KENJI INDUCTIONAIR STERILIZER

Cut Off The Public Transmission Of The Virus

Service Hotline: +65 6472 7337

QSON KITCHEN EQUIPMENT

GREAT KITCHENS. WE MAKE IT HAPPEN !

CONTENTS

01

The Mission Of KENJI

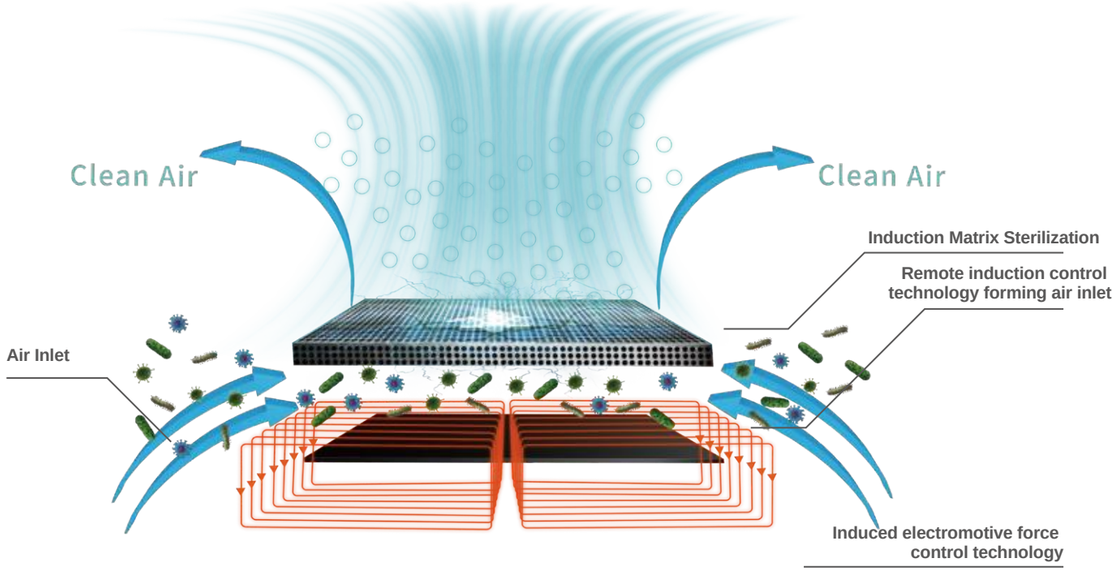
INDUCTION AIR STERILIZER

Sterilization, disinfection and odor removal are the lifelong mission of KENJI induction air sterilizer.
Restaurants, lobbies, hospitals, waiting halls, the more crowded and complex environment, the more worthy of KENJI air sterilizer.

02

Induction Matrix Air Sterilization Technology

INDUCTION AIR STERILIZER



Induction matrix air sterilization technology is a new air disinfection technology based on the principle of electromagnetic induction, which is invented by “the phenomenon of induced electromotive force produced by the conductor cutting the magnetic field line in the changing magnetic field”.

The core of the technology includes a super audio intelligent frequency conversion controller and a metal compound for electromagnetic induction.

By making metal compounds into a special matrix structure, each matrix element becomes an independent potential body under the action of electromagnetic induction, and finally forms a high-energy, high-density potential matrix.

When bacteria, virus and organic matter (VOC) pass through the potential matrix, its physical structure will produce a “micro explosion” in an instant, so as to realize the effect of sterilization, disinfection and odor removal, without any toxic and harmful by-products.

KENji

Supported By Three Major Invention Patents

Matrix sterilization technology

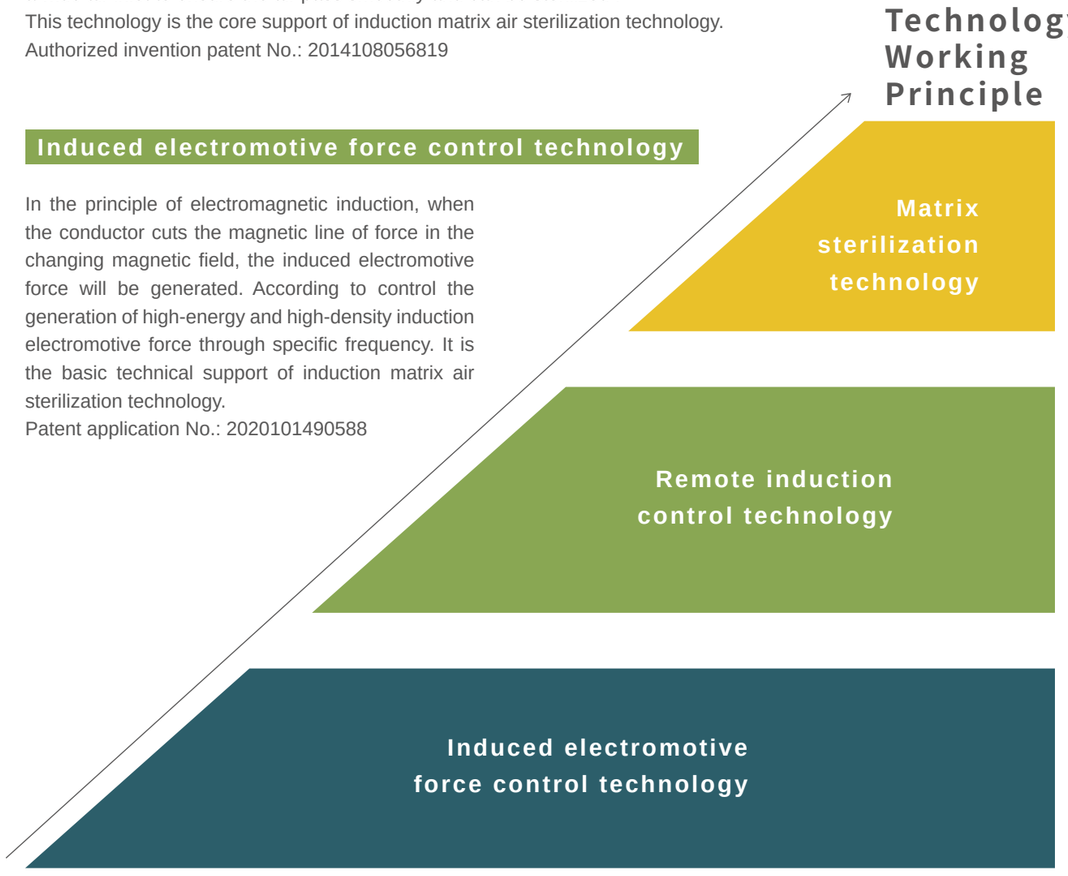
Matrix metal compound is of staggered design, in which each matrix element forms an independent potential body under the action of electromagnetic induction, and finally forms a high-energy, high-density potential matrix. When bacteria, virus and organic matter (VOC) pass through the potential matrix, its physical structure will produce a “micro explosion” in an instant.
This technology provides a way to make the induction matrix air sterilization technology.
Patent application No.: 2020101490978

Remote induction control technology

By virtue of remote induction control, it can also achieve stable control without contact, forming a high-energy and high-density potential matrix, and can provide a wide air inlet to ensure the air pass smoothly and can be sterilized .
This technology is the core support of induction matrix air sterilization technology.
Authorized invention patent No.: 2014108056819

Induced electromotive force control technology

In the principle of electromagnetic induction, when the conductor cuts the magnetic line of force in the changing magnetic field, the induced electromotive force will be generated. According to control the generation of high-energy and high-density induction electromotive force through specific frequency. It is the basic technical support of induction matrix air sterilization technology.
Patent application No.: 2020101490588



03

Air Disinfection In Public Places
— Represented by restaurant

INDUCTION AIR STERILIZER

KENJI is suitable for the complex place with rigorous standards and requirements as represented by the restaurant.

Because among all kinds of complex places, the air disinfection in the restaurant (school canteen, company canteen, restaurant, etc.) is very urgent and difficult to deal with.

Five typical characteristics of restaurant

1. Crowd gathering

The most typical feature of the restaurant is its crowd gathering.
Restaurant is always crowded with people. In particular, the risk of getting infection is relatively high during the epidemic period of flu season in the school canteen, company canteen and the restaurant with long queue and booming business.

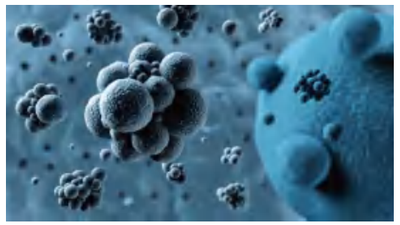
2. High humidity, more oil particles

Compared with general public places, the humidity of restaurants is higher. Especially in summer, the indoor humidity is high, the ground is wet and slippery, and there is a lot of condensation water on the wall.
Due to the existence of oil smoke, in some canteens with poor smoke exhaust design, the concentration of oil particles in the air are very high.
High humidity and oil-based particles make major damage to filter screen type equipment.

3. Various strains, complex odor easy to grow microorganisms

The restaurant is the place for public dining. There are special environmental factors such as food, soup, lampblack, and kitchen waste that is not disposed in time. In addition, due to the crowded with people and complex odor, pathogenic microorganisms are more likely to breed.

For example: two kinds of common pathogenic microorganisms that can be transmitted by air in restaurants



Staphylococcus aureus

It can be widely spread through air, water, food, etc.
Infection symptoms: nausea, vomiting, dizziness, skin ulceration, wound spread, fever, nausea and vomiting, enteritis, pneumonia and other symptoms, which can cause meningitis, septicemia, shock and other symptoms.

Legionella

It can be spread by air and water. The common way of transmission is central air conditioning.
Infection symptoms: mainly fever and respiratory symptoms, the most common and serious clinical type is pulmonary infection, accompanied by systemic multiple system damage.

4. Large space

The school canteen and company canteen generally possess large space. According to the “Code for Design of Catering Buildings” (JGJ 64-1989), the minimum usable area of each dining room and dining hall of restaurants and canteens shall be 850 m2 ~ 1100 m2 at least. Ordinary air disinfectors and air purifiers are not suitable for use in such places.

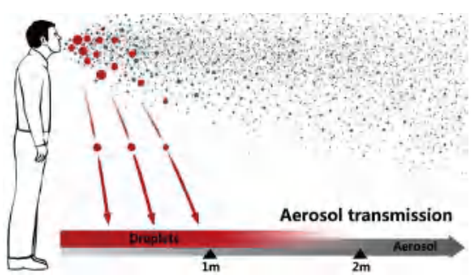
Minimum area for each seat in restaurants

	Minimum area for each seat in restaurants (m^2 / seat)		
Grade	Restaurant	Catering shop	Canteen
Class I	1.30	1.30	1.10
Class II	1.10	1.10	1.10
Class III	1.00	—	—

Class I canteen: the seating arrangement is comfortable;
Class II canteen: the seating arrangement meets the basic requirements.

5. Without masks while dinning: the risk of aerosol transmission is higher

Aerosol is an important way of virus transmission, such as covid-19.
Because of the dense seats in restaurants, the virus is more likely to spread through aerosols. Especially in the flu season or epidemic period, it is impossible to wear masks while eating, so the risk of aerosol transmission is higher, and the restaurant is easy to become the focus of the epidemic.



04

Common Air Disinfection Technology

INDUCTION AIR STERILIZER

Is the common air disinfection technology on the market suitable for the complex places with high standards and strict requirements represented by restaurants?

KENji

Ultraviolet & Ozone air disinfection

When using ultraviolet disinfection, the human body cannot be directly irradiated, otherwise it will cause skin redness, itching, desquamation, eye inflammation, burning and even cataract.

In the use of ozone disinfection, inhalation of excessive ozone will strongly stimulate the respiratory tract, causing sore throat, chest tightness, cough, bronchitis and emphysema. In severe cases, it can also cause neurotoxicity, dizziness and headache, decreased vision and memory. Ozone can also damage the immune system of human body.

The above two disinfection methods require “No Human Around”,the personnel must leave and this method is subject to high limitation.It cannot be used for air disinfection during the business operating hour and can’t kill the bacteria and viruses immediately.

2. Filter screen type

When it is used in restaurants with high temperature, high humidity and much lampblack, the pores are likely to be blocked and the loss rate may be accelerated due to high concentration of oil particles, resulting in a rapid decline in the purification effect. It is not only costly to use, but also easy to lose the filtering ability of bacteria and viruses due to not replacing in time.

3. Chemical disinfection

Chlorine dioxide and sodium hypochlorite are the representatives of chemical agents, which also include spray, effervescent tablets, and 84 disinfectant water. Such chemicals shall be kept away from the human body, otherwise it will cause uncontrollable safety problems.

In additional,it is impossible to cut off the transmission path of bacteria and viruses.

4. Photocatalyst method

The photocatalytic reaction of photocatalyst is unstable and depends on the triggering light source usually like ultraviolet light, which is difficult to control the actual effect.

5. Electrostatic purification

Electrostatic purification adopts the principle of corona air of high voltage DC electric field to absorb dust and kill microorganisms. It is easy to produce ozone. If the ozone is not well controlled, excessive inhalation will cause damage to human respiratory tract, nerves and immunity.

6. Plasma and anion

Plasma and anion are both used to ionize air (mainly oxygen) under high pressure, which will also produce trace ozone while working, but with less amount than the type of electrostatic purification.

The effect of anion sterilization and disinfection is very weak, and more effect is reflected in dust reduction, fresh air and other aspects.

Plasma can be used as an auxiliary in the air disinfection of complex places with high standards and strict requirements, such as restaurants.

05

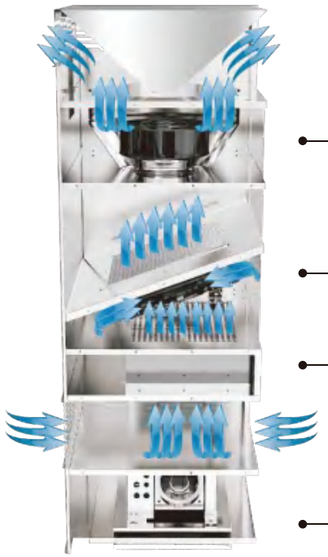
Favorable position for the use of KENJI

INDUCTION AIR STERILIZER

Compared with others, the KENJI induction air sterilizer equipped with induction matrix air sterilization technology is the method most suitable for the complex places with high standards and strict requirements represented by restaurants.

How does KENJI induction air sterilizer solve the problem of air sterilization?

The KENJI induction air sterilizer can generate negative pressure through the German ebmpapst air power module, and suck the indoor air into the machine from the bottom all around. The inhaled air is first treated by the triple metal filter module at the bottom so that dust, hair, oil smoke, PM2.5, etc. are intercepted. Then, the physical structure of bacteria and viruses are killed by virtue of the high-intensity and high-density potential matrix formed by core module and induction matrix. Finally, the internal air is released from the top all around to achieve the effect of disinfection and purification.

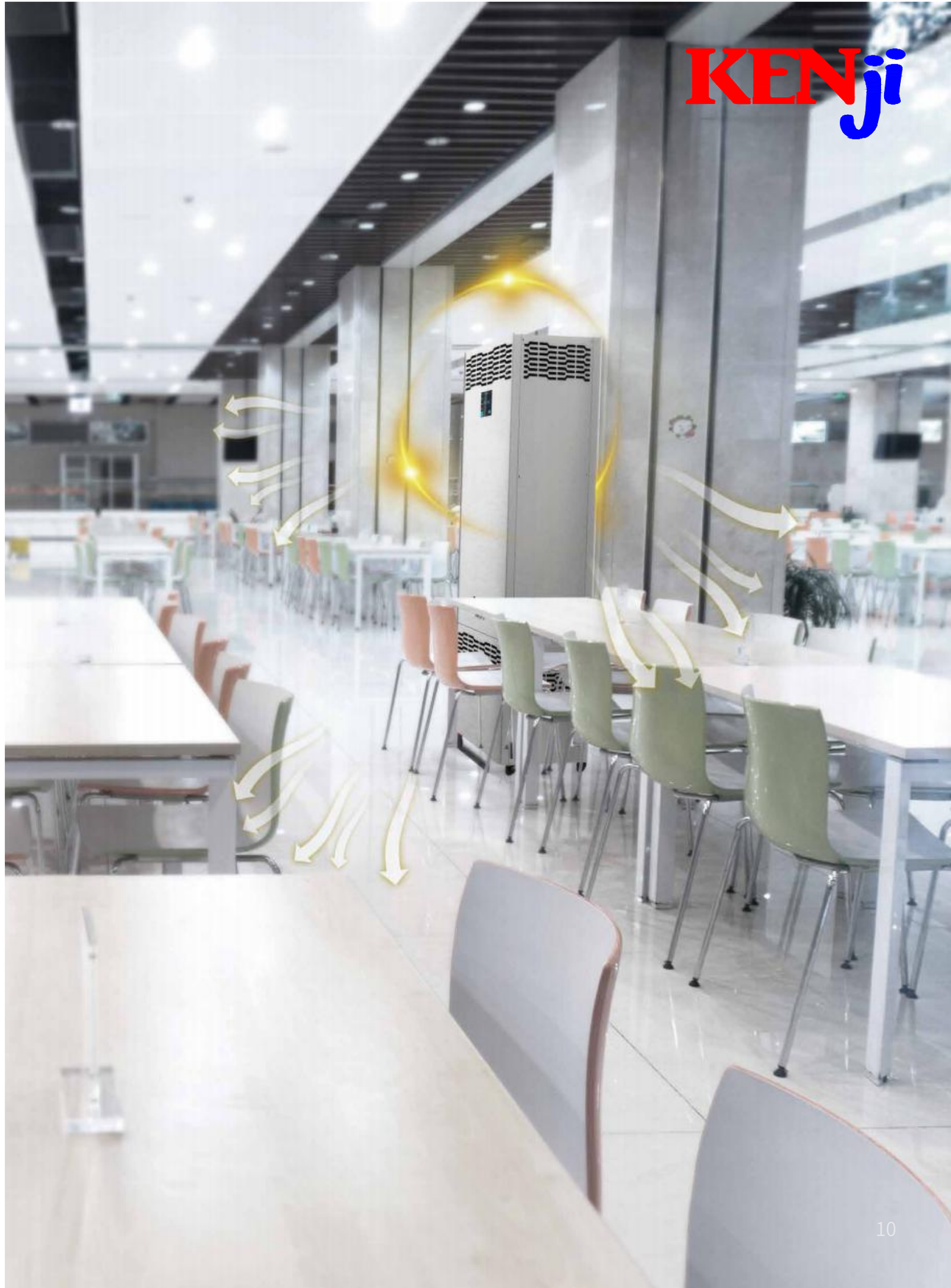


Aerodynamic module

New material magneto-electric sterilization module

1.Stainless steel double side primary filter screen
2.Aluminum-based double side primary filter screen
3.High-efficiency filter screen

Magneto-electric control module



06

Four powerful abilities

INDUCTION AIR STERILIZER

KENji

1. Man-machine coexistence

Cut off the public transmission path of virus

Induction matrix air sterilization technology adopts a safe, reliable and harmless physical disinfection method, which will not produce toxic and harmful by-products, irritating smell and other peculiar smell.

When KENJI is used, it will not cause damage to the environment and human body. The on-site personnel do not need to leave the field, and the machine can cut off the virus transmission path in real time at the first scene.

The disinfection method that personnel must leave the site during disinfection

Ozone | ultraviolet | chemical disinfection

06

Four powerful abilities

INDUCTION AIR STERILIZER

2. Large-flow instantaneous sterilization

The innovative design of “staggered” matrix structure ensures the effect of “instant sterilization” when bacteria and viruses pass by. At the same time, it is equipped with large-volume and high-performance fans, realizing ultra-low wind resistance and achieving high flow rate and instantaneous sterilization.

“staggered” matrix structure,
realizing ultra-low wind resistance

Comparison of bacteria and virus treated by different purification methods

Disinfection technology	Evaluation
Filter screen type	Large wind resistance
Plasma, anion, photocatalyst	Unstable effect
Nano silver, UV, ozone, chemicals	Long response time
Induction matrix air sterilization technology	**Large-volume and high-velocity instantaneous sterilization**

The test results of authoritative organization show that KENJI has strong and fast sterilization ability.

Microbial removal rate in 15 minutes

89.26%

Microbial removal rate in 30 minutes

99.91%

Test Report

Test Report No.: 证检2020-03-0071a
Applicant: Shenzhen Wantru.e commercial Equipment Manufacturing Co., Ltd.
Sample Name: Commercial Air Disinfection Purifier (Magnetoelectric Matrix Air-Disinfection Technology)
Type and Specification: KXJ-ME1200A-Y
Completion Date: 2020-03-25

Guangzhou Quality Supervision and Testing Institute (GQT)

Guangzhou Quality Supervision and Testing Institute (GQTI)
Test Report

KENji

3. Thorough sterilization

The induction matrix air sterilization technology adopts the physical disinfection method. When bacteria, virus and organic matter (VOC) pass through the potential matrix, its physical structure will produce a “micro explosion” in an instant, so as to realize the effect of sterilization, disinfection and odor removal, without any toxic and harmful by-products. In terms of microbe treatment, compared with the filter screen type of “blocking without killing”, the chemical disinfection of “short-term inhibition”, the electrostatic purification of “dust collection and adsorption”, the induction matrix air sterilization technology employed by KENJI can authentically and thoroughly kill bacteria and viruses from the physical structure.

Disinfection technology	Mode
Filter screen type	Blocking without killing
Chemical disinfection	Short-term inhibition and easy to rebound
Electrostatic purification	Mainly for dust collection
induction matrix air sterilization	**Sterilization and disinfection from the physical structure**

Steel mesh design, easy to clean

4. Ultra-low cost

All metal matrix structure, which is washable, eliminating the trouble of frequent replacement of consumables, and realizing ultra-low operation and maintenance cost.

07

Other characteristics

INDUCTION AIR STERILIZER

Operation design of replacing complexity with simplicity

Simplicity and convenience are the way of business

According to the needs of logistics management, work time and mode can be set in advance to ensure simple and efficient operation.

KENji

Germany ebmpapst large-volume high-performance fan

Sufficient air volume, super high efficiency

In order to ensure the efficacy of sterilization, KENJI is equipped with Germany ebmpapst high-performance fan with large air volume. Ebmpapst is a global leader in aerodynamic solutions.

Ventilation design of breathing zone

The sterilized air will be supplied to the breathing zone at first

Height of air outlet: 1.35m higher than the ground (height of breathing zone)

Breathing zone refers to the air directly used by human breath, that is, the air in the space near the mouth and nose, with a height of about 0.5-1.5m, which has a direct impact on human health.

Body design of high-quality stainless steel

Good texture and stable structure

The body is made of high quality stainless steel, which is durable.

Moving design with wheel

Easy and smooth to move

Equipped with high-performance wheel, which is convenient for daily use of logistics management.

08

I am KENJI

INDUCTION AIR STERILIZER

Product characteristics

1. The air sterilization technology of induction matrix is adopted to effectively kill bacteria and viruses. Its technical framework consists of three technologies: matrix-based bacteria and viruses hunting technology, remote sensing control technology and induced electro-motive force control technology;

2. The efficiency of air sterilization is high, the sterilization rate accounts for 89.26% in 15 minutes and 99.91% in 30 minutes;

3. Guard in time: kill the bacteria and viruses in the air and cut off the transmission path immediately and quickly at the first scene;

4. Man-machine coexistence: there are no toxic and harmful substances produced in the process of disinfection, and personnel do not need to leave the site during disinfection to realize the coexistence of human and machine;

5. High efficiency: German EBM high-quality fan is adopted, with air volume of 1200m3/h, surrounded air inlet and outlet, staggered matrix structure and extremely low wind resistance, to meet the needs of indoor air disinfection in large space;

6. Low cost: there is no need for frequent replacement of consum-ables of filter screen, which is convenient for maintenance with low comprehensive cost;

7. High quality all stainless steel shell, which is corrosion-resistant, oxidation-resistant and durable;

8. Microcomputer intelligent control, TFT color touch display panel;

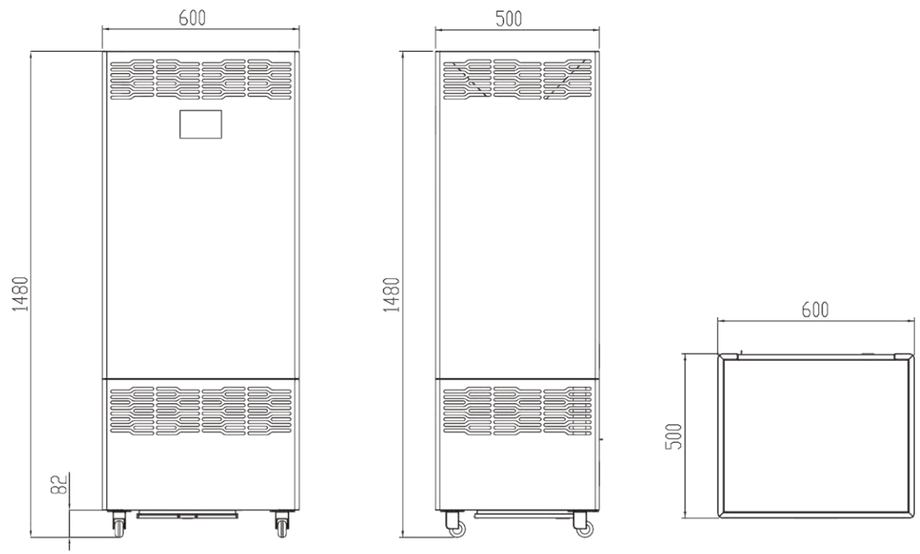
9. A variety of working modes are available, such as reservation, fast, super strong and silent modes, etc.

10. Intelligent function of reminding filter cleaning, which is conve-nient for maintenance and management.

KENji

Product parameters

Product Name	KENJI Induction Air Sterilizer
Product Type	Commercial Air Sterilization Purifier
Model	KXJ-ME1200A-Y
Air Volume	1200m³/h
Sterilization Efficiency	89.26% in 15 minutes and 99.91% in 30 minutes
Sterilization Technology	Induction Matrix Air Sterilization Technology
Direction of Wind	Suction Type
Dimension	600*500*1480mm
Rated Power	2300W
Rated Voltage	220V, 50/60Hz
Shell Material	High Quality Stainless steel
Weight	85kg
Reference Applicable Area	84-144㎡
Application	Restaurants, lobbies, hospitals, waiting halls, the crowded and complex places with high standards and strict requirements represented by restaurants.
Major Function	Running Time Setup, Environment Setup, Running Mode Setup, Warning for Cleaning



09

After-sales service

INDUCTION AIR STERILIZER

1. Applicable site

(1) This product is suitable for crowded public places such as schools, restaurants, factories, public institutions, and waiting halls, etc.

(2) This product is not suitable for commercial kitchens or places where there are metal dusts.

(3) This product needs to be placed on a level and stable ground.

(4) This product needs to be placed more than 30cm away from its left and right walls, furniture, curtains, etc., and at the same time, the back of the product needs to be kept at least 10cm away from the wall to ensure that the indoor air can be effectively disinfected and purified.

(5) It is recommended to use the product in the environment where the ambient temperature is between - 15°C and 45°C and the relative humidity is below (93±3) %.

2.After-sales service

24 hours * 365 days national service hotline: +65 6472 7337

3. Instructions for use

(1) The installation and use of the equipment must be in accordance with the requirements of the product manual.

(2) Please place the equipment on a level and stable ground and turn the red gear of caster clockwise until the foot pad is against the ground to avoid the equipment toppling or overturning.

(3) This equipment may cause noise under the operation of super mode, and sensitive people may be uncomfortable. It is recommended to adjust the equipment to silent mode after 30 minutes of operation under super mode.

(4) The cleaning and maintenance of the equipment shall be in accordance with the require-ments of the product manual.

(5) Please keep the product manual for future use.