VerterPure VP2

UVC-LED Water Purifier

USER'S MANUAL





Product Review

UVC radiation is a known disinfectant for air, water, and nonporous surfaces. UVC radiation has effectively been used for decades to reduce the spread of bacteria.

UVC disinfection has many advantages:

- UV disinfection is effective at inactivating most viruses, spores, and cysts.
- UV disinfection is a physical process rather than a chemical disinfectant, which eliminates the need to generate, handle, transport, or store toxic/hazardous or corrosive chemicals.
- There is no residual effect that can be harmful to humans or aquatic life.
- UV disinfection is user-friendly for operators.
- UV disinfection has a shorter contact time when compared with other disinfectants).
- UV disinfection equipment requires less space than other methods

The test report shows that our UVC LED is able to inactivates up to 99.99% of E. coli bacteria at water flow rate of 2L/min

With the innovative UVC LED technology, the device can switch on immediately when the water starts flowing and operates at full power within a fraction of a second to give instant disinfection. This ensures that the water is cleaned at the moment it is dispensed.

The device is powered by 12V DC. The internal water flow sensor will activate UVC-LED only when water flows through the system. This design improves the energy efficiency and extend the system's life-time.



Product Specification

Bacteria Inactivation	99.99%
UV Radiation Intensity (mW/cm2)	52
Max. Flow Rate	2.0 L/minute (0.52GPM)
Minimum Working Flow Rate	0.5 L/Minute
Inlet Fitting	1/4" Push-to-Connect
Outlet Fitting	1/4" Push-to-Connect
Input Voltage	12V DC
Power Consumption (Active)	Approx. 6.0W
Power Consumption (Standby)	Approx. 0.1W
Maximum Water Temperature	40°C (104°F)
Maximum Working Pressure	90PSI
UVC LED Life-Time	3000 Hours (on demand)
Material of Body Case	ABS + Aluminium
Color	Light Grey + Silver
Dimensions	158 x 128 x 58mm (6.2 x 5.0 x 2.3inch)
Warranty	1 year

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Overview of VerterPure VP2 Water Purifier





Safety Information and Warnings

Safe installation and operation of the device are provided in this section. Please read carefully.



Do not store the device in freezing conditions. Do not allow water to freeze in the device. Do not use this device if damaged or dropped. Do not submerge the device into water. Do not connect to AC power without an AC to DC power adapter. This device uses DC only.





The UV device includes fragile parts, including parts made from glass. The device shall not be dropped and must be transported or carried with sufficient care.

When water flows through the device, a steady blue light will lit as indicator that the water is safe to drink. If the blue lit is not lit when the faucet is open, please stop using the device.

If the device is installed in a Recreational Vehicle (RV), ensure that the RV is winterized as per its owner's manual.



Installation and Maintenance Guide

Installation

UVC radiation can only inactivate a virus if the virus is directly exposed to the radiation. The inactivation of viruses may not be effective in cloudy water because small particles may block germs from the light. Therefore, install a water filter before the UV device when necessary.

The UV device is effective to water flow rate between 0.5 - 2.0 L/minute. Therefore, the device requires a flow restrictor to maintain a constant flow rate.

The UV device includes a flow sensor, meaning it is active only when there is water flow. After installation, open the faucet to check if the blue indicator is lit.

When the faucet is turn off, the blue indicator will not lit any more, meaning the UV device goes into standby mode.

Once the device is connected to the water line, flush the device for 5 minutes to ensure the water entirely floods the disinfection unit. During this time, check the connections to make sure they are tight and sealed.





Maintenance

- Check the device and installation monthly, ensure the device is working properly, and that connections are not leaking.
- The UVC LED is effective for 3,000 hours. There is digital time with the device, indicating the total hours the device has worked. Replace the device when it shows 3,000 hours.

