



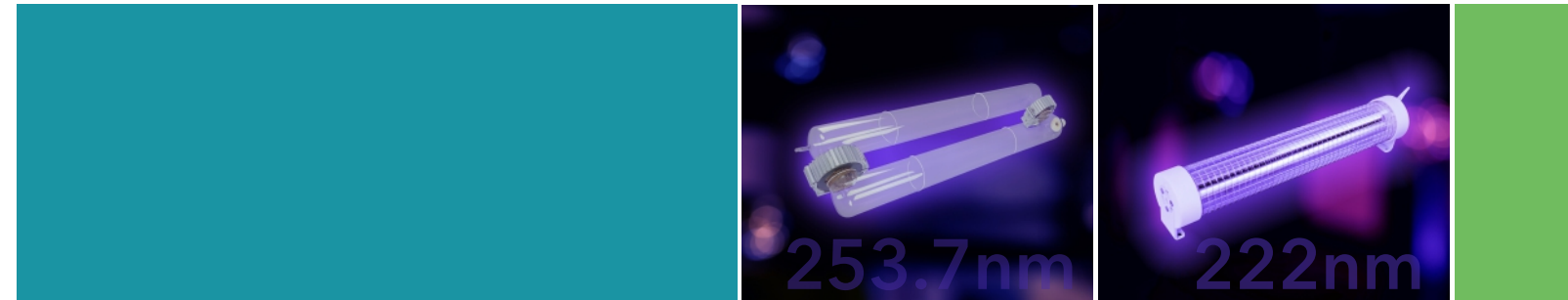
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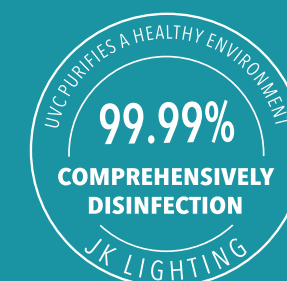


JK UVC Germicidal Product Brochure

CREATE & SAFEGUARD A SAFER & HEALTHIER LIFE



UVC Disinfection Expert



JK UVC

Germicidal Lamp

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Company Introduction

INTEGRITY/RESILIENT/SUSTAINABILITY/TEAMWORK

Fujian Juan Kuang Yaming Electric Limited specializes in the research, development, manufacturing and sales of lighting products. It was established in 1984 with branches in Nanping, Fuzhou, Wenzhou and Shanghai. It is a group company to provide lighting solutions and supply lighting products with its superior proprietary technologies of UVC, LED, LEP, Induction and HID lightings.

Fujian Juan Kuang Yaming Electric Limited (hereinafter called FJK or JK Lighting) takes the green and high energy efficiency as its mission and builds healthy and green energy saving lighting environments by dedicating itself in meeting the tough, harsh, intelligent control lighting requirements by supplying best engineered and high quality lighting products and solutions. In 2001, the company established the Post-Doctoral Research Station, the first of its kind in China lighting industry and now it owns a provincial technical center, a provincial R&D Research Center of Lighting, a UL and CUL certified lab. It has been awarded with dozens of national and international patents, drafted 25 pieces of national and industrial standards in capacitor, HID, induction and other lighting products or systems. It is one of the cabinet members of China Lighting Association and members of China Lighting Society.

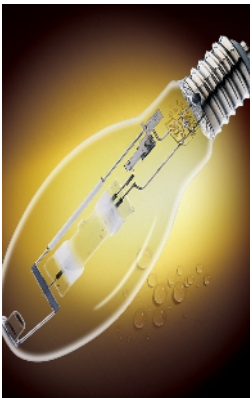
FJK attaches great importance to product quality assurance and inspection system. In 1997, It passed ISO 9001 Quality Management System and ISO 14001 Environmental Management System afterwards. Many products are certified with CCC, UL, CSA, DLC, VDE, CE, CB, PSE, TUV and CQC respectively. The complete quality assurance system, superb quality and high performance of the products bring in high reputation worldwide and win many key lighting projects and great customers at home and abroad, such as Sports Stadiums of 11th Asian Games, Tiananmen Square, Oriental Pearl Tower, Shanghai Nanpu Bridge, Kunming Expo, Shanghai Bunds Tunnel, Shanghai General Motors, Shanghai Volkswagon, Zhenzhou Yutong Auto, Hongta Tabaco Group, Gree Group, Guangzhou Theatre, Shenzhen Metro, Fuyin Express Highway, American Oakland Harbor, etc.

FJK will adhere to the principles of Integrity, Resilience, Sustainability, and Teamwork, build JK brand into a world famous brand and turn company into a first- class modernized manufacturer. JK Lighting will contribute itself in supplying good and healthy green lighting solutions and products with superb quality, high energy efficiency and excellent service.

UVC Disinfection Expert

JK Mission:

Turn To be One of Global Leaders of UVC Disinfection Devices
To Provide a Healthier & Safer Life



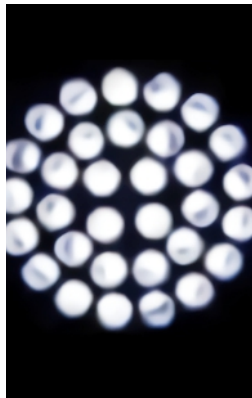
HID Lighting



Induction Lighting



UVC Germicidal Lamp



LED Lighting



LEP Lighting

UVC Germicidal Lamp System

APPLICATIONS



AIR DISINFECTION

Micro-organisms float in the air, which is a main factor of people's illness. The appreciable number of airborne micro-organisms can be reduced by using either JK's UVC induction lamp system or JK's UVC excimer technology. So the danger of airborne infection is reduced.



WATER DISINFECTION

Water disinfection is the process of reducing the amount of harmful pathogens in a water supply. This can be achieved through simple chemical, filtration and radiation methods or a combination of techniques. Chemical disinfectants and treatments are often reserved for municipal and large water distribution networks, while point-of-use (POU) and point-of-entry (POE) systems rely on filtration and deep UVC. In these systems, filtration removes chemical and organic contaminants, while UVC addresses microbial threats from bacteria, viruses and cysts.



SURFACE DISINFECTION

The use of UVC light is an effective and reliable method of surface disinfection. Using high intensity UVC and right dosage, up to 99.99% of micro-organisms can be destroyed in a matter of seconds with no residues and contaminants.

TECHNOLOGY INTRODUCTION

UVC TECHNOLOGY

- 01-02 What Is UV Technology?
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UVC DEVICES

- 17-19 JK Far UVC Sanitizer Dual functional (Handheld/Ceiling) (30W)
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- 23-24 JK UVC DAS Series of In-duct Air Sterilizer(200-600W)
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- 27-28 JK UVC Cabinet Sterilizer(With UV Induction electrodeless lamp)(420W)
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SERVICE

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Notice

- All information and data contained in this brochure are subject to change without prior notice.
- Always use UVC product(s) carefully, safely and cautiously as per applicable local, state and international regulating standards, recommendations and guidelines.

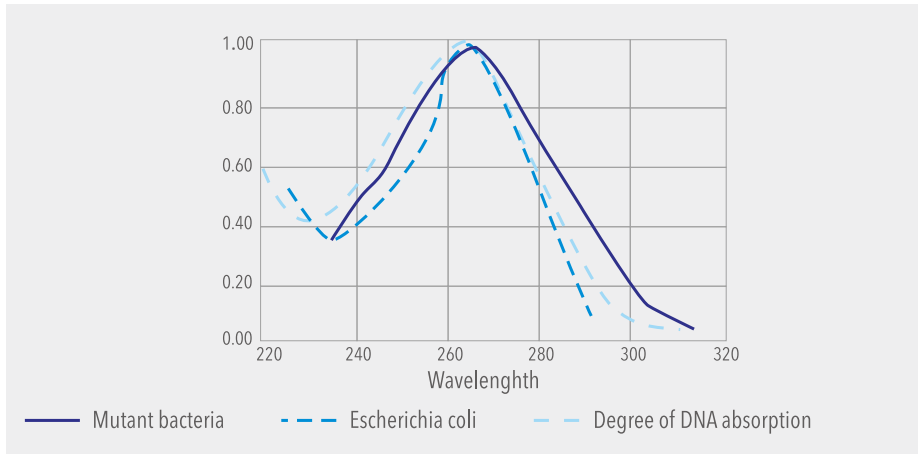
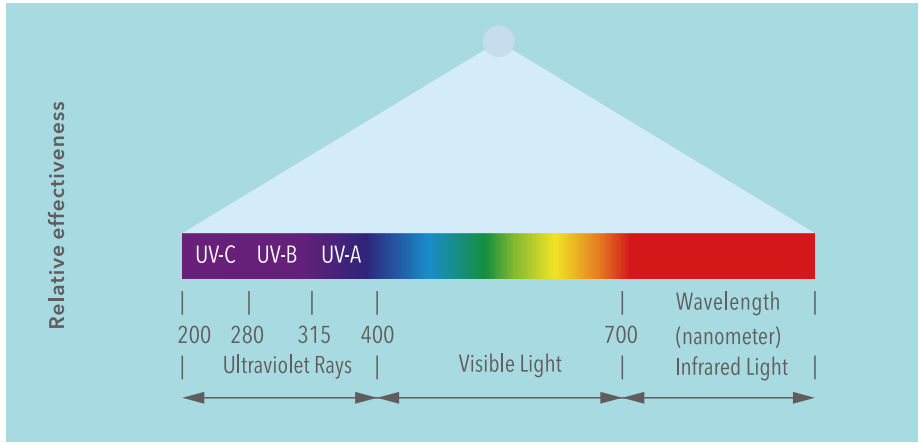
WHAT IS UV TECHNOLOGY?

UV radiation is an electro-magnetic wave radiation (photon radiation), which is only different in wavelength to the other stated radiations. UVC is the short wave part of the ultraviolet radiation spectrum that is not naturally occurring on the earth. So it must be produced artificially. UV light is classified into three primary wavelength ranges: UVA (320-400nm), UVB (280-320nm), UVC (200-280nm).

Scientific researches show that the ultraviolet disinfection method mainly damages nucleic acids by radiation damage and degree of damage to microorganisms, resulting in bond and chain breaks, thereby changing the biological activity of cellular ribonucleic acid (RNA) and deoxyribonucleic acid (DNA) so that microorganisms cannot replicate themselves. By doing this, the sterilization and disinfection will be achieved.

The picture shows a typical DNA absorption curve. The DNA has its maximum absorption close to 260 nm. So micro-organisms are mostly sensitive to germicidal wavelengths around 260 nm. JK UVC induction disinfection lamp emits the peak wavelength of 253.7nm, which falls at 80% of the peak value. As it emits intense UVC light at the peak of 253.7nm, the JK UVC induction disinfection lamp is highly effective for air, surface and water disinfection with the right deployment, duration, exposure rate and dosage. Together with JK's best engineering and workmanship, its UVC induction disinfection lamp system is the right solution to efficient, thorough and consistent disinfection.

Furthermore, recent science researches showed that the UV length at 222nm kills viruses with no harm to people. JK's excimer far UVC lamp systems are ready for the market for occupied area.



JK UVC GERMICIDAL LAMP SYSTEM

Ultraviolet / Virus Inactivation

Viruses, bacteria, mold, spores and other harmful microbes exist in air, on surface, and in water which serve as a source for infections and health problems. JK's UVC Germicidal lamp system is capable of killing 99.99% of these micro-organisms effectively and energy-efficiently with no residual and contaminants while meeting various national and international regulating standards.



VIRUS KILLING

It is proved and confirmed that UVC kills various bacteria, virus and micro-organism including Coronavirus.



SAFE & RELIABLE

Reliable disinfection, killing rate of 99.99%, smart control, efficient and safe.



ENERGY SAVING

With the electronic ballast design and smart control options, the energy saving is maximized.



ENVIRONMENTAL-FRIENDLY

No residual and contaminants after disinfection.

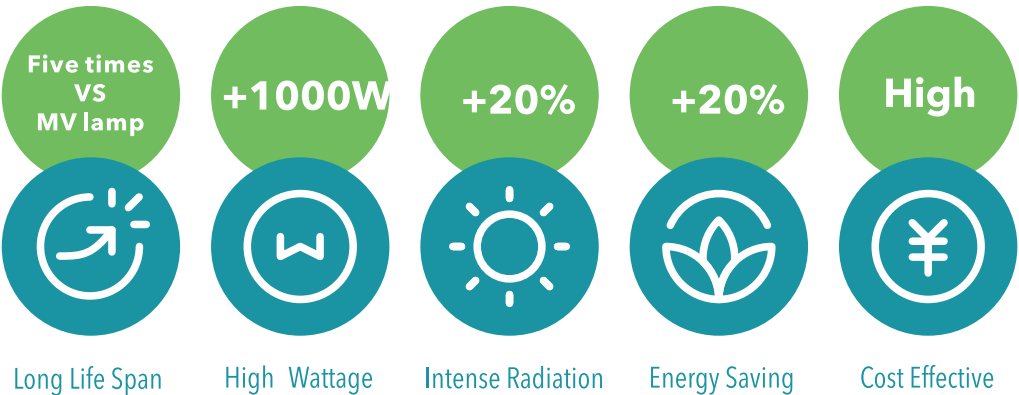


ECONOMY & CONVENIENT

Long life span, low operation cost, maintenance free in lamp system in 5 years

What Is JK UVC Induction Germicidal Lamp?

FIVE CORE ADVANTAGES OF JK UVC INDUCTION



Comparison of various uvc light sources in performance

Item	LED	Low-pressure mercury lamp	Medium-pressure mercury lamp	JK UVC induction lamp
power	3W	10W~150W	150~400W	40W~1000W
Radiation rate at 250-280nm	≤2%: Radiation rate, not for sizable area	≤40%	≤10%	≤40%
UVC power per lamp(W)	0.06	3-45	15-100	14-400
Available electrode	No	Yes Short life span due to the electrode aging	Yes Short life span due to the electrode aging	No Long lifetime due to electrodeless structure
Lamp size	Small	Big	Small	Medium
Life span(Hrs)	12,000	1,000-12,000	1,000-3,000	60,000
Cost-effective	Low	Medium	Medium	High
Conclusion	Very low cost effectiveness, for low watt only, Not suitable for sizable disinfection.	Conventional disinfection light source, short life span.	The radiation at 254nm is little. Not efficient.	Long life span and high radiation rate result in an ideal UV disinfection lamp.

Virus Killing Effect (Based on 100W UVC induction germicidal lamp)

Micro-organism	Duration	Distance	Reappearance	Colony Forming Units	Average Colony Forming Units	Killing rate	Log reduction
Coli germs ATCC 11229	0 minutes	N/A	1 2	7.20E+07 4.90E+07	6.05E+07	N/A	N/A
	15minutes	1m 2m	1 2	<1.00E+01 2.70E+02	<1.40E+01	>99.9998%	>5.64
	20minutes	1m 2m	1 2	2.00E+01 <1.00E+01	<1.50E+01	>99.99998%	>6.61
Staphylococcus ATCC 6538	0 minutes	N/A	1 2	1.43E+07 9.90E+06	1.21E+07	N/A	N/A
	15minutes	1m 2m	1 2	2.20E+02 1.09E+03	6.55E+02	>99.995%	4.27
	20minutes	1m 2m	1 2	3.40E+02 6.90E+02	5.15E+02	>99.996%	4.37
Clostridium ATCC 15597-B1	0 minutes	N/A	1 2	7.20E+05 6.30E+05	6.75E+05	N/A	N/A
	15minutes	1m 2m	1 2	1.36E+03 1.51E+03	1.44E+03	>99.787%	2.67
	20minutes	1m 2m	1 2	1.70E+03 2.09E+03	1.90E+03	>99.72%	2.55

Comparison between uvc induction germicidal and chemical germicidal

Item	UVC induction lamp	Chemical
Residual	No residual	Residual and poisonous side product
Operation cost	Little operation expense; energy expense only	Human operates, handles and stores with the help of machines resulting in potential error and problematic sequences
Frequency	24 hours/365 days	Human operates
Effect	Consistently effective	Problematic handling of chemicals and potential pollutant
Cost	High cost effective	High cost in purchase, storage, handling, formulae, residual, pollutant, corrosion, etc
Maintenance	60,000 hours maintenance free	Frequent maintenance
Effect	All known bacteria	Dedicated detergent
Environment	Environment friendly	Potential pollutant, contaminant and hazardous residual

JK UVC Induction Germicidal Lamp System

Features Of UVC Induction Germicidal Lamp

- Proved and matured technology: The technology exists more than a hundred years and JK has installed millions of visible induction lights globally with high quality and low failure rate.
- Long lifetime: The induction technology uses the frequency induction to drive the lamp. There is no electrode to kill the lamp as conventional regular fluorescent lamp. The lifetime is 100,000 hours and we warrantee 60,000 hours or 5 years.
- No re-lamping in 5 years virtually eliminates the costly down time and maintenance.
- Instant on/off and instant hot restrike eliminate warm-up.
- Extensive suitable ambient temperature range: 0-50°C (32-122°F).
- No liquid mercury: The technology uses mercury amalgam which is easy to manage.
- Strong UV radiation intensity.
- Pure, high intensity and uniform 253.7 nm radiation: The radiation power at 253.7 nm is around 98% of total emitted UV light.
- Direct submersion in water and direct contact with water without additional quartz protective sleeve for high radiation and disinfection efficiency when in use in water.
- Available power as high as 800W eliminates the need for invasive rows of multiple cables, ballasts, controls and power cabinets.
- Good for tough area where the power supply fluctuates significantly or dirty power occurs.
- Stable output: Output power fluctuates within 3% when supply voltage varies in 10%.
- Sturdy and durable ballast design with military graded electronic components and high quality extruded aluminum housing for maintenance free and low operation cost.
- Optional dimming with 0-10V function for controller with display screen, laptop or mobile phone APP for energy efficiency, smart control and remote control.
- No EMC issue: Compliance of CE Standard 55014.
- Optional supply voltage: 120~277Vac for American market or 220~240Vac for Asian and European market, 50/60Hz.

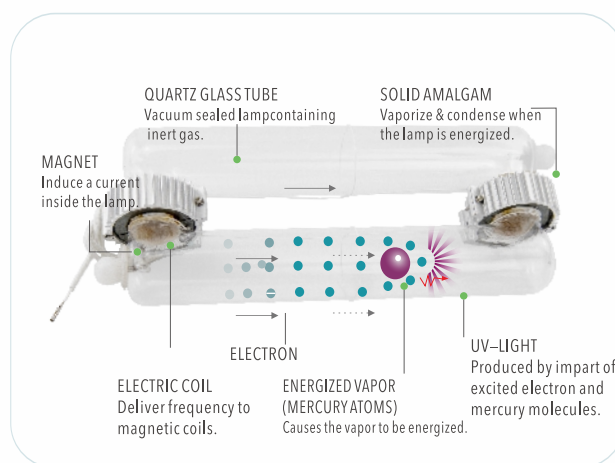
Applications

- Inactivation of virus, bacteria, pathogens and other micro-organisms
- Air purification in sizable area such as hospital, school, health-care centers, restaurant, port, halls, malls, lab, office, animal breeding, plant cultivation, industrial facility and HVAC management, etc.
- Surface disinfection for food processing, food storage, medicine, fruits, vegetables, malls, handrails, hospital, luggage, package, parcel, and tools, etc
- Water disinfection for drinking water, waste water, swimming pool, aquarium, facility and utility water.

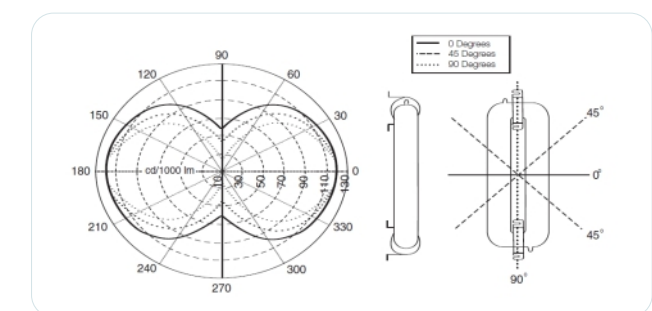
Working Principle & Innovations

Induction lamps are basically fluorescent lamps with electromagnetics wrapped around a part of the tube. In external inductor lamp, high frequency energy, from the ballast, is sent through wires, which are wrapped in a coil around the ferrite inductor on the outside of the glass tube, creating a powerful magnet.

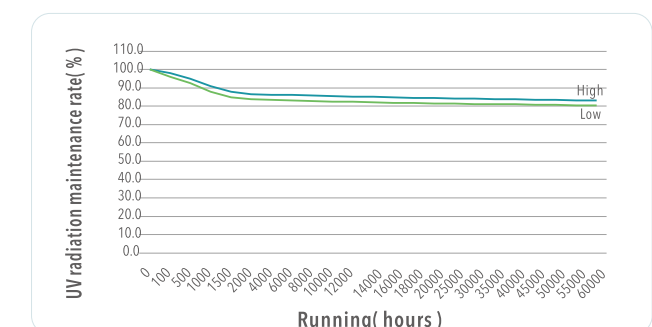
The induction coil produces a very strong magnetic field which travels through the glass and excites the mercury atoms in the interior. The mercury atoms are provided by the amalgam (a solid form of mercury). The excited mercury atoms emit UV light of 253.7 from the quartz lamp envelope.



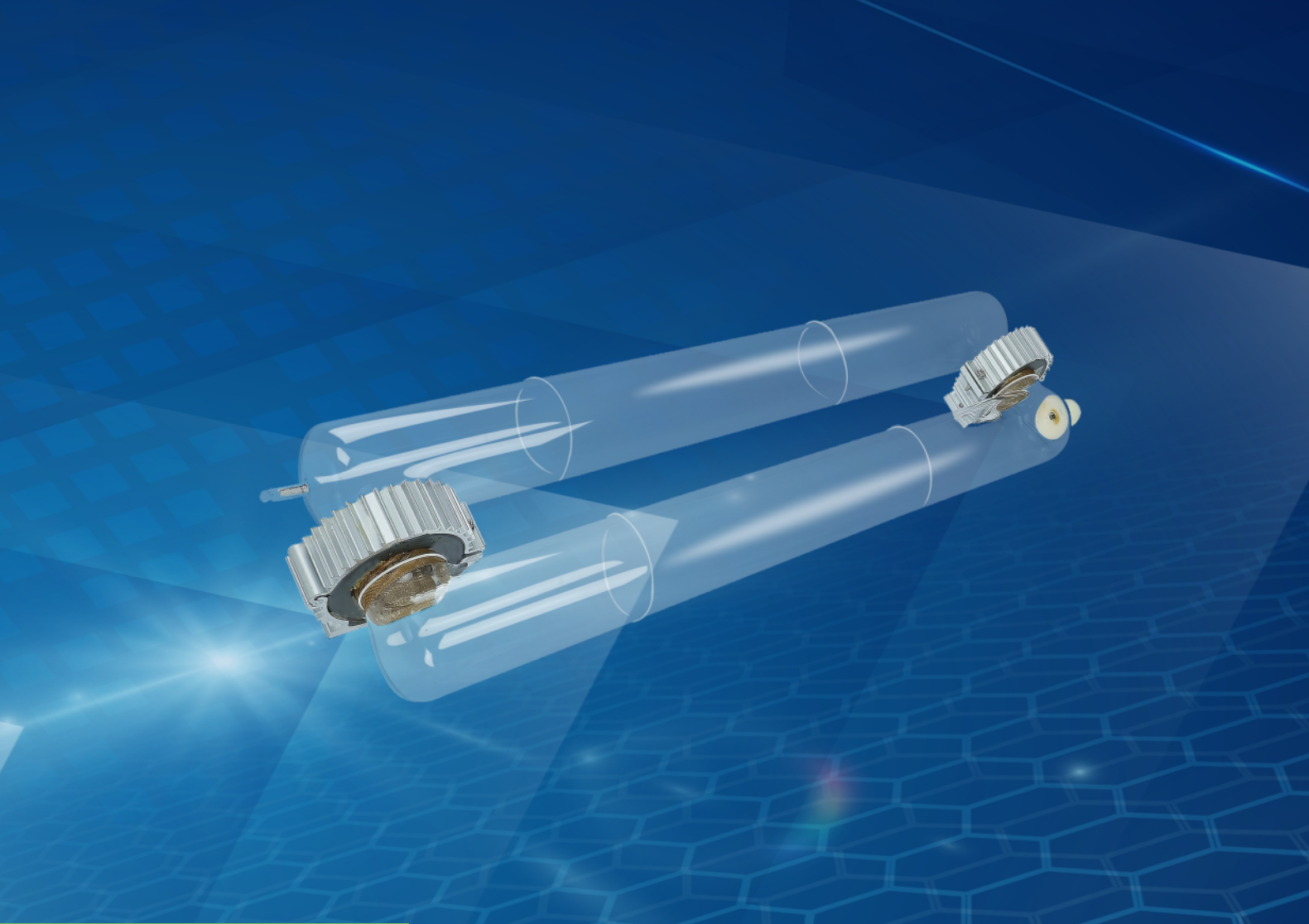
▲ Working principle diagram of induction lamp



▲ UV irradiation intensity germicidal chart of JK UVC Induction Germicidal Lamp



▲ JK UVC Radiation maintenance rate



AIR/SURFACE DISINFECTION

Long Lifespan & High Power

High Efficient
Virus Inactivation

Reliable & Safe

Energy Efficient
& Eco-friendly

JK UVC

Induction Germicidal Lamp System(Air/surface Disinfection)

Virus, bacteria and other pathogens exists in air and surfaces and cause people to be sick. Our high-efficient electrodeless induction ultraviolet disinfection technology can inactivate viruses, bacteria and pathogens in air and surfaces quickly and efficiently.

It meets all relevant standards with virus inactivation rate at 99.99% according per the third-party reputable lab. The features of high-efficient virus inactivation, long lifetime, high power, reliable, eco-friendly and maintenance-free provide a worry-free guarantee for human's healthy daily life.

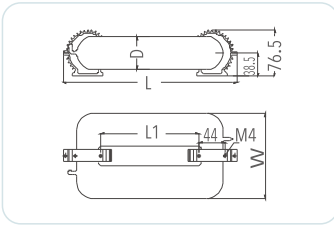


Dimension

Unit:mm

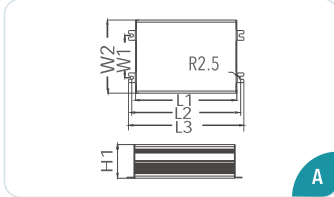
UVC induction germicidal lamp

Power	Diameter(D)	Length (L)	Width (W)	Mounting Hole Distance(L1)	Length
200W	54	388	144	261	342
300W	54	540	144	419	500
400W	54	676	170	549	630
500W	54	796	170	669	750
600W	54	947	170	819	900

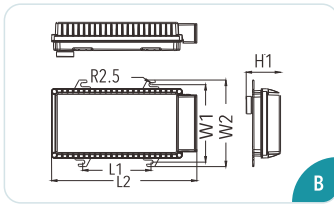


Ballast for UVC induction germicidal lamp

Power	Length L1	Length L2	Length L3	Width W1	Width W2	Height H1	Outline Dimension	Application	Enclosure
200W	189	204	215	70.0	120	53.0	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/ Internal Mounting	IP65
300W	274	290	302	70.0	135	63.5	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/ Internal Mounting	IP65
400W	274	290	302	70.0	135	63.5	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/ Internal Mounting	IP65
500W	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/ Internal Mounting	IP65
600W	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/ Internal Mounting	IP65



Profile Aluminum Housing



Die Cast AluminumHousing

Technical Specification

Type Ozone-free(O ₃)	Power (W)	Input(W) 120Vac / 277Vac	UV radiation power@253.7nm (W)	UV intensity(μw/cm ²) @20cm/100cm	UV intensity at lamp surface (mw/cm ²)	Ozone content (O ₃)≤(g/hr)	Wave length (nm)	Average life span (h)	Lamp
WJZW200-54-W-ST-388	200	216.0/210.0	73.5	≥9520	≥530	0.010	253.7	80% @60000	quartz glass+ Amalgam
WJZW300-54-W-ST-540	300	324.0/315.0	110.3	≥14290	≥900	0.015			
WJZW400-54-W-ST-676	400	432.0/420.0	147	≥13330	≥1110	0.020			
WJZW500-54-W-ST-796	500	540.0/520.0	183.8	≥10500	≥1295	0.025			
WJZW600-54-W-ST-947	600	648.0/630.0	220.5	≥19900	≥1510	0.030			



WATER DISINFECTION Direct submerge in water Long lifespan High efficient virus inactivation Eco-friendly

JK UVC

Induction Germicidal Lamp System(Water Disinfection)

JK Electrodeless UVC disinfection lamp can be submerged in water directly to enhance the virus inactivation capability while the conventional low-pressure UVC lamp has to be enclosed with quartz sleeve for water disinfection. So the electrodeless induction UV lamp is much more efficient in the water disinfection than the low pressure mercury lamp according to the Inverse square law in the UV dose and distance. The features of high-efficient virus inactivation rate, long lifetime, high power, reliable, eco-friendly and maintenance-free meet the requirements of small, medium and large sizable water treatment applications including utility water, industrial effluent, process water and aquatic breeding.

The optional 200w to 700w high power electrodeless ultraviolet disinfection lamp systems meet the requirements of disinfection systems for all scales of water treatment and purification.

Induction lamp

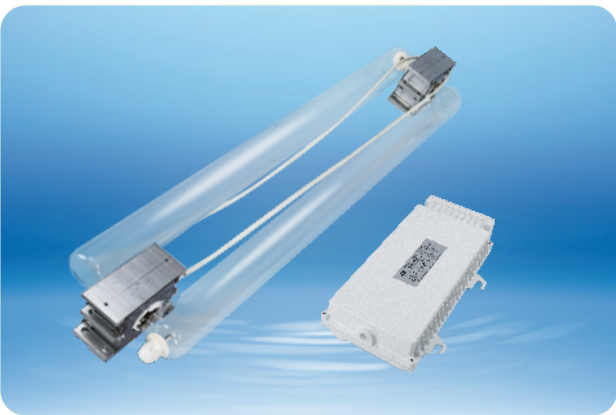
Long lifetime

Virus killing rate 99.99%

Energy Efficient & Environmental friendly

Economy & convenient

Safe and reliable

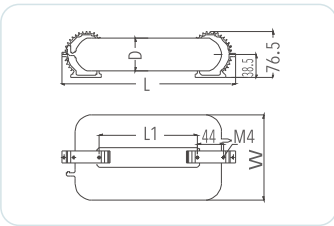


Dimension

Unit:mm

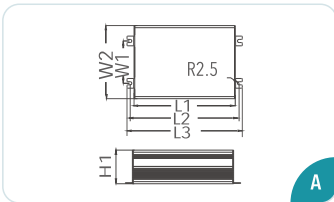
Induction UVC Germicidal lamp for water treatment

Power	Diameter D	Length L	Width W	Mounting Hole Distance L1	Length
200W	54	295	144	169	250
300W	54	388	144	261	342
400W	54	540	144	419	500
500W	54	676	170	549	630
600W	54	736	170	669	690
700W	54	796	170	719	750

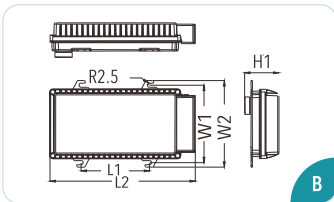


Ballast for UVC germicidal lamp for water treatment

Power	Length L1	Length L2	Length L3	Width W1	Width W2	Height H1	Outline Dimension	Application	Enclosure
200W	189	204	215	70.0	120	53.0	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/Internal Mounting	IP65
300W	274	290	302	70.0	135	63.5	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/Internal Mounting	IP65
400W	274	290	302	70.0	135	63.5	Fig.A	Internal Mounting	IP40
	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/Internal Mounting	IP65
500W	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/Internal Mounting	IP65
600W	150	319	/	169.5	189.5	75.5	Fig.B	External Mounting/Internal Mounting	IP65
700W	302	318	328	70.0	120	51.0	Fig.A	Internal Mounting	IP40



Profile Aluminum Housing



Die Cast Aluminum Housing

Technical Specification

Type	Ozone-free(O ₃)	Power (W)	Input Voltage (V)	Input Power	UV radiation power@253.7nm (W)	Radiation Poweruvv (w)@185nm	Irradiation Intensityuvv (μw/cm ²)@20cm	Ozone content (O ₃)≤(g/hr)	Wave length (nm)	Average life span (h)	Lamp
WJZW200-54-Y-ST-295-SWT		200	120-277	216.0/210.0	73.5	10	7270	5.0	253.7	80% @60000	Quartz Glass+ Amalgam
WJZW300-54-Y-ST-388-SWT		300	120-277	324.0/315.0	110.3	15	9812	7.5			
WJZW400-54-Y-ST-540-SWT		400	208-277	432.0/420.0	147	20	13077	10.0			
WJZW500-54-Y-ST-676-SWT		500	208-277	540.0/520.0	183.8	25	16351	12.5			
WJZW600-54-Y-ST-736-SWT		600	208-277	648.0/630.0	220.5	30	19616	15.0			
WJZW700-54-Y-ST-796-SWT		700	208-277	756.0/735.0	257.3	35	22890	18.0			



Safety Tips and Precautions

ATTENTION

- Never use UV germicidal device as for lighting purpose.
- At NO time should UVC products for UNOCCUPIED Spaces be permitted to operate with humans, animals, or plants present in the operation area. Must use multiple safety systems such as PIR, microwave detector, timing switch and time delay switch to prevent accidental UVC exposure.
- Limit access to areas where UV sources are used.
- Post warning signs at the entrance to labs, halls or other work areas using UV sources.
- Wear protective eyewear and gloves.
- Cover arms and neck and limit exposure time.
- Never look directly at the beam.
- Use a manual or electronic shutter to close the beam when the source is not in use.
- Use enclosed beam paths where possible.
- Exposure to UV radiation, even for short periods of time, can be hazardous to skin and eyes.
- Never place glass before UVC light source as it impairs the UV penetration.
- Unplug and disconnect the power and the lamp shall be extinguished before any service and access. Do not service when the lamp is still hot. Wait until it cools down.
- Do not try to service the lamp system. Consult a manufacturer representative for service.
- Use cloth to collect the broken lamp and dispose it environmentally as per local regulation.
- UVC light source always generates certain amount of ozone. Keep the room or enclosure well ventilated. Wear respiratory masks when entering concentrated rooms during and after UVC disinfection when ventilation is not enough.
- The surface disinfection requires a clean and flat surface with no texture, obstacles and shadow.
- The surface disinfection is directional, so multiple and full-around UVC disinfection are recommended for complete sterilization.
- Ultraviolet (UV) light imposes degrading effects on different types of materials and surfaces such as rubber, plastic, coating, painting, ceramics, leather and glass, etc.
- At times when exposure to the light is unavoidable (for example, when using UV hand lamps to disinfect a surface or object), use protective eyewear such as glasses, covered visors or full face masks. Cover as much of the hands, arms, legs and neck as possible. Avoid touching a disinfection lamp that is on.
- Correct installation ensures proper disinfection. Keep children away from the UVGI. Multiple UVGIs may be needed for right dosage. Right duration and distribution angles are also important. Humidity may be a factor of efficient disinfection.
- Always follow safety precautions published by the manufacturer, local and state authorities.



JK FAR UVC

Excimer Light Source(222nm)

Working principle

Excimer stands for “excited dimer” and is a dimer in the excited state. It refers to the transient molecule (nanosecond level) formed by the noble gases in the lamp excited by external voltage, which will radiate photons and decompose into atoms when it returns to the ground state with low energy. Excimer light source generally uses dielectric barrier discharge, and its far ultraviolet photon radiation mechanism can be described as follows: in dielectric barrier micro discharge, electrons with an average photon energy of several electron volts effectively splash krypton atoms and chlorine atoms. These excited krypton and chlorine atoms collide with the surrounding krypton and chlorine atoms to form excited krypton chloride excimer. When the excited krypton chloride excimer returns to the state of low energy, it will produce far ultraviolet radiation with narrow wavelength and relatively concentrated energy, with a wavelength of 222 nm which half peak is 2 nm. And it will quickly decompose into krypton and chlorine atoms. So the excimer lamps release and can be classified as quasi monochromatic light.

Dielectric barrier discharge (DBD) is a high voltage non thermal equilibrium alternating discharge. The discharge is driven by a high voltage of several thousand volts. The discharge is done by the micro discharge formed by a large number of filamentous irregular fast pulses discharge channel. The time of each

micro discharge is very short, which is about 10ns, the channel radius is no more than 0.1mm, and the current density is as high as 0.1-1KA / cm2.

When the external electric field voltage on the gas gap exceeds the breakdown voltage of the gas, the gas will be broken down and a conductive channel will be established. The space charge will be transmitted in the discharge gap and accumulated on the dielectric. At this time, the surface charge of the dielectric will establish an electric field, and its direction is opposite to the external electric field, so as to weaken the acting electric field and interrupt the discharge current. At the same position, only when the voltage rises again to the original breakdown voltage, the re breakdown and micro discharge will occur again.

Each micro discharge consists of three development stages

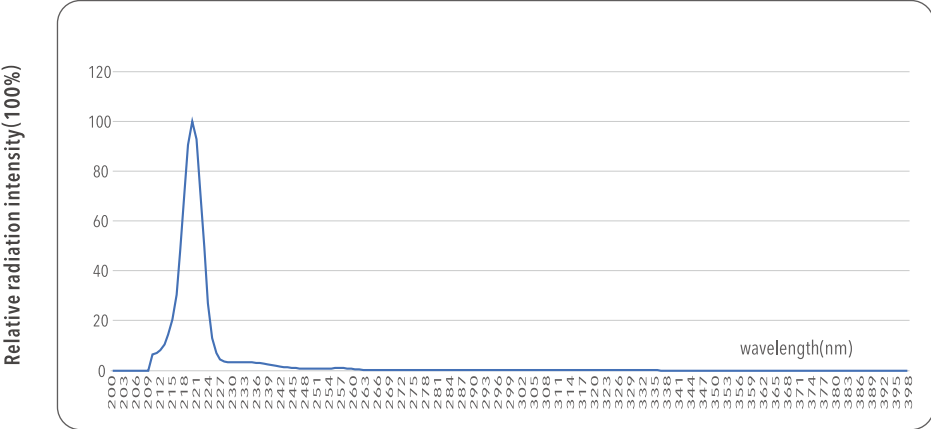
- Formation of discharge, that is, breakdown of electric field;
- Formation of continuous current pulse in the transmission process of electron in the gas;
- Excitation of the atom and molecular.

Features

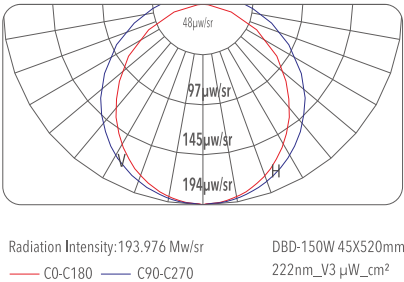
- **Compact:** Small size and light weight, no electrode;
- **Quick start:** Instant on/off without warm-up time or decreased lifetime;
- **Energy efficient:** Power factor ≥ 98 ;
- **Constant output wattage:** Output within 3% variation when supply voltage at $\pm 10\%$;
- **Extensive allowable ambient temperature:** $-10\sim 50^{\circ}\text{C}$ ($14\sim 122^{\circ}\text{F}$);
- **Low total harmonic distortion (THD):** $\text{THD}\leq 10\%$, meeting class L;
- **Environment-friendly:** Mercury-free, No pollutant or chemical residual;
- **Low operation cost:** One time investment and energy cost only;
- **Safe operation:** Leaves no hazardous substance; No touch operation;
- **Optional control:** Smart control of UV intensity for maximum energy saving effect.

Application

- Inactivate bacteria, virus and pathogen;
- Air and surface disinfection.



Spectrum Distribution Curve(150W far UVC lamp)



▲ Radiation Intensity Distribution (Excimer 222nm)

Distance	Radiation energy		Coverage Area
	Max	Ave	
0.2m	4849.4	139.6 μW/cm²	0.5x0.5 meter
0.5m	775.9	22.3 μW/cm²	1.2x1.2 meter
1.0m	194.0	5.6 μW/cm²	2.5x2.5 meter
1.5m	86.2	2.5 μW/cm²	3.8x3.8 meter
2.0m	48.5	1.4 μW/cm²	5.1x5.1 meter
2.5m	31.0	0.9 μW/cm²	6.4x6.4 meter

▲ Radiation intensity VS Mounting height (Excimer 222nm)



AIR/SURFACE DISINFECTION

Efficient and safe

Human-computer
Coexistence

Sterilization in
seconds

Energy Efficient
& Eco-friendly

JK FAR UVC Excimer Light Source(222nm)



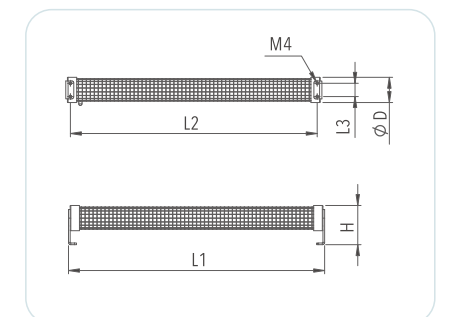
Electric and UV Radiation Data

Model	Power (W)	Input Voltage (V)	Input power (W) 120Vac / 277Vac	Radiation power (mW)	Lamp Radiation superficial area (cm ²)	Radiation intensity (μW/cm ²) @Lamp Surface	Radiation intensity (μW/cm ²) @20cm/100cm	Wavelength (nm)	Life span (h)	Lamp material
FUVC45-DBD-150W	150	AC 120-277	162/157	3938	735.1	5835	509/70	222nm	5000+	Quartz Glass
FUVC45-DBD-100W	100		108/105	2625	459.5	5713	486/55			
FUVC45-DBD-80W	80		86.4/84	2100	367.6	5713	457/45			
FUVC45-DBD-60W	60		64.8/63	1575	275.7	5713	428/35			
FUVC32-DBD-50W	50		54/52.5	1313	361.9	3627	308/30			
FUVC32-DBD-30W	30		32.4/31.5	788	181.0	4352	283/18			

Model	Outline dimension (D×L)(cm)	Power (W)	Input Voltage (V)	Input power (W) DC12V	Radiation power (mW)	Lamp Radiation superficial area (cm ²)	Radiation intensity (μW/cm ²) @Lamp Surface	Radiation intensity (μW/cm ²) @20cm/100cm	Wavelength (nm)	Life span (h)	Lamp material
FUVC20-DBD-30W	2.0x30	30	DC 12	33	693	188.4	3678	290/15	222nm	5000+	Quartz Glass
FUVC20-DBD-20W	2.0x20	20		21	462	125.6	3678	270/13			
FUVC20-DBD-10W	2.0x12	10		12	231	75.4	3065	180/8			

Outline dimensions

Built-in electrode	Power (W)	Outer diameter (mm)	Lamp length (mm)	D (mm)	L1 (mm)	L2 (mm)	L3 (mm)	H (mm)
Full electrode	150	45	520	52	551	537	20	66
	100	45	325	52	356	342	20	66
	80	45	260	52	291	277	20	66
	60	45	195	52	226	212	20	66
	60	32	360	38	386	372	20	59
	30	32	180	38	206	192	20	59



Application Attentions & Tips

- Traditional disinfecting UV lamps are very effective against pathogens but they also emit light at harmful wavelengths and can only be used in unoccupied spaces. Excimer mainly emits light at a wavelength of 222 nanometers which deactivates viruses such as coronavirus and antibiotic-resistant bacteria. Many science researches and reports show that the wavelength of 222nm does not cause harm to humans so that it can be used in both unoccupied and occupied spaces around clock, highly increasing its effectiveness and usability against the spreading of infectious diseases. However it is a must to follow the guidelines of permissible exposure limit published by ACGIH (American Conference of Governmental Industrial Hygienists) and other local, national and international authorities, recommendations, regulations and standards. And do not light directly on humans.
- Far-UVC 222 nm light is at the low range of the UV-C spectrum. Leveraging its germicidal abilities, this UV band is capable of inactivating harmful microbes at the size equal or larger than 0.1 μm. The 222 nm wavelength is particularly effective in disrupting chemical bonds in dangerous or toxic gases and bio-toxins. Applying this observation in comparing the properties of 222 nm and 254 nm, the far-UV band could achieve higher UV absorption than conventional 254 nm. The possibility of photo-reactivation is also decreased due to the high energy of 222 nm.



FAR UVC /222nm

110~240Vac/12VDC

30W

AIR/SURFACE DISINFECTION

Dual uses

Efficient and safe

Occupied or
unoccupied area

Sterilization in
seconds

JK FAR UVC 222NM

Sanitizer Dual functional (Handheld/Ceiling) (30W)

Traditional germicidal UV lamps such as low pressure mercury UV lamps emitting 254nm are effective against pathogens, but the emitted light of 254nm is harmful to the eyes and skin and can only be used in unoccupied spaces.

Far UVC excimer lamp is a most recent technical breakthrough in UV disinfection technology and mainly emits light at a wavelength of 222nm, which inactivates viruses, bacteria and microorganism without causing harm to humans. Thus, the far UVC excimer lamp emitting 222nm can be used in both unoccupied and occupied spaces, highly increasing its effectiveness and usability against the spreading of infectious diseases.

JK's Dual Functional (Hand-Held/Ceiling) Far UVC Sanitizer with model number of JK-FARUVC-WB-YD-30W mainly emits light at the wavelength of 222nm and is proudly manufactured in JK's factory certified with ISO ISO9001-2015 (Quality), ISO14001 (Environment), ISO 45001-2018 (Occupational health and safety) and EPA Est No. 102800-CHN-1.

Features

- **High effectiveness:** The far UVC 222nm is proved scientifically to deactivate 99.9% of virus and bacteria as well as other pathogens in the air or on surface within seconds or minutes depending on the situations. It is the most state-of-art breakthrough disinfection technology and leads to a safer and healthier daily life.
 - **Safer:** The far UVC 222nm is proved to be non harmful to eyes and skin when ACGIH UV exposure regulation is followed.
 - **More extensive applications:** The far UVC 222nm can be used in both occupied and unoccupied area especially at high touch and high traffic area.
 - **More environmental friendly:** No mercury and low ozone emission
 - **Instant start:** < 1 second.
 - **Dual use:** JK's far UVC sanitizer with model JK-FARUVC-WB-YD-30W can be used as a handheld wand or as a ceiling disinfection lamp.
 - **Easy to use:** It is for dual functions, handheld use and ceiling use.
- For hand-held use,** fully charge the wand before start using it, turn-on the device with the UVC Light facing down and slowly move it across the entire area 1-2 inches from the surface, letting the light stay in each area for about 10-20 seconds to ensure total disinfection;
- For ceiling lamp use,** hang the bracket or handle on the housing on the wall or ceilings and then turn on the device. Avoid direct light exposure to the eyes, skin, pets, plants.

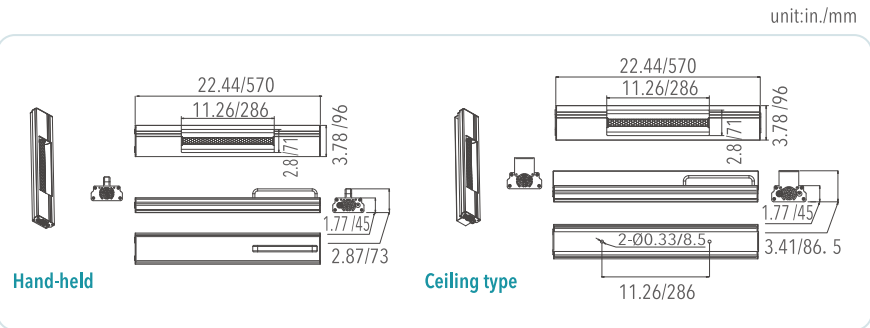
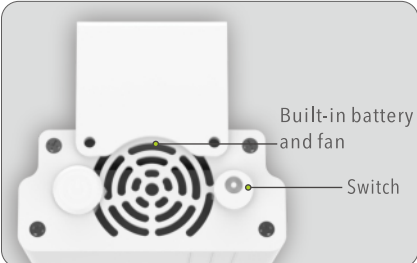
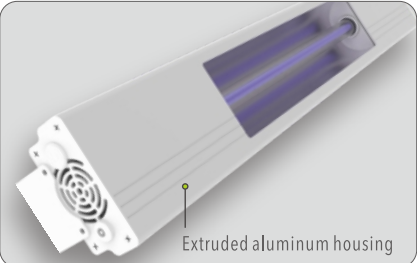
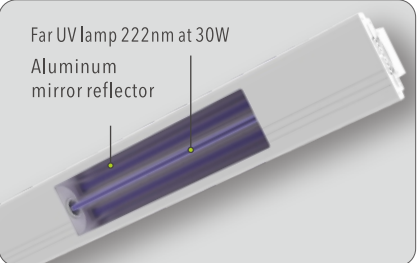
Application:

- **For hand-held use:** Suitable for home, office travel, outings, travel, cars, bedrooms, kitchens, shoe cabinets, toilets, baby rooms, pet rooms and other small spaces and items.
- **For ceiling lamp use:** Suitable for airports, transportation, halls, hospitality, restaurants, gyms, retail, educational establishments, hospital, healthcare, commercial offices and conference rooms, athletic facilities, and any other occupied area.

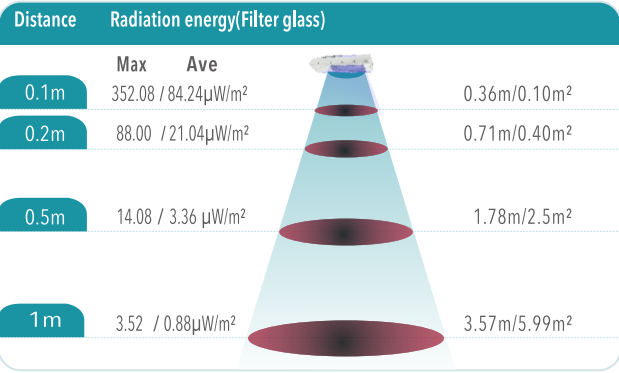
Specification

Description	Data
Model	JK FUV222-WB-YD-30W
Wattage	33W
Main wavelength	Far UVC 222nm
Effective UV Intensity at lamp surface	3500μW/cm²
Nominal Capacity (battery)	5000AH
Maximum Input of battery	36W
Nominal Voltage of battery	12VDC
Input voltage	12VDC (with AC/DC adaptor)
Charge Voltage	12V 3A
Powered by	Mains/rechargeable battery
Battery Type	Lithium Ion Polymer
Full charging duration	100 minutes
Operation duration at full charge	90 minutes
Ambient Operating Temperature	−10°C to +50°C
AC/DC Adaptor	110-240VAC, 50/60HZ
Input current	0.286-0.131 A
Expected Lifespan	6000+ hrs
Safe environment	Mercury-Free
Beam Angle	60°
Bulb casing	High purity quartz glass
Filter glass	Standard filtered glass, optional quartz
Optional function	Motion sensor within 6 meters, timer
Suggeted effectivearea (for ceiling use)	10m²
Suggested disinfection distance (for hand held use)	1 to 2 inches
Ozone generation	0.01mg/hour
Qty of fan	1 unit
Wattage of fan	1.2 W
Flow rate m³/h	10.8CFM
Noise of fan(at disintace of 0.5 m)	35dB
Total power	35W
Dimensions (mm)	Ceiling:22.44(570)×3.78(96)×3.4186.5in.(mm) Hand-held:22.44(570)×3.78(96)×2.84(73)in.(mm)
Net Weight	2.1/2.75 kgs (w/no battery)

The above data is subject to change without notice.



Far UVC Distribution



UV dosage calculation form (at 99% inactivation rate)

Distance (m)	Air (aerosol)		Surface		ACGIH 2022 Direct light duration (s)	Max Radiation (μ W/cm ²)	Ave Radiation (μ W/cm ²)	Filter glass
	Duration (s)	Dosage (mJ/cm ²)	Duration (s)	Dosage (mJ/cm ²)				
0.1	3.0	1.3	6.8	3	152	440.1	105.3	No
	3.7	1.3	8.5	3	483	352.08	84.24	Yes
0.2	11.8	1.3	27.3	3	609	110.0	26.30	No
	14.8	1.3	34.1	3	1934	88.00	21.04	Yes
0.5	73.9	1.3	170.5	3	3807	17.60	4.20	No
	92.3	1.3	213.1	3	12088	14.08	3.36	Yes
1.0	295.5	1.3	681.8	3	15227	4.40	1.10	No
	369.3	1.3	852.3	3	48352	3.52	0.88	Yes

FAR UVC /222nm

110~240Vac/24 VDC
110~277Vac

150W

AIR/SURFACE DISINFECTION

Dual uses

Efficient and safe

Occupied or
unoccupied area

Sterilization in
seconds

JK FAR UVC 222NM

Sanitizer Dual functional (Handheld/Ceiling) (150W)

Traditional germicidal UV lamps such as low pressure mercury UV lamps emitting 254nm are effective against pathogens, but the emitted light of 254nm is harmful to the eyes and skin and can only be used in unoccupied spaces.

Far UVC excimer lamp is a most recent technical breakthrough in UV disinfection technology and mainly emits light at a wavelength of 222nm, which inactivates viruses, bacteria and microorganism without causing harm to humans. Thus, the far UVC excimer lamp emitting 222nm can be used in both unoccupied and occupied spaces, highly increasing its effectiveness and usability against the spreading of infectious diseases.

JK's Dual Functional (Hand-Held/Ceiling) Far UVC Sanitizer with model number of JK-FARUVC-WB-YD-150W mainly emits light at the wavelength of 222nm and is proudly manufactured in JK's factory certified with ISO 9001:2015 (Quality), ISO 14001 (Environment), ISO 45001:2018 (Occupational health and safety) and EPA Est No. 102800-CHN-1.

Features

- High-intensity emission at 222nm as main UV.
- 5000+ hours lifetime.
- Instant start: < 1 second.
- Patent pending sine damping waveform driving for high efficiency.
- Patent pending printed metal nets Electrode for lower ozone generation than regular electrode of metal net.
- Safe and suitable for occupied area (when assembled with filter glass lens).
- Extensive allowable ambient temperature: -10~50°C (14~122°F)

Application:

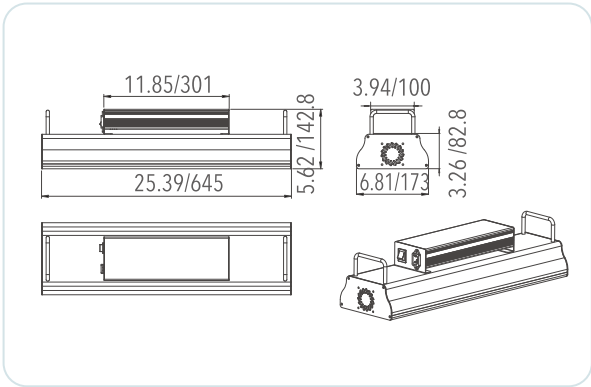
- **For hand-held use:** Suitable for home, office travel, outings, travel, cars, bedrooms, kitchens, shoe cabinets, toilets, baby rooms, pet rooms and other small spaces and items.
- **For ceiling and top use:** Suitable for airports, transportation, halls, hospitality, restaurants, gyms, retail, education establishments, hospital, healthcare, commercial offices and conference rooms, athletic facilities, food processing, fruit package line and grow room, etc.

Specification

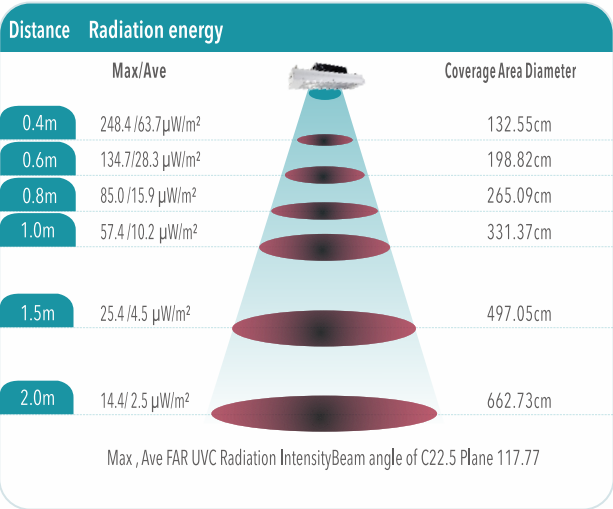
Description	Data
Model	JK FUV C222-WB-YD-150W
Input data	
Input voltage	110-240Vac/24VDC; 110-277Vac
Rated Power	157W
Power Factor	>0.95
Electric fan	2 W X2
Output data	
Main wavelength	Far UVC 222nm
Radiation Intensity @ Lens Surface	3000μW/cm²
Expected Lifespan	5000 hrs
Electric fan	2 W X2
Instant start	<1 second
Mechanical data	
Dimensions (LxWxH)	645 (25.39)x173(6.81)x142.8(5.62) mm(inch)
Net Weight	9.26 pounds (4.2 kgs)
Mounting	Suspension / Wall/Hand
Housing	Extruded aluminum



Unit:in./mm

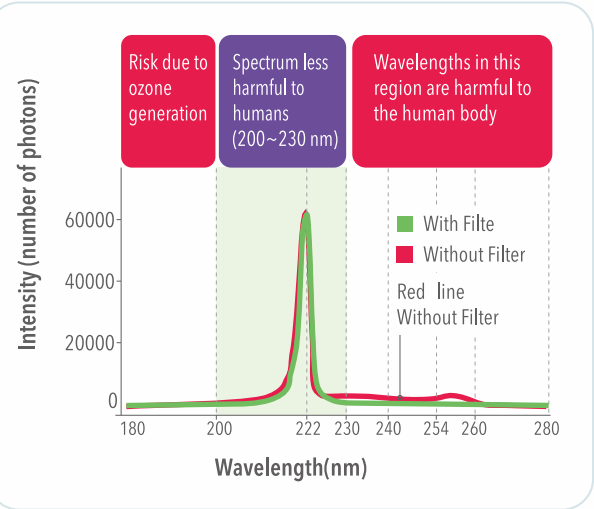


FAR UVC Distribution



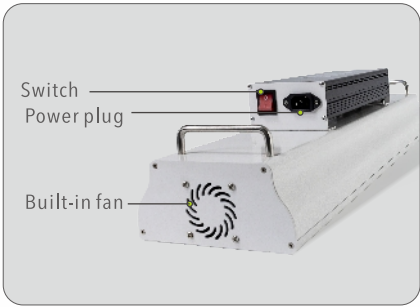
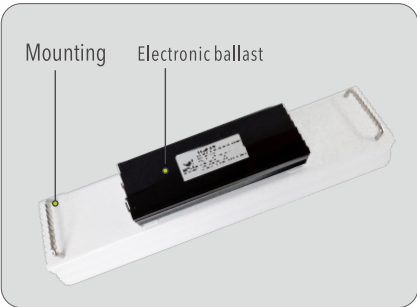
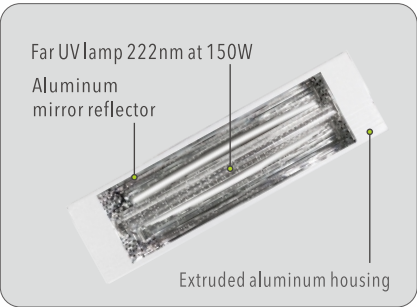
Classification and safety usage

The fixture is optional with filter glass and with quartz glass lens. Its light output characteristics are shown in the following figure:



UV dosage calculation form (at 99% inactivation rate)

Distance (cm)	Radiation Intensity at Fixture glass surface (μW/cm²)	Air (aerosol)		Surface		Safe Irradiation Duration		Filter glass	Note
		Duration (s)	Dosage (mJ/cm²)	Duration (s)	Dosage (mJ/cm²)	For Eye safety Duration(Seconds)	For Body Skin safety Duration(Seconds)		
0	2959	0.45	1.33	1.03	3.05	23	60	No	Based on 2022 ACGIH TLVs Broad Band 8 hours accumulating dose should be lower than For Eye:67mJ/cm²/For human body Skin:178mJ/cm² 2 Log 99% disinfection Covid 19 For Air (aerosol) 1.3mJ/cm² For Objects surface 3 mJ/cm²
1	2473	0.53	1.31	1.25	3.09	27	72		
10	1154	1.15	1.33	2.65	3.06	58	154		
20	619.4	2.15	1.33	5.00	3.10	108	287		
50	178.9	7.50	1.34	17.0	3.04	375	995		
100	57.4	23.0	1.32	53.0	3.04	1167	3101		
150	25.4	53.0	1.35	120	3.05	2638	7008	Yes	Based on 2022 ACGIH TLVs Narrow Band 8 hours accumulating dose should be lower than For Eye:170.2mJ/cm² For human body Skin:451.24mJ/cm² 2 Log 99% disinfection Covid 19 For Air (aerosol) 1.3mJ/cm² For Objects surface 3mJ/cm²)
200	14.4	92.0	1.32	215	3.10	4653	12361		
0	2367	0.55	1.30	1.30	3.08	72	191		
1	1978	0.66	1.31	1.60	3.07	86	228		
10	923.2	1.43	1.32	3.30	3.05	184	489		
20	495.5	2.65	1.31	6.10	3.02	343	911		



The above data is subject to change without notice.



AIR DISINFECTION

Long Lifespan
& High Power

Comprehensive
Disinfection

Reliable operation

Continuous
Disinfection

JK UVC

DAS Series of In-duct Air Sterilizer(200-600W)

The DAS series of In-duct Air Sterilizer is equipped with JK's ultraviolet electrodeless induction lamp system with features of long life span, high efficiency and energy saving.

The real-time dynamic and effective air disinfection and purification is achieved when it is installed in the HVAC system or duct. It works 24/7 continuously to provide a sustainable purified indoor air without any secondary residual.

It can also be installed and operated in front of coil of HVAC to eliminate the build-up of coils.

Advantages

- **High efficiency:**Inactive all known viruses, bacteria and other micro-organisms including corona virus with inactivation rate higher than 99.99%.
- **Safety:**Installed in the HVAC system or duct to have sustainable and continuous dynamic disinfection to provide an indoor healthy environment.
- **Long life span:**Assembled with ultraviolet electrodeless induction lamp system with life span as long as 100,000 hours to be maintenance-free other than possible lamp wiping due to dirt or small partide build-up on lamp from incoming air.
- **Long-time effectiveness:**It can be operated 24/7 to ensure all-time effectiveness of viruses inactivation.
- **High cost-effectiveness:**No need to purchase or handle cleaning detergent which could be corrosive, poisonous and harmful to human. Only energy bill and lamp cleaning will be serviced. No other maintenance work takes place in 5 years.
- **Eco-friendly:**No chemicals, no residual, no secondary harmful or polluted by product.
- **Installation:** Built-in installation, flexible, easy connection and easy installation.

Features

- **Overview:**Integrated module to be installed at air-feeding port or duct of HVAC. It can also work with fan(s) to increase virus inactivation efficiency. The independent power switch, lamp operation status indicator and fault indicator are provided for convenient trouble shooting.
- **Mechanics:**The aluminum housing is used for corrosion-proof and high UV reflection rate.
- **Lamp:**The electrodeless induction lamp system from 200W to 600W is installed with long life span, high UV irradiation, high reliability, high energy efficiency and eco-friendly.
- **Ballast:**The independent die cast ballast is assembled with IP65 protection to achieve high reliability and high performance and to avoid the foreign partide or dirt build-up.
- **Allowable ambient temperature:**~15 to 50°C (5 to 122°F).
- **Maintenance:**Simple and easy operation and disassembly.

Application

- Inactivation of viruses, bacteria and other micro-organisms in air.
- Installed in HVAC ducts for area where highly clean indoor air is required such as food processing line, pharmaceutical processing line, lab. chemicals, bank, school, restaurant, airport, retail store, offices and rooms.

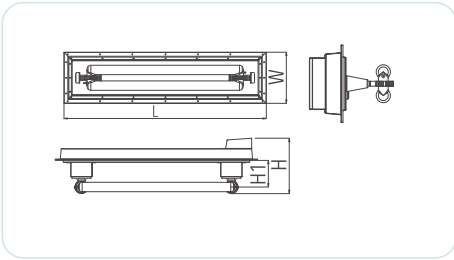
Specification

Type	Power (W)	Voltage (VAC)	UVC dosage (μW/cm²)	Air flow (m³/h) (Note 1)	Wavelength (nm)	IP	Lifespan (h)
JKWJZW-DAS200-ST	210	120-277/200-347	≥530	550-600	253.7	IP65	60000
JKWJZW-DAS300-ST	315	120-277/200-347	≥900	900-1000	253.7	IP65	60000
JKWJZW-DAS400-ST	420	120-277/200-347	≥1110	1500-1600	253.7	IP65	60000
JKWJZW-DAS500-ST	525	120-277/200-347	≥1295	2800-2900	253.7	IP65	60000
JKWJZW-DAS600-ST	630	120-277/200-347	≥1510	4200-4300	253.7	IP65	60000

Note

- The air flow is based on the wind speed ≤ 5 m/s.
- Please consult the representative for a proposal based on size of duct, air flow and temperature.
- The above data is subject to change without notice.

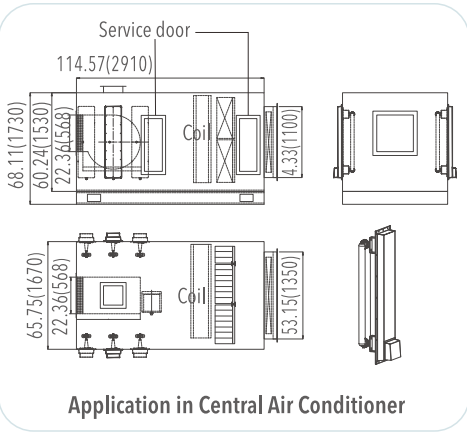
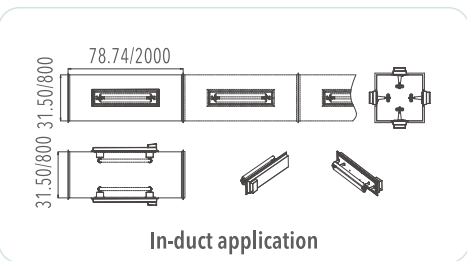
Unit:in./mm



Power	Length (L)	Width (W)	Height (H)	Height (H1)
200W	23.62/600	11.57/294	9.06/230	3.93/100
300W	29.92/760	11.57/294	9.06/230	3.93/100
400W	35.04/890	11.57/294	11.02/280	5.91/150
500W	39.76/1010	11.57/294	12.99/330	7.87/200
600W	41.73/1160	11.57/294	12.99/330	7.87/200

Installation schematics

Unit:in./mm





AIR DISINFECTION

Long Lifespan

Comprehensive
Disinfection

Reliable operation

Energy Efficient
& Eco-friendly

JK UVC

EAS Series of Ceiling/recessed UV Air Sterilizer (40-60W)

The ceiling/recessed UV Air Sterilizer is installed at the ceiling or air inlet or outlet port to inactive viruses, bacteria and micro-organisms in air so that the indoor air becomes fresh, clean, purified and healthy.

A fan is assembled in the sterilizer to accelerate the air velocity to increase the air exchange rate and virus disinfection rate.

The electrodeless induction lamp system is installed with long life span, high efficiency and energy saving, which can run 24/7 continuously to provide sustainable high quality clean indoor air with the features of low maintenance, easy installation, low operating cost and high safety.

Advantages

- **High efficiency:** Inactive all known viruses, bacteria and other micro-organisms including corona virus with inactivation rate higher than 99.99%.
- **Safety:** Installed in the HVAC system or duct to have sustainable and continuous dynamic disinfection to provide an indoor healthy environment.
- **Long life span:** Assembled with ultraviolet electrodeless induction lamp system with life span as long as 100,000 hours to be maintenance-free other than possible lamp wiping due to dirt or small particle build-up on lamp from incoming air.
- **Long-time effectiveness:** It can be operated 24/7 to ensure all-time effectiveness of viruses inactivation.
- **High cost-effectiveness:** No need to purchase or handle cleaning detergent which could be corrosive, poisonous and harmful to human. Only energy bill and lamp cleaning will be serviced. No other maintenance work takes place in 5 years.
- **Eco-friendly:** No chemicals, no residual, no secondary harmful or polluted by-product.

Features

- **Overview:** Integrated module to be installed at air-feeding port or duct of HVAC. It can also work with fan(s) to increase virus inactivation efficiency. The independent power switch, lamp operation status indicator and fault indicator are provided for convenient trouble shooting.
- **Mechanics:** The aluminum housing is used for corrosion-proof and high UV reflection rate.
- **Lamp:** The electrodeless induction lamp system from 40W to 60W is installed with long life span, high UV irradiation, high reliability, high energy efficiency and eco-friendly.
- **Ballast:** The independent die cast ballast is assembled with IP65 protection to achieve high reliability and high performance and to avoid the foreign particle or dirt build-up. Allowable ambient temperature: -15 to +50 degree C.
- **Maintenance:** Simple and easy operation and disassembly.

Application

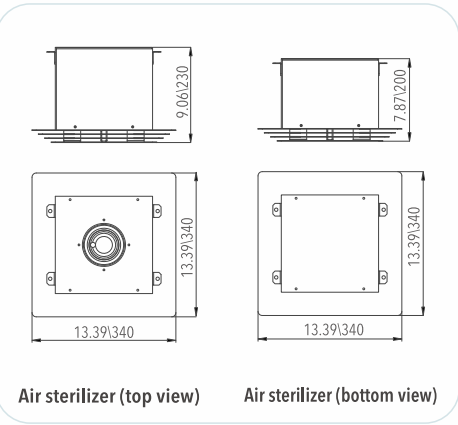
- Inactivation of viruses, bacteria and other micro-organisms in air
- Installed in HAVC duct for indoor air where high indoor air is required such as food processing line, pharmaceutical processing line, lab. chemicals, bank, school, restaurant, airport, retail store, offices and rooms

Specification

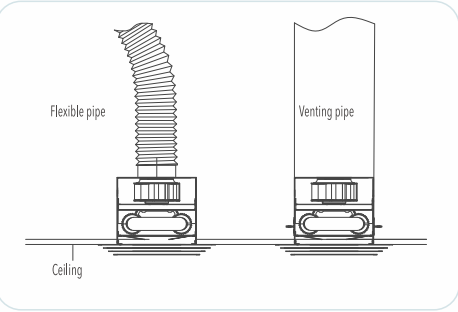
Type	Power (w)	Voltage (V)	UVC dosage $\mu\text{W}/\text{cm}^2$	Air flow m^3/h (Note 1)	Wavelength (nm)	IP	Lifespan (h)	Dimension (mm)
JKWJZW-EAS40-ST-FAN	42	120-277, 200-347	≥ 232	150-180	253.7	IP65	60000	340X340X230
JKWJZW-EAS60-ST-FAN	63	120-277, 200-347	≥ 355	200-230	253.7	IP65	60000	340X340X230
JKWJZW-EAS40-ST	42	120-277, 200-347	≥ 232	150-180	253.7	IP65	60000	340X340X200
JKWJZW-EAS60-ST	63	120-277, 200-347	≥ 355	200-230	253.7	IP65	60000	340X340X200

Note

- The air flow is based on the wind speed $\leq 5 \text{ m/s}$.
- Please consult the representative for a proposal based on size of duct, air flow and temperature.
- The above data is subject to change without notice.



Installation schematic





SURFACE DISINFECTION

360° all-round disinfection

Disinfection in seconds

Lab-proved 99.99% disinfection

JK UVC

UV Cabinet Sterilizer(With UV Induction electrodeless lamp)(420W)

Ultraviolet (UV) disinfection technology is a proven and sustainable treatment method as the UV light kills up to 99.99% of viruses, bacteria, molds, spores and other pathogens with right dosage.

JK's UV induction lamp emits strong UV light at wavelength of 254nm with ultra long life span.

It offers a standard disinfection that can not be met by manual cleaning or by wet solutions/disinfectants. Once disinfected, there is no residue. It is simple and easy to use and is proudly manufactured with high standard and quality in JK's ISO9001, ISO14001 and ISO45001 certified factory.

Advantages

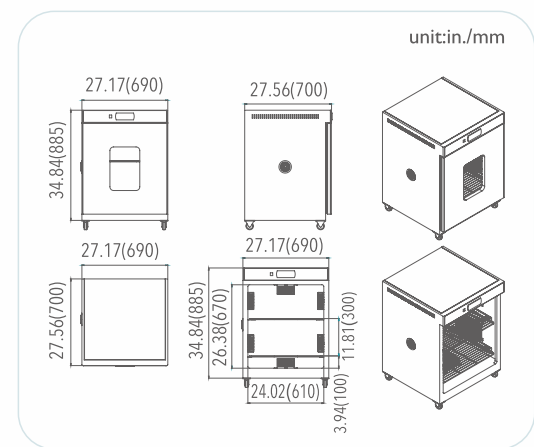
- **High efficiency:** Inactivate all known viruses, bacteria and microorganisms in seconds.
- **Safety:** Timer control for right dosage, door control system, speaker showing the operation status; automatic shut-off system when the door is open.
- **Long lifetime:** Induction electrodeless lamp is installed with life span as long as 60,000 hours
- **All-round disinfection:** 6 lamps (one per direction) for true 360 degree coverage disinfection, virtually all surface areas with no blind spots.
- **Third-party test and approved:** 99.99% inactivation rate certified by GZmicro Test Lab.
- **Cost-effectiveness:** No chemical disinfection.
- **Low operation and maintenance fee:** Wipe lamps for cleanliness, no further bills but energy expense.
- **Eco-friendly:** No residual, no ozone.

Features

- **Engineering excellence:** Housing made of aluminum alloy, powder coating for good look, ergonomically designed handle, soft rubber with magnetic door latch for air tightness with no UV or ozone leakage, optional operation status speaker, light weight.
- **Lamp:** Induction electrodeless lamp with life span as long as 60,000 hours, high UV irradiation intensity and high reliability, emitting 254nm UV light, optional ozone generating and ozone free.
- **Ballast:** Military-rated components and state-of-art technology for long lifetime and low ballast lost, high reliability and efficiency, 10KV surge protection.
- High reflective mirror stainless steel for high reflection rate.
- **Timing control:** To control the disinfection duration for high UV dosage and inactivation rate.
- **Clear perspex door design:** Only one door is designed for tight sealing so that the ozone will not be emitted. The transparency of perspex allows operator to see the disinfection status.
- **Interlocking system:** If the door is opened, the lamp will be turned off.
- **Casters:** 4 universal casters with locking function.
- **Ratings/Approvals:** Risk Group 3 UV product
- **EPA Reg. No.:** 102800
- **EPA Est. No.:** 102800-CHN-A

Application

- Inactivation all known viruses, bacteria and other microorganisms.
- Disinfection of surface of objects in hotels, offices, retail stores, bank, schools, gyms, logistics, etc.



Technical data

Description	Data
Model	JKWJZW- WB400-XDG-01
Rated power	420W(6 units of lamp)
Supply voltage	120-277VAC, 50/60HZ
Duration	≤60s (after warming period)
Wave length	253.7nm
Life span	60000h
Ozone	Optional
External dimension	34.84(885)x27.17(690)x27.56(700)in.(mm)
Internal dimension	12.4(315)x16.14(410)x12.4(315)in.(mm)
Net Weight	135.58(61.5) lb(Kg)

Note:

- The above data is subject to change without notice.
- Follow instructions of user's manual and take all safety precautions of UV exposure.
- The UV cabinet sterilizer can be custom engineered and manufactured upon request.

JK UVC

Open-Channel UV Water Disinfection System(600-4800W)

(With UV Induction electrodeless lamp)

Ultraviolet (UV) water disinfection technology is a proven and sustainable water treatment method as the UV light kills up to 99.9% of viruses, mold, sports and bacteria with right dosage.

JK's UV induction lamp emits strong UV light at wavelength of 254nm with ultra long life span.

JK's UV water disinfection system is a modular design consisting of UV induction germicidal lamp module, electronic ballast module, auto cleaning module, water level control module and control cubicle module for open channel water disinfection. Each lamp module is made of stainless bracket. The control cubicle is integrated with operation data collection, lamp operation status indication, timing control, surge protection system, dimming control, etc. Due to the modular design, the lamp system can be single lamp or multi lamp combination for easy maintenance, operation and installation. The induction lamp is engineered to submerge in water directly without a protective sleeve, which blocks UV penetration resulting in less efficiency as the traditional UV lamp.

Advantages

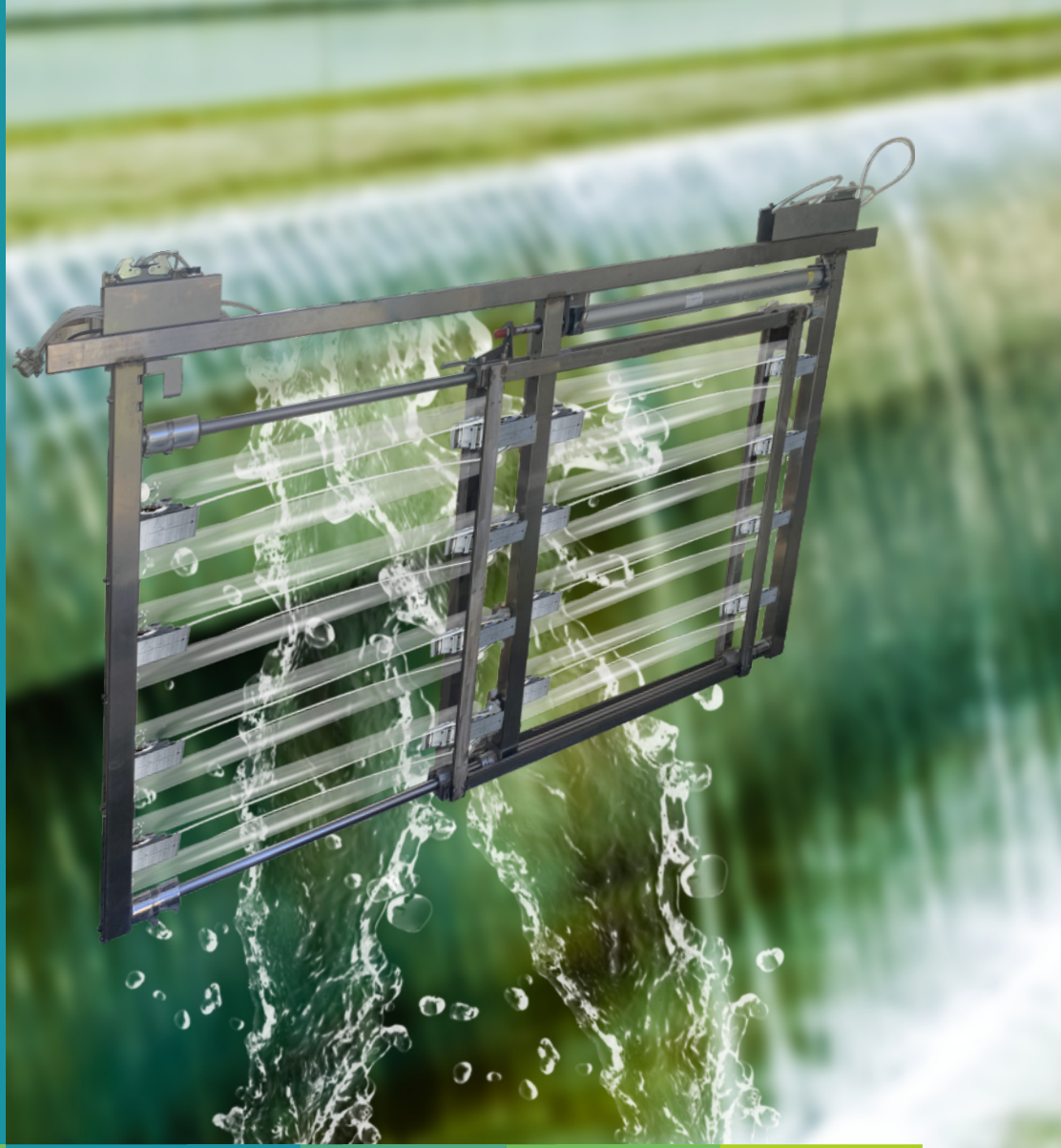
- **Modular design with single or multiple lamp arrangement** resulting in easy installation and maintenance as well as simple retrofit of existing system.
- **Low operation fee:** UV induction lamp is featured with life span as long as 60,000 hours. The system requires the built-in auto cleaning of lamp only. No chemical disinfectant is needed.
- **High UV exposure:** The UV induction lamp is submersible in water without a protective sleeve which blocks UV light significantly. Water is exposed to the UV energy directly with UV induction lamp.
- **More affordable:** Optional maximum power of individual lamp up to 700W means less lamps, but stronger UV energy, higher penetration and higher efficiency.
- **High adaptability:** Good for ambient temperature of 0 to 50 °C.
- Chemical free disinfection, no residual or by- product and improvement of taste.

Features

- **Engineering excellence:** Modular design of each lamp system, corrosion-proof stainless steel, power cable and signal cable sealed in the modules with no contact with water and UV light.
- **Auto clean system:** Auto clean regularly or at field-set intervals while lamps are in operation..
- **Superb lamp performance:** UV Induction electrodeless lamp is installed with features of high UV energy, long life span, durable water tight design and optional dimmability.
- **Tool-free connectors:** The tool-free and high IP rated water-tight connector is used for easy and quick disconnection between the lamp and ballast without lifting the lamp module from water when the service is necessary on ballast.
- **Alarming system:** Malfunction alarm, individual lamp operation status and address indicator.
- **Easy installation:** Modular design and pre-assembled, open channel or closed water treatment application, lamp lengthwise with water flow direction, lifting hook design.

Application

- Inactivation of viruses, bacteria, spores and pathogens in water.
- Treatment of effluent or drinking water in industry, utility, process and aqua culture, etc.



WATER DISINFECTION

Direct submerge in water

Long lifespan

High efficient virus inactivation

Eco-friendly

JK UVC

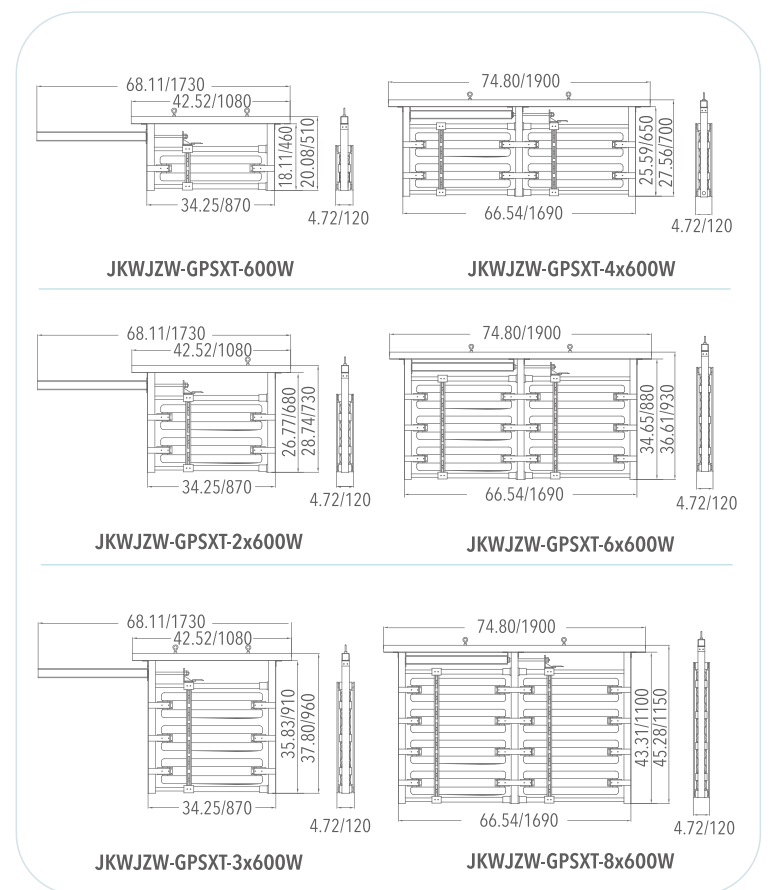
Open-Channel UV Water Disinfection System(600-4800W)

(With UV Induction electrodeless lamp)



Unit:in./mm

Model	Length(L)	Width(W)	Height(H)
JKWJZW-GPSXT-1x600W	68.11/1730	4.72/120	20.08/510
JKWJZW-GPSXT-2x600W	68.11/1730	4.72/120	28.74/730
JKWJZW-GPSXT-3x600W	68.11/1730	4.72/120	37.80/960
JKWJZW-GPSXT-4x600W	74.80/1900	4.72/120	27.56/700
JKWJZW-GPSXT-6x600W	74.80/1900	4.72/120	36.61/930
JKWJZW-GPSXT-8x600W	74.80/1900	4.72/120	45.28/1150



Specification

Model	Power(kw)	Supply voltage	Number of module	Units of lamp	Daily treatment capacity (m³)	Killing rate	Wavelength	Lifespan of lamp
JKWJZW-GPSXT-1x600W	0.63	220V/380V 50Hz/60Hz	1	1	1000	99%	254	60000
JKWJZW-GPSXT-2x600W	1.26		1	2	2000			
JKWJZW-GPSXT-3x600W	1.89		1	3	5000			
JKWJZW-GPSXT-4x600W	2.52		1	4	8000			
JKWJZW-GPSXT-6x600W	3.78		1	6	10000			
JKWJZW-GPSXT-8x600W	5.04		1	8	20000			



WATER DISINFECTION

High power and Long lifespan

High Efficient Disinfection

Ultrasonic Cleaning

Smart Control

JK UVC

In-Line UV Water Disinfection Tank (300W)

Advantages

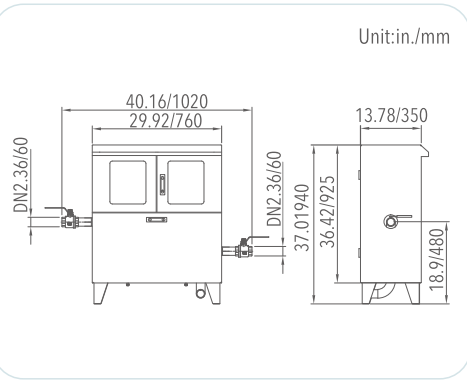
- **High inactivation rate:** Inactivate all known viruses, bacteria and microorganisms.
- **Low maintenance:** UV induction lamp system is featured with 60,000 hours life span which means no relamping in 5 years. No chemical disinfectant is necessary, eliminating the hassle handling and operation as well as potential corrosion of chemicals.
- **High UV contact:** The UV induction lamp is submersible in water with no protective sleeve which blocks UV light, for high UV contact and high inactivate rate.
- **Low operation cost:** No chemical disinfectant is necessary, eliminating the hassle handling and operation as well as potential corrosion of chemicals.
- **High adaptability:** Good for ambient temperature of 0 to 50 °C.
- **Environmentally friendly:** Chemical free disinfection, no residual or by- product and improvement of taste.

Features

- **Engineering excellence:** Engineering excellence: Stainless steel 304 or 316 housing and tank.
- **State-of-art cleaning system:** Ultrasonic cleaning system to clean the lamp at preset timing.
- **Closed type design:** No worry about UV exposure or leakage to harm people and secondary pollution after disinfection.
- Installed in-line pipe.

Application

- Inactivation of viruses, bacteria, spores and pathogens in water
- Treatment of effluent or drinking water in industry, office, livestock farms, utility, process and aqua culture, etc.



Technical data

Description	Data	
Model	JKUVC-WATER-25T	JKUVC-WATER-50T
Power of UV lamp	315W ×1 unit	315W×2 units
Power of cleaner(W)	300	300
Input voltage (VAC)	120~277 50/60Hz	120~277 50/60Hz
Current (A)	2.76-1.2/5.39-2.35	5.5-2.4/8.2-3.55
UVC energy (mJ)	≥20	≥20
Capacity (T/day)	25	50
Weight (lb/kg)	121.25/55	132.28/60
Average life span (h)	60000	60000



After-Sales Service

After-sales Service

Service Concept

Customer orientation & customer satisfaction.

Service attitude

Enthusiastic service & quick response.



Email: fjjkym@fjjk.com

Phone: +86 13960635211 (24-hours on)

A Letter of Warrantee

Fujian Juan Kuang Yaming Electric Limited (FJK) warrants that its products shall be free from defect in material and workmanship in the specified warranty period beginning from the date of manufacture. FJK extends this Limited warranty only to the first distributors, purchasers or end users and it is subject to change to the final agreement between the project owner (the first distributor, purchaser or end-user) and FJK in a particular project. FJK does not warrant the installation, maintenance, or service of its products. FJK shall not be responsible for any ancillary equipment not supplied by FJK, which is attached to or used with its products, or for the operation of its products with any ancillary equipment. All such equipment should be excluded from this limited warranty. Furthermore, FJK shall not be responsible for any damage to the products resulting from the use of any ancillary equipment not furnished by FJK for use with the product.

Limitations of Liability

Under no circumstances, whether as a result of breach of contract, breach of warranty, tort, strict liability or otherwise, will FJK be liable for consequential, incidental, special or exemplary damages, including, but not limited to, loss of profits, loss of use or damage to any property or equipment, cost of capital, cost of substitute product, facilities or services, down time costs or claims of claimant's customers. FJK's liability for all claims of any kind or for any loss or damages arising out of, resulting from or concerning any aspect of this warranty or from the product or services furnished hereunder, shall not exceed the price of the specific product which gives right to the claim. This limited warranty is conditioned upon the proper storage, installation, use and maintenance of the products. This limited warranty is not applicable to the failures or defects caused by act of God or as a result of any abuse, misuse, abnormal use, or use in violation of any applicable standard, code or instructions for use in installations, including, but not limited to, those contained in.

This limited warranty sets forth all of FJK's responsibilities regarding its products. If a FJK's product fails due to defects in materials or workmanship within the periods of time indicated above, after the date of manufacture, then FJK will at its option, either provide a credit to purchaser equal to the current price FJK charges purchaser for the product and, in FJK's discretion, or refund the purchase price paid to FJK for the product or provide the replacement. The foregoing warranty constitutes the sole and exclusive remedy of the purchaser and the sole liability of FJK for product warranties. NO warranty of merchantability or fitness for a particular purpose is made or is to be implied.