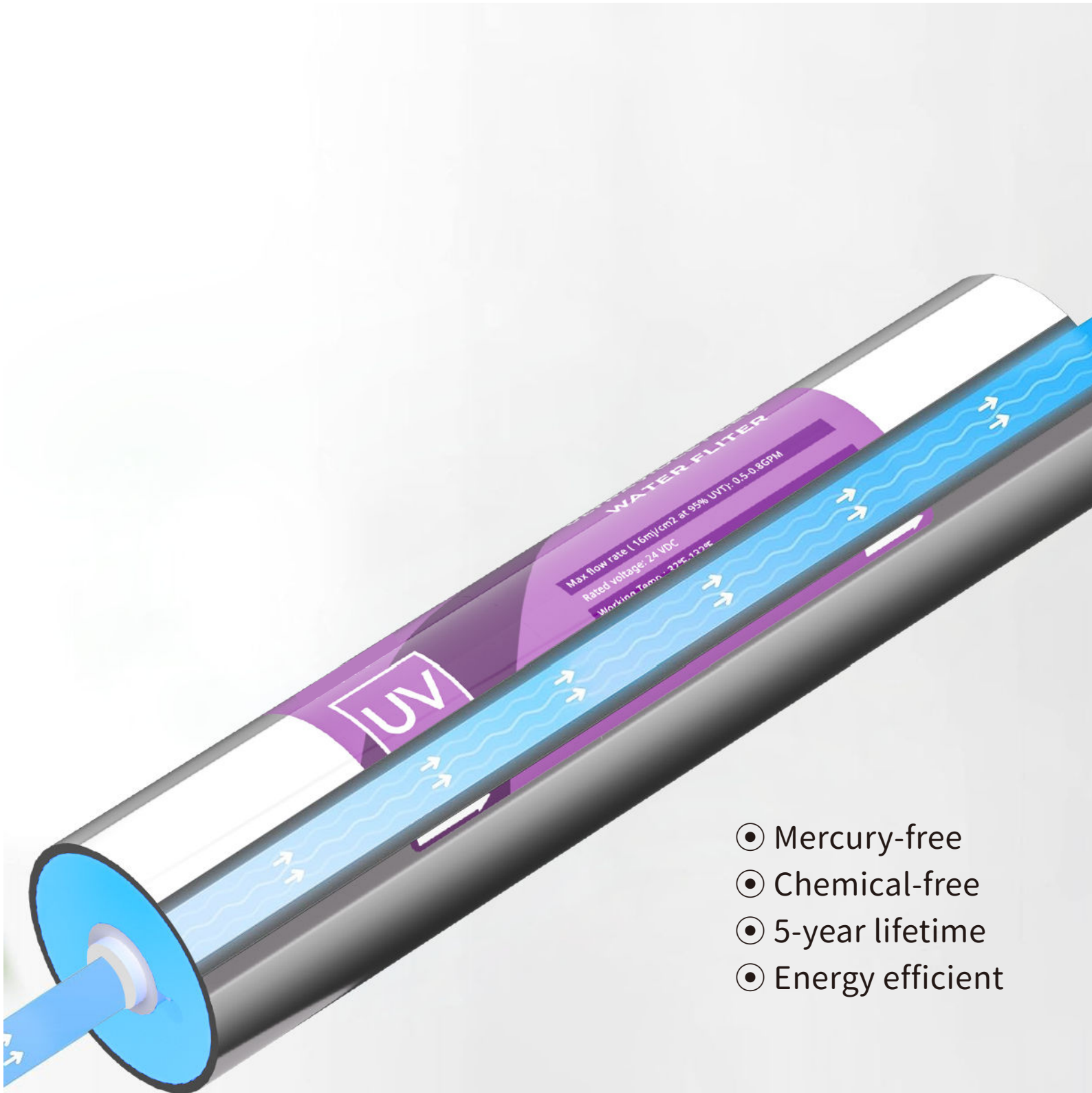


# Specification For LED UV Water Purifier

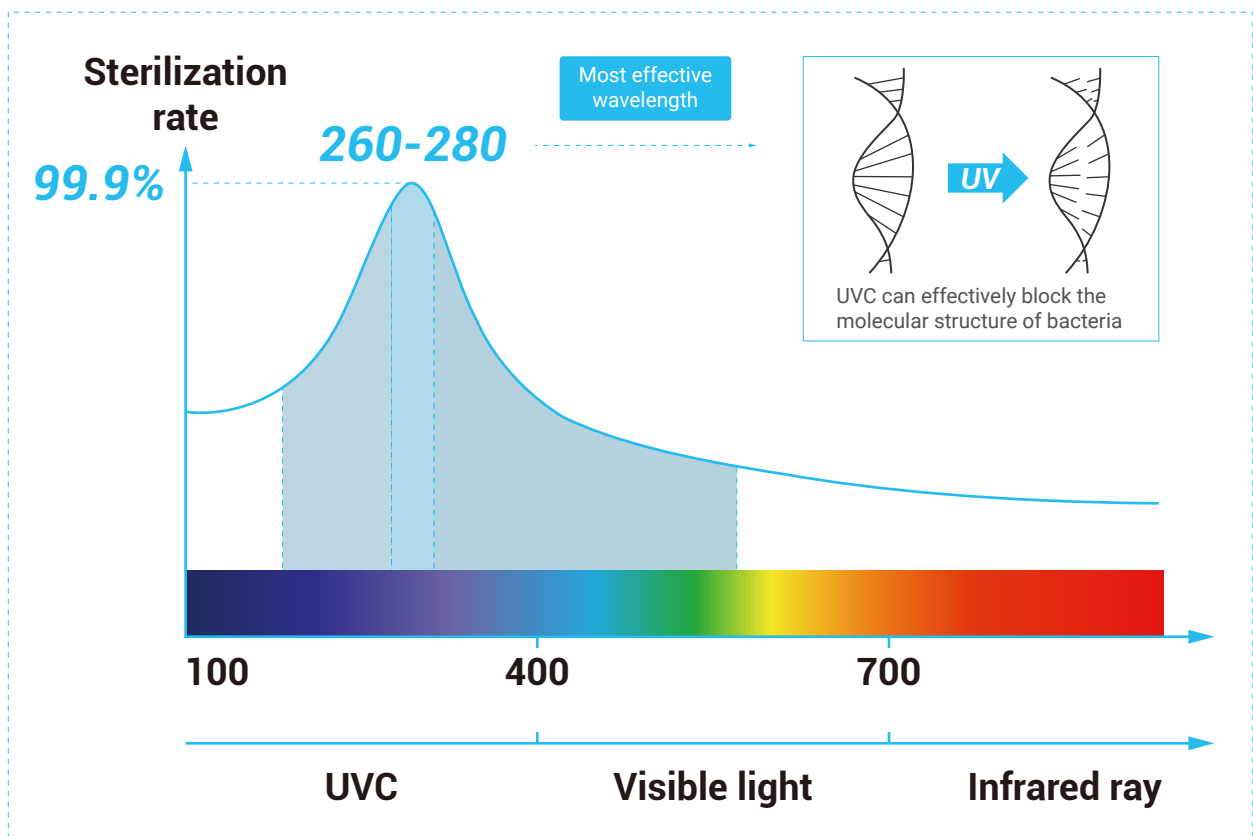


- Mercury-free
- Chemical-free
- 5-year lifetime
- Energy efficient

## What is UVC-LED

- ▶ The UVC region of the UV spectral range refers to wavelength between 260 nm to 280 nm.
- ▶ In the case of disinfection, the optimum wavelength is in the region of 260 nm to 280 nm, with germicidal efficacy falling exponentially with longer wavelengths.
- ▶ UV-C LED technology is set to provide new, improved, and expanded solutions in both air and water treatment.

## Ultraviolet Sterilization Diagram



★ Wavelengths between 260 and 280 nm are more effective, particularly in eliminating harmful substances resulting in molecular structure change and thorough reduction.

## Benefits of UV LED water purifier

UV-C LEDs perform the same functions of conventional mercury-vapor lamps but have **many benefits** in comparison.

- > **Environmentally friendly**-conventional UV lamps use heavy metals that are difficult to handle and cost a great deal to dispose of safely
- > **Small design footprint**-LEDs are much more compact compared to their mercury vapor counterpart, meaning they can be integrated easily into new innovative designs.
- > **Instant-on/off-UV-C LEDs work instantly**, so there is no need for a warm-up time that is a common constraint of mercury-vapor lamps
- > **Unlimited cycling-on/off cycles** do not impact the life of the LEDs, meaning there is an unlimited scope for lamp cycling.
- > **Temperature independent**-LEDs can emit photons from a different surface as their heat emissions. They can be designed so that if UV-C LEDs are being used in water purification, they will not transfer heat into the water.
- > **Wavelength selection**-One of the greatest benefits of UV-C LEDs is that users can configure them to choose a specific wavelength that is best suited for maximum absorption of light for the chosen microorganism.

## LED UV WATER PURIFIER VS Traditional Mercury lamp

Data	LED UV Water Purifier	Traditional Mercury lamp
Mercury content	<b>NONE</b>	20-200mg
lifetime	5 years	1 year
Turn on/off times	10,000 times	MAX. 10,000 times
Preheating time	Instant Startup	Max. 5 minutes
Temperature increment	<b>NONE</b>	Max. 35 degrees
Shockproof	Easy to transport	Fragile
Power	24 VDC	110-240VAC


# Benefits of UV LED water purifier

## Bateria and Diseases that caused

Pathogene	DISEASES
Escherichia coli	Acute cholecystitis
Staphylococcus aureus	Wound infection
Fungus	Beriberi infection
Hepatitis virus	Choleplania
Salmonella	Bromatoxism

Pathogene	DISEASES
Coronavirus	Respiratory tract infection
Haemophilus influenzae	Acute sinusitis
Clostridium tetani	Tetanus
Tubercle bacillus	Phthisic
Streptococcus viridans	Infection of biliary tract

## Four kinds of sterilization



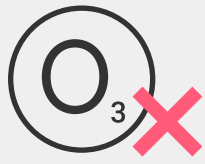
**Ultraviolet sterilization**

UV-C can purify almost **99.9%** Bacteria in the water by pure physical sterilization, that is purifying immediately




**Chemical disinfectant kills bacteria**

Chemical drugs have a certain toxicity, all can not disinfect food, tableware and other items, general chemical drug residues cause a certain pollution to the environment



**Ozone sterilization**

Ozone sterilization, but when the concentration is too high, it will cause damage to human cells

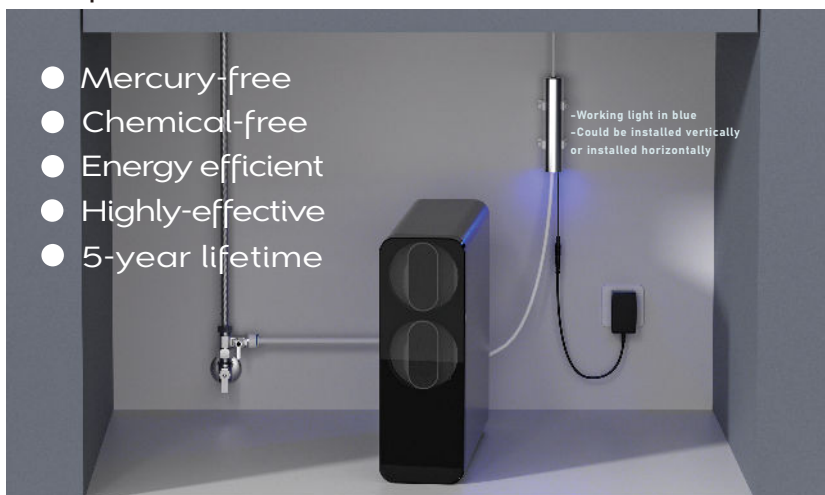


**Boiling sterilization**

Families commonly use sterilization methods, but there is a waiting time, and there is a risk of contamination after cooling

## Product Information:

### Sample connection:



### Technical Data:

Model	UVC-SW
UVT%	Recommend above 90%
Flow rate	0.5-0.8 gal/m
Rated Power	8W
Rated Voltage	24 VDC
Operating temp	Min.32°F,Max 132°F
Working pressure	Max.6 bar
Applicable Water Source	Municipal water
Water connections	1/4" quick fitting
LED lifetime	2000 hours