紫外线杀菌器

Ultra Violet Sterilizer Catalog



www.uv-ozonechina.com



公司简介
Company profile

优曼康成立于2010年，以生产，研发，销售为一体的专业紫外线消毒和臭氧设备制造商，产品涵盖饮用水，市政水，污水等水处理要求。
我们的产品包括紫外线杀菌器，臭氧发生器，及相关配件。

公司成立7年来，我们引进了国内外先进的生产设备，培养了一批经验丰富的技术工人，为产品质量和升级提供了坚实的基础。我们将继续加大消毒产品研发投入。

在2015年，自主生产的紫外线中压消毒设备，产品的成功运行长期受到国外产品垄断的局面打破，得到了国外客户的良好反馈。陆续成功出口欧美，澳大利亚，中东等地区。

UMEK was established in 2010, with production, research and development, sales as one of the professional manufacturers of ultraviolet disinfection and ozone equipment, products cover drinking water, municipal water, sewage and other water treatment requirements.

Since the establishment of the company 7 years, we have introducted the domestic and foreign advanced production equipment, and cultivate a group of experienced technical workers, for the quality of products and upgrading to provide a solid foundation. we will continue to increase investment in R & D of disinfection products.

Especially in 2015, self-produced UV medium-pressure disinfection equipment, the successful operation of the product to break a long time by foreign products monopoly situation, and got good feedback from foreign customers. one after another successfully exported to Europe and the United States, Australia, the Middle East and other regions.foreign customers. one after another successfully exported to Europe and the United States, Australia, the Middle East and other regions.

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UMEK

UV Sterilizer

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目录 Contents

工作原理 ····· 01
Sterilization principle

使用条件 ····· 02
Operating conditions

产品优势 ····· 03
Product advantages

应用 ····· 04
Application

家用系列 ····· 05
Residential application

商用系列 ····· 06
Commercial application

污水处理系列 ····· 07
Waste water application

养殖应用系列 ····· 08
Aquaculture application

中压紫外线杀菌器 ····· 09
Medium-pressure UV system

中压UV型号 ····· 10
Medium-pressure UV Model

紫外线杀菌器外壳定制 ····· 11
UV chamber custom-made

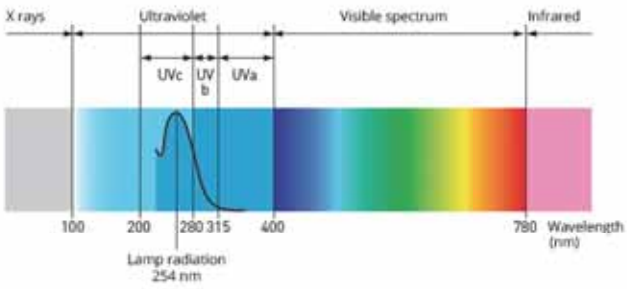
明渠式紫外线杀菌系统 ····· 12
Open channel UV system

CE UL RoHS

Sterilization principle 工作原理

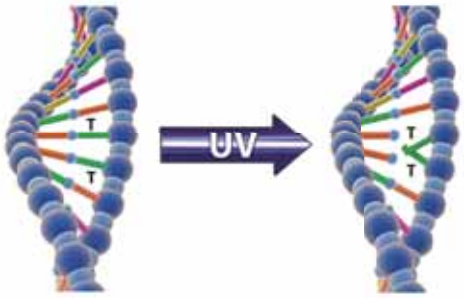
紫外线是不可见光，位于光谱图中的紫外线的外侧，因此称为紫外光，波长在100nm和400nm之间，紫外线可根据波长分为A，B，C和真空紫外线波长，紫外线C波长在200nm和280nm之间，UV-C波长为253.7nm，具有最佳的灭菌效果，这也是现代UV-C的起源。

UV ray is an invisible light, locating at outer side of violet rays in the spectrogram, Therefore it is called as ultraviolet light, with wave length between 100nm and 400nm, UV ray can be divided into A, B, C and vacuum ultra violets as per the wave length, Ultraviolet C is shortened to UV-C with wave length between 200nm and 280nm, UV-C with wave length of 253.7nm has the best sterilization effect, which is origin of modern UV-C.



通过研究，紫外线主要通过辐射损伤和破坏核酸杀死微生物（病原体，如病毒，真菌等），紫外线可导致核酸链的断裂和光化学产物的形成等，从而改变DNA的生物活性并抑制微生物的繁殖。因此，这种紫外线伤害也是致命的。UV辐射（UVC）可以不可逆地破坏微生物的DNA，使得它们不能再生，直到死亡为止。

Through the studies, UV ray mainly kills the microbes (pathogene such as germs, virus, gemma of fungus, etc) by radiation damage and function destruction of nucleic acid for the purpose of sterilization. UV rays can cause the breakage of nucleic acid's strand, inter-strand cross-linking and formation of photochemical products, etc. thus to change the biological activity of DNA and inhibit the reproduction of microbes. Therefore, this UV damage is also fatal.UV radiation (UVC) can destruct the DNA of microbes irreversibly so that they can not reproduce until death finally.



DNA DNA

使用条件 Operating conditions

操作条件

- 环境温度：5℃～ 40℃
- 相对湿度：≤90%（在环境温度25℃）
- 电源：110V/220V/240V/380V，50Hz/60Hz
- 操作压力：≤1.0Mpa

Environmental conditions

- Temperature: 5℃~40℃
- Relative humidity: ≤90% (at ambient temperature 25℃)
- Power supply: 110V/220V/240V/380V , 50Hz/60Hz
- Max. operating pressure: ≤1.0MPa

水质要求 Water supply requirements

PARAMETER 指标	STANDARD 标准
铁 Fe	≤0.3 (mg/l)
硫化氢 Hydrogen sulfide	≤0.05 (mg/l)
悬浮固体 Suspended solid	≤10 (mg/l)
锰 Mn	≤0.05 (mg/l)
硬度 Hardness	≤120 (mg/l)
色度 Chroma	≤15 (degree)
浊度 Turbidity	≤5 (NTU)
水温 Water temperature	5℃~60℃

Product advantages 产品优势

- **快速杀菌：**可以在1-5秒内破坏细菌和病的DNA，从而达到杀菌的效果，使用其他化学方法（氯，臭氧，二氧化氯）需要约30分钟或更长的接触时间。
- **杀菌广谱性：**UV技术广泛应用于水杀菌，有效杀灭水中的病原微生物，细菌和病毒。
- **无二次污染：**由于不添加任何化学品，所以不会对水和环境造成污染。
- **运营成本低：**运行维护简单。
- **占地面积小：**组装方便，可将紫外线设备安装在靠近水源和电源的地方。



- Ultraviolet disinfection technology is very expeditious in destroying bacteria.

  UV energy can destroy bacteria and virus in just about 1-5 seconds. In order to reach the same disinfection effect, it costs about 30 minutes or more contact time by use other chemical methods (Chlorine, Ozone, Chlorine Dioxide).

- Comprehensive range of disinfection.

  Ultraviolet disinfection technology has been widely applied for efficiently destroying pathogenic microorganisms, bacteria and virus.



- No secondary pollution.

  Since no chemical is added, ultraviolet disinfection system will not cause secondary pollution for water and environment.

- Low operational costs, simple operation and maintenance and economical prices.

- Occupied small space.

  Occupied small space and easy assembly enable UV equipment to be installed at the place near water and power source. The ultraviolet equipment starts working after connecting the inlet and outlet of the Ultraviolet equipment and powering up.

应用 Application











- **纯净水：**饮用水，自来水厂，食品生产用水，医院和药品行业，啤酒行，酒店，实验室超纯水，化妆品行业。
- **循环水：**水上娱乐设施游泳池水，景观水，工业循环冷水，温泉，微电子。
- **废水：**市政污水，医院污水，油田注水，城市污水，回收水，屠宰场废水，船舶污水。
- **水产养殖：**水培贝类，鱼类孵化场农场，水族馆。
  军事基地、野外作业、飞机、舰船、潜艇用水消毒。

Pure Water: Drinking water; Tap water factory; Food process water; Hospital and Pharmaceutical; Beer industry; Hotel; Lab ultrapure water; Cosmetics industry.

Circulating Water: Water entertainment facilities swimming pool water; Landscape water; Industrial circulating cool water; Spa; Micro-electronics.

Wastewater: Municipal sewage; Hospital sewage; Oilfield reinjection water; Urban sewage; Reclaimed water; Slaughter-house wastewater; Sewage from ships.

Aquaculture: Hydroponic shellfish; Fish hatcheries; Farms; Aquarium.

Military bases, Field operations, Aircraft, Ships, Submarine water disinfection.

Residential application 家用系列



产品简介

- 进口紫外线杀菌灯，寿命长达9000-12000小时；
- 配置高质量镇流器，带有LED报警功能。
- 不锈钢304/316 反应器，内外抛光处理；（可电解抛光）
- 设备耐压1.0 Mpa.

Product description:

- Imported germicidal UV lamp with 9000-12000 hours working life.
- UV chamber with 304 SUS material(316L is optional), with mechanical polishing and welding. (Electrolytic polishing is optional)
- The chamber pressure resistance meets the standard specification 1.0 Mpa.
- High performance ballast with operate LED light, approved by CE and UL certification.

规格 Model	流量 Flow Rate @ 30mj/cm²		灯管瓦数 Lamp Watts	进出接口 Inlet/outlet Port	反应器尺寸 Reactor Size (mm)		
	GPM	TPH			L	W	H
UMK-RUV-4	0.3	0.07	4	1/4" F Thread	200	51	70
UMK-RUV-6	0.5	0.12	6	1/4" F Thread	260	51	70
UMK-RUV-11	1	0.23	11	1/4" F Thread	260	51	70
UMK-RUV-16	2	0.45	16	1/2" M Thread	375	63	80
UMK-RUV-25	6	1.4	25	1/2" M Thread	518	63	90
UMK-RUV-30	8	1.8	30	3/4" M Thread	975	63	90
UMK-RUV-40	10	2.3	40	3/4" M Thread	890	63	90
UMK-RUV-40	12	2.7	40	1" M Thread	920	63	90
UMK-RUV-55	12	2.7	55	3/4" M Thread	975	63	90
UMK-RUV-80	24	5.5	80	1" M Thread	950	63	90

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商用系列 Commercial application

产品简介

- 进口紫外线杀菌灯，寿命长达9000-12000小时；
- 配置电控箱，LED指示灯，累时器，运行指示灯，使操作更简单。
- 不锈钢304/316 反应器，内外抛光处理；（可电解抛光）

Product description:

- Imported germicidal UV lamp with 9000-12000 hours working life.
- UV chamber with 304 SUS material(316L is optional), with mechanical polishing and welding. (Electrolytic polishing is optional)
- Lamp working timer, the lamp of the working hours of statistics, simple and effective detection of lamp life.
- Configure the system working status indicator, when the UV sterilizer is working, the indicator light, simple and attractive performance.

型号 Model	流量 Flow Rate @ 30mj/cm²		灯管瓦数 Lamp Watts	灯管数量 Lamp QTY	进出接口 Inlet/outlet Port	反应尺寸 Reactor Size (mm)		
	GPM	TPH				L	W	H
UMK-CUV-80	24	5.5	40	2	G1 1/4" M Thread	920	100	233
UMK-CUV-120	35	8	40	3	G1 1/2" M Thread	920	159	300
UMK-CUV-160	44	10	40	4	G1 1/2" M Thread	920	159	300
UMK-CUV-200	53	12	80	2	DN50	920	101	300
UMK-CUV-240	88	20	80	3	DN65	920	133	320
UMK-CUV-320	110	25	80	4	DN80	975	159	380
UMK-CUV-360	132	30	120	3	DN80	1350	159	380
UMK-CUV-480	154	35	80	6	DN100	920	219	400
UMK-CUV-600	176	40	120	5	DN100	1250	159	580
UMK-CUV-620	198	45	155	4	DN100	1660	159	380
UMK-CUV-720	220	50	120	6	DN100	1250	168	530
UMK-CUV-775	242	55	155	5	DN100	1660	219	550
UMK-CUV-930	286	65	155	6	DN125	1660	219	530
UMK-CUV-1085	330	75	155	7	DN125	1660	219	480
UMK-CUV-1240	420	95	155	8	DN125	1660	219	480
UMK-CUV-1600	490	110	320	5	DN150	1660	280	550
UMK-CUV-1920	660	150	320	6	DN200	1660	300	550

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Waste water application 污水处理系列



型号 Model	流量 Flow Rate @ 30mj/cm² GPM	TPH	灯管瓦数 Lamp Watts	灯管数量 Lamp QTY	进出接口 Inlet/outlet Port	反应尺寸 Reactor Size (mm) L	W	H
UMK-WUV-160	44	10	40	4	G1 1/2" M Thread	920	159	300
UMK-WUV-200	53	12	80	2	DN50	920	101	300
UMK-WUV-240	88	20	80	3	DN65	920	133	320
UMK-WUV-320	110	25	80	4	DN80	975	159	380
UMK-WUV-360	132	30	120	3	DN80	1350	159	380
UMK-WUV-480	154	35	80	6	DN100	920	219	400
UMK-WUV-600	176	40	120	5	DN100	1250	159	580
UMK-WUV-620	198	45	155	4	DN100	1660	159	380
UMK-WUV-720	220	50	120	6	DN100	1250	168	530
UMK-WUV-775	242	55	155	5	DN100	1660	219	550
UMK-WUV-930	286	65	155	6	DN125	1660	219	530
UMK-WUV-1085	330	75	155	7	DN125	1660	219	480
UMK-WUV-1240	420	95	155	8	DN125	1660	219	480
UMK-WUV-1600	490	110	320	5	DN150	1660	280	550
UMK-WUV-1920	660	150	320	6	DN200	1660	300	550

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产品简介

- 进口紫外线杀菌灯，寿命长达9000–12000小时；
- 配置手动/气动/电动清洗系统，清洗时无需停机，确保UV的穿透率；
- 系统报警功能，在操作过程中，操作发生异常时发出声光报警；
- 不锈钢304/316反应器，内外抛光处理；
- 配置UV强度检测仪，随时观察监测UV强度，确保UV剂量；
- 支持远程开关，自动清洗，UV强度检测，系统故障检测等功能；

Product description:

- Imported germicidal UV lamp with 9000-12000 hours working life.
- UV chamber is made of 304 SUS material (316L is optional) ,with mechanical polishing and welding. (Electrolytic polishing is optional)
- Lamp working timer, the lamp of the working hours of statistics, simple and effective detection of lamp life.
- Configure the system working status indicator, when the UV lamps working well, the indicators light.
- Manual/Pneumatic/Electrical cleaning system for quartz sleeves are optional, the UV system no need stop working.
- UV monitor and sensor detect the UV output intensity, secure the UV dosage.
- System fault alarm, when UV system work abnormally , the audio and visual alarm will be activated.
- Remote control, Power switch, automatic cleaning monitoring for UV intensity, temperature and system fault are functional with installation of remote control.



养殖应用系列 Aquaculture application

养殖应用系列杀菌器外壳采用优质工程级PVC管材，耐紫外线辐射，耐酸碱腐蚀。可加装视镜，检测每支灯管的运行。两端封头和进出水口均用活接的设计，易拆开清洗内壁和安装维护。

该系列选用进口紫外线杀菌灯管配套高效镇流器进一步保证设备的寿命及杀菌效果。

该系统设计采用美国NSF55“紫外线微生物水处理设备”标准和国家生活饮用水紫外线杀菌器行业标准CJ/T204-2000.

Aquaculture application series sterilization chamber using high-quality engineering grade PVC pipe,Resistant to ultraviolet radiation, acid and alkali corrosion. The view port can be made for detecting operation of each lamp. Both ends of the head and the inlet and outlet are used loose joint design, which can be easy opening, cleaning and installation.

The series adopt imported UV sterilization lamp and efficient ballast to further ensure the equipment life and sterilization effect.

The system design uses the United States NSF55 "UV microbial water treatment equipment" standards and national drinking water UV sterilizer industry standard CJ / T204-2000.

型号 Model	流量 Flow Rate @ 30mj/cm²		灯管瓦数 Lamp Watts	灯管数量 Lamp QTY	进出接口 Inlet/outlet Port	反应尺寸 Reactor Size (mm)		
	GPM	TPH				L	W	H
UMK-UV2T-P	9	2	28	1	1″	700	120	180
UMK-UV3T-P	13	3	40	1	1″	1000	120	180
UMK-UV6T-P	26	6	40	2	1.5″	1000	290	180
UMK-UV10T-P	44	10	120	1	1.5″	1350	120	230
UMK-UV20T-P	88	20	120	2	2.5″	1350	290	330
UMK-UV30T-P	132	30	120	3	3″	1350	460	350
UMK-UV40T-P	180	40	120	4	4″	1350	630	380
UMK-UV50T-P	220	50	120	5	4″	1350	700	380

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Medium-pressure UV system 中压紫外线杀菌器



产品简介

中压紫外线杀菌器是最安全，最环保的杀菌技术之一，在过去的几年里，优曼康加大对研发的投入，该设备采用304或者316不锈钢材料的反应器，控制系统在UV强度检测仪，系统错误报警，清洗装置的基础上，增加了热过载，定时自动清洗，PLC操作系统等功能，帮助客户节省人员操作成本，让设备更加智能化。

Product profile

Medium-pressure UV system is one of safest and the most eco-friendly water disinfection technology, UMEK has increased investment in R & D in the past few years, the device uses 304 or 316 stainless steel shell, the control system in addition to UV intensity display, System failure alarm, cleaning function, we also increased the thermal overload, regular automatic cleaning, PLC operating system and other functions to help customers save staff operating costs, so that make disinfection more intelligent.

产品优势

- 高功率杀菌灯，适合大流量的水消毒；
- 输出200-400nm波长，紫外线强度更高，用途广泛；
- 设计紧凑，占地面积小，易操作；
- 进口中压紫外线杀菌灯和镇流器，寿命长；
- 单支灯管的输出功率是低压灯管的10-100倍，灯管用量少，维护成本低。

Advantage

- High lamp power, larger capacity and high disinfection efficiency;
- 200-400nm UV radiation output, high UV intensity, widely application;
- Small occupation, easy operation;
- Imported UV lamp and ballast, long working life;
- Signal UV lamp output power is 10-100 times than low pressure UV lamp, less UV lamp quantity, low continuance cost.

型号 Model

型号	流量 Flow Rate		功率（KW）
Model	M³/H	GPM	Power
UMK-M50LT	50	220	1.3
UMK-M100LT	100	440	2.0
UMK-M150LT	150	660	3.0
UMK-M200LT	200	880	4.0
UMK-M300LT	300	1320	6.0
UMK-M400LT	400	1760	8.0
UMK-M450LT	450	1980	9..0
UMK-M500LT	500	2200	10
UMK-M600LT	600	2640	12
UMK-M650LT	650	2860	13
UMK-M700LT	700	3080	14
UMK-M750LT	750	3300	15
UMK-M800LT	800	3500	16
UMK-M900LT	900	3960	18
UMK-M1000LT	1000	4400	20

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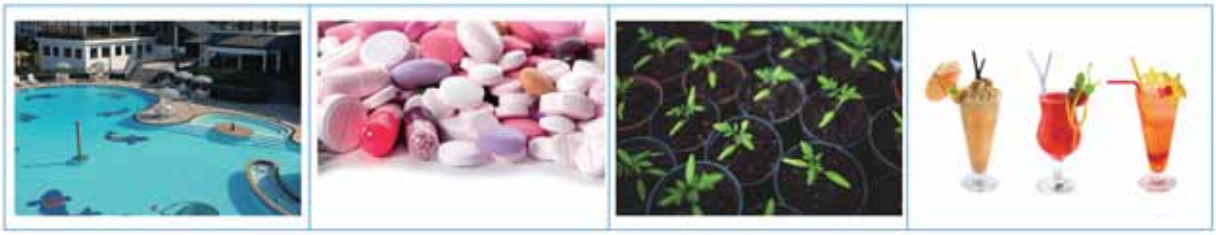
产品应用

市政用水， 游泳池，育苗养殖， 制药行业，果汁饮料行业等。

Application

Municipal water,Swimming pool,Seedling breeding, Pharmaceutical industry, Fruit juice beverage industry, etc.



UV chamber custom-made 紫外线杀菌器外壳定制

优曼康在机加工领域拥有丰富的生产经验，我们的工程师团队非常熟悉螺纹，法兰，材料等各种加工标准和生产工艺。

我们可以定制您的产品，将您的产品与其他竞争对手区分开来，支持OEM。

尽力帮助您节省成本和时间，让您有足够的时间专注于您的核心业务。

目前，优曼康已为国内外多家紫外线杀菌企业提供杀菌器外壳定制服务，且收到良好的评价。欢迎联系我们的销售部，邮箱：sales@amandawatertech.com。

UMEK have rich production experience in UV chamber and machining for 13 years, providing OEM service, our engineer team is pretty familiar with drawing and kinds of machining standard, such as thread, flange, material, etc.

Customize your products, differentiate your products from other competitors.

Do our best to help you save cost and time, so that you have plenty of time to focus on your core business.

At present, UMEK already provide sterilization chambers customization services to many UV sterilizer enterprises at domestic and abroad , and received a good evaluation. Welcome to contact with our sales department, sales@uv-ozonechina.com.



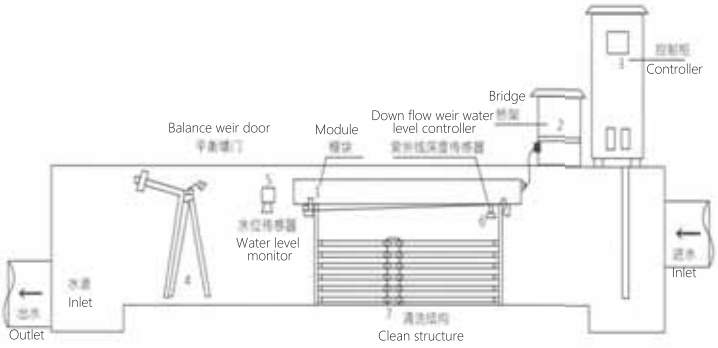


明渠式紫外线杀菌系统 Open channel UV system

产品简介

优曼康明渠式紫外线杀菌系统是我司设计的一种先进，高效经济的污水紫外线杀菌系统。参照国际权威标准，利用软件辅助计算出所需要的紫外线强度和剂量，为用户设计最佳预算效果的消毒方案，采用模块化设计，还可提供手动/自动控制系统。可用于各种规模的污水处理厂，中水回收，医院污水处理等。与传统的紫外线杀菌相比，该系统不仅环保，还可以进一步改善水质，运行成本也大幅度降低。

UMEK明渠式紫外线杀菌系统主要包括：灯管架，紫外线杀菌模块，电控箱，自动水位控制装置，电源配置中心清洗装置。



施工工艺图
Disinfection Channel Diagram

Product profile

UMEK open channel UV system is one of our advanced, efficient and economical sewage UV sterilization system. With reference to the international authority, the use of software to help calculate the required UV intensity and dose for the user to design the best budget results of the disinfection program, the use of modular design, but also provide manual / automatic control system. Compared with the traditional UV sterilization, the system is not only environmentally friendly, but also can further improve the water quality, operating costs are significantly reduced.

UMEK open channel type ultraviolet germicidal system mainly includes: lamp holder, ultraviolet sterilization module, electric control box, automatic water level control device, power supply center, cleaning device.



工程案例
Installation Case

UV Installation Cases UV安装案例



无土栽培 Non-soil cultivation



游泳池水 Swimming pool water



游泳池水 Swimming pool water



校园用水杀菌 Campus water sterilization



淡水养殖 Freshwater aquaculture



游泳池水 Swimming pool water

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