total Decay Constant		CADR Q (m ³ /h)
		A ₀ (min ⁻¹)	A _n (min ⁻¹)	A ₀ (min ⁻¹)	A _n (min ⁻¹)	
QX20210332-1	PM _{2.5}	0.0022	0.2214	0.2214	394.6	

To be continued

Page 3 of 5



GUANG ZHOU INSTITUTE OF MICROBIOLOGY CO., LTD.

TEST REPORT

Test No. QX20210332

Date Received: May. 20, 2021
Date Analyzed: May. 27, 2021Method for Measuring PM_{2.5} Removal Rate:

1. Test Object:
 - 1) Cigarette smoke as PM_{2.5} dust source, the test particle size range (<2.5 μm total particles)
2. Test Conditions:
 - 1) Environment temperature: (25±2) °C
 - 2) Environment humidity: (50±10)% RH
3. Test Equipment:
 - 1) The volume of the test chamber: 30 m³, Dust detector (TSI 8530)
 - 2) Operation Conditions of the Machine: Set the switch to position "the highest wind speed", "negative ion".
4. Test Procedures:
 - 1) Place the air cleaner to be tested in the test chamber according to the standard requirements. Adjust the machine to the working state of the test, check that it runs normally, and then switch off.
 - 2) Turn on HEPA (high efficiency particle air filter) until the background concentration (PM_{2.5}) reaches a concentration of less than 0.03 mg/m³. Simultaneously operate the environmental control devices until the room conditions (temperature and RH) meet the desired test chamber conditions.
 - 3) When an acceptable test chamber background concentration is achieved, record the background concentration, turn off the test chamber environmental control system.
 - 4) Connect the cigarette burner to light the cigarette. The cigarette smoke is blown into the test compartment with low pressure air. The fan continues to stir for 10 min, so that the bulk particles are mixed evenly after switching off the mixing fan.
 - 5) Test the initial concentration of PM_{2.5}, denoted as C₀.
 - 6) Open the air cleaner, the final concentration of PM_{2.5} is collected after 60 min.
 - 7) Test the natural decay on the same condition, except that the air cleaner is switched off.
 8. Computational Formula:
Natural decay rate: $N(\%) = \frac{C_0 - C_n}{C_0} \times 100$
Removal rate: $K(\%) = \frac{C_0 \times (1 - N) - C_n}{C_0 \times (1 - N)} \times 100$
Where: C₀ = the original concentration of control group; C_n = the final concentration of control group
Where: C₀ = the original concentration of test group; C_n = the final concentration of test group

Number of Sample	Pollutant	Test Time (min)	Control Group		Test Group		Removal Rate K _i (%)
			Original Concentration C ₀ (mg/m ³)	Final Concentration C _n (mg/m ³)	Original Concentration C ₀ (mg/m ³)	Final Concentration C _n (mg/m ³)	
QX20210332-1	PM _{2.5}	60	8.26	7.33	11.26	8.13	99.71

End of report

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Page 4 of 5

Some of our customers/agents/distributors



Our products are sold to some countries & regions



*We focus on
Continuous Innovation
For Your Healthy Breathing*



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