

UV@PEM

Hydrogen bottle
with UV self-cleaning feature

USER MANUAL

Dear Customer, congratulations on purchasing the world's first hydrogen bottle with ultra-high hydrogen concentration and ultraviolet (UV) self-cleaning feature!

Be sure to read this manual carefully so that the UVePEM will provide you with many years of trouble-free service.

Thanks to using the latest technologies and materials, the UVePEM device achieves a life-time stable ultra-high hydrogen concentration of more than 4.0 PPM*, as proven by tests using H2 Blue drops.

The combined UV-A and UV-C radiation system built into the lid of the device, according to numerous studies, allows you to get rid of 99% of viruses, bacteria, pathogens and mould. This is a very important feature, given the constant presence of water in the device.

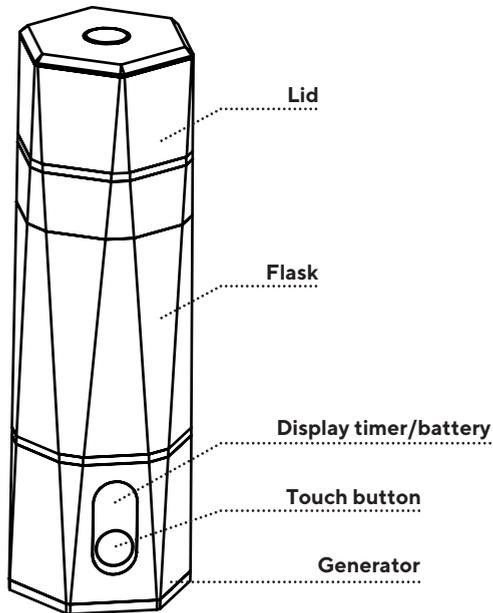
*Hydrogen concentration depends on many factors: degree of mineralisation, water and ambient temperature, atmospheric pressure, water level in the flask, cleanliness of the flask and electrodes, as well as other factors. It may vary depending on a combination of the above-mentioned conditions, as well as change over time.

Precautionary measures

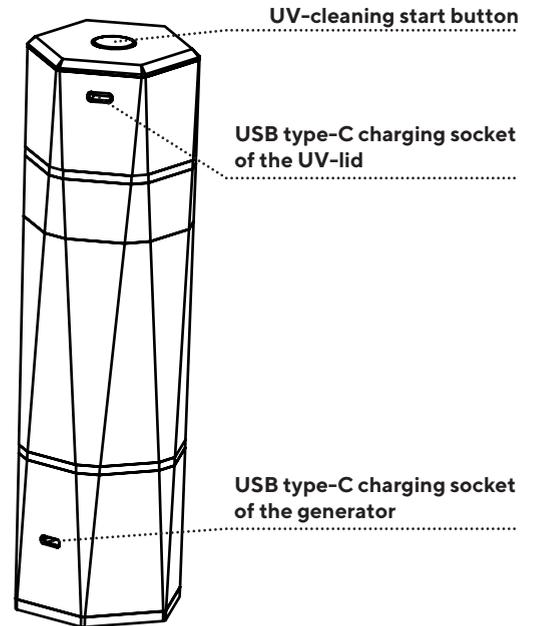
1. Do not use hot water (water temperature > 60 °C) for hydrogen generation or cleaning, as this may damage the device.
 2. Any type of drinking water can be used in the hydrogen water bottle, such as filtered, mineral or distilled water. It is forbidden to use the bottle for juices, carbonated and sweet drinks, alcohol, dairy products. The use of any liquid other than potable water will void the warranty.
 3. Never turn on the device when the electrodes are dry.
 4. Hydrogen generation is not allowed for more than 2 cycles of 10 minutes in a row. This can lead to depressurisation of the seals and failure of the device.
 5. Do not drop the device as this may cause damage.
 6. Prior to adding potable water, make sure that the body of the device and the generator are screwed on securely to avoid any leakage.
 7. The water level should not exceed the lower edge of the threaded neck on the flask, as this will block the pressure relief valve.
 8. Screw on the lid and tighten securely prior to generating hydrogen water.
 9. If the device is not used for a long time, keep some water in it to prevent drying out and damaging the membrane. Use the original silicone plug to prevent water from evaporating and leaking when the device is not used for a long time.
 10. Do not attempt to disassemble or modify the device. This may cause fire or explosion during use. There is a risk of electric shock, short circuit or fire.
 11. Charge the device only with a 5 V/2 A AC adapter. Use of the wrong adapter may damage the device.
 12. Do not place the device in a microwave oven.
- 13. Do not aim at the eyes or look directly at the UV emitters in the lid. Direct ultraviolet light may cause eye and skin irritation or be potentially harmful in another way.**

Product composition

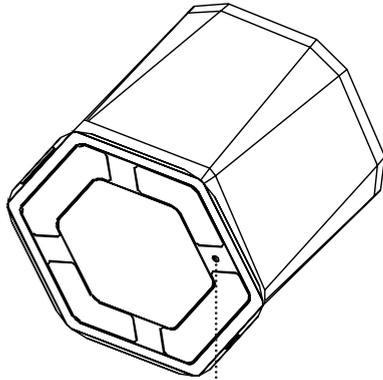
Front view



Back view



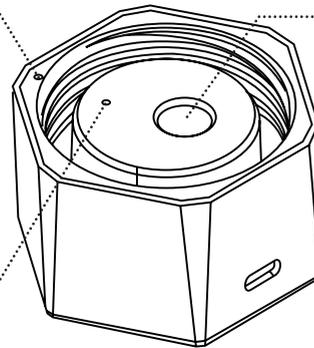
Product composition



Exhaust port

1. The exhaust port should not be blocked. This will stop the release of oxygen and ozone.
2. Periodic drainage of water droplets from the exhaust port is a normal situation.

Water drain port
 If water accumulates in the lid, it will be drained from this port.

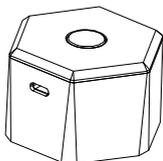


UV emitter

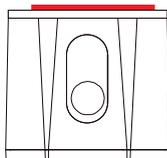
Port for pressure reducing valve
 Do not block the valve.
 The water level must not flood the valve during generation.

Before starting work

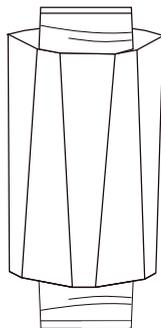
The UVePEM device consists of three main parts: lid, flask and generator.



Lid

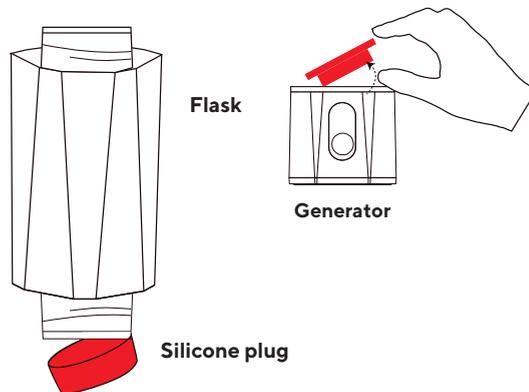


Generator



Flask

Remove the parts of the device from the packaging box and unscrew the lid from the flask. Remove the silicone plugs from the generator and flask.



In the future, you will only need plugs when there is a long break in using the device.

Drain remaining process fluid from the generator, if any. Screw the flask on the generator, pour clean water. Plug the power cable into the USB-C socket and charge the device until the battery indicator on the display stops blinking. The time to fully charge the device is approximately 4 hours. After charging is completed, disconnect the cable, and drain the water. Rinse the flask inside thoroughly with clean water several times. Pour in clean water up to the level of the lower edge of the threaded neck on the flask. Screw the lid on tightly. Your UVePEM is ready!

Tip: If a full charge is reached in less than 4 hours, leave the water in the device for up to 4 hours and then drain it. This will ensure that the membrane is moistened before using the device.

Device control

1. Press and hold the button for 3 seconds. The blue LED will light up.
2. A beep indicates that the power is on. Hydrogen generation will start and bubbles will appear in the water.
3. The default cycle time is 5 minutes. If you click the button after starting a 5-minute cycle, i.e., the start of the countdown by the timer and the appearance of bubbles, the cycle time increases to 10 minutes.
4. When the hydrogen production cycle is completed, the blue lights and the bottle will automatically turn off and you will hear two beeps.
5. In order to forcibly stop hydrogen production, press and hold the button for 3 seconds; the generator will turn off and you will hear a beep.

Charging indicator

1. When charging is required, the indicator will flash red. The USB-C charging port is located on the back panel of the generator.
 2. While charging, the battery indicator on the LCD will blink.
 3. When charging is complete, 4 full bars will appear on the battery indicator display and stop flashing. Unplug your device after charging is complete.
 4. It is recommended that you charge the device with a 5 V/2 A AC adapter.
- ATTENTION! While charging the device, you can turn on the hydrogen generation. This means you won't miss the next portion of hydrogen water!

Device care

1. Depending on the mineral content in the water used, it is necessary to clean the electrodes once or twice a month.
 2. To descale the device, pour 1 part of 9% white vinegar, lemon juice or citric acid and 3 parts of water into the device and leave the device overnight.
 3. The next day, drain the solution and rinse the device thoroughly with warm water before using.
- Note! The outside of the device must not be cleaned with water or soaked in water, as this may damage the electronic components.
- Note! Use wet wipes to clean the outside surface of the device.
-
-

Use of ultraviolet self-cleaning

The UVePEM device is equipped with an Ultraviolet (UV) self-cleaning system, allowing you to remove viruses, bacteria and pathogens, as well as get rid of possible unpleasant odours and deposits on silicone gaskets.

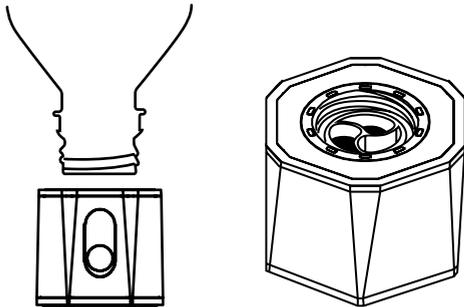
For UV-water purification, the UVePEM lid has a built-in UV system developed using dual UV-radiation (UVA 390–400 nm + UVC 265–280 nm).

1. Click the button on the lid; the indicator will turn purple and sterilisation mode 1 will be initiated for 60 seconds. After the indicated time period has elapsed, the indicator goes out, UV sterilisation is turned off and the device goes into sleep mode.
2. Click the button twice; the indicator will turn purple and sterilisation mode 2 will be initiated for 180 seconds. After the indicated time period has elapsed, the light goes out, UV sterilisation is turned off and the device goes into sleep mode.
3. To prematurely stop the UV feature, press and hold the button for 2 seconds and the indicator will turn off. UV sterilisation will turn off and the device will go into sleep mode.
4. If the green indicator flashes 2 times when the lid is turned on/used, it is a reminder of insufficient power, and that the voltage is less than 3 V. The lid needs to be charged.
5. During charging, the indicator will blink green; after being fully charged, the green light will remain on without flashing. Approximate time for a full charge is 2 hours.

**IT IS STRICTLY FORBIDDEN TO POINT THE TURNED-ON ULTRAVIOLET EMITTER IN THE LID INTO THE EYES AND LOOK DIRECTLY AT IT!
IT CAN BE DANGEROUS TO YOUR VISION!**

Use of the generator with a bottle of water

Instead of a regular flask, it is possible to use bottles with mineral (non-carbonated) water. Only bottles with a neck diameter of 28 mm are suitable, such as Evian.



To avoid overpressure, the liquid level in the bottle must be at least 5 mm below the base of the neck. It is not allowed to generate hydrogen in the bottle for more than one cycle, i.e., 10 minutes.

1. Unscrew the flask from the generator.
2. Turn the generator upside down and screw it onto the neck of the bottle.
3. Turn over the bottle with the generator and operate the device as described above.

Warranty

For the warranty to take effect, you must register the warranty on the official website of the product uvepem.com in the Support section.

1. The manufacturer guarantees correct operation of the UVePEM device for 12 months from the date of purchase, unless local laws require otherwise.
2. The warranty covers the repair and replacement of defective parts by personnel authorised by the manufacturer or by the official technical assistance service in their workshops.
3. The manufacturer is exempt from warranty obligations in the event of the need to replace parts subject to natural wear, lack of maintenance, mechanical damage resulting from improper or inadequate use of the device in violation of the operating conditions and limits specified by the manufacturer.
4. The warranty becomes invalid if repairs have been carried out by unauthorised personnel, unauthorised disassembly of the device or unauthorised modification of the design.
5. Warranty claims must be submitted on the uvepem.com website in the Support section.

Technical specifications

Product Name: ultra-high hydrogen concentration hydrogen bottle with ultraviolet (UV) self-cleaning feature

Brand: UVePEM

Model: SKV-5000

Electrodes: titanium with multilayer platinum coating

Proton-exchange membrane: Dupont 117

Flask material: Food grade polycarbonate. Does not contain Bisphenol A (BPA).

Generator body material: aluminium oxide

Generator battery capacity: 2200 mAh/3.7 V

Lid battery capacity: 350 mAh/3.7 V

Input voltage: 5 V/1 A

UVC Emitter wavelength: 265-280 nm

UVA Emitter wavelength: 390-400 nm

Flask capacity: 210 ml

Dimension: 55x55x200 mm

Generator weight: 163 g

Weight of the assembled device: 385 g

Disclaimer statement

The UVePEM is not a medical device and it is not intended to diagnose, treat, cure, or prevent diseases. Seek medical advice if you are seriously ill or are trying to treat or prevent any disease.

Your use of the product is at your own risk. It is understood that you are voluntarily using it with full knowledge that there are inherent and/or associated risks in doing so, and you assume and accept any and all risks that may be associated with and that arise out of possession or use of the product, including, but not limited to, the risk of property damage and loss, and/or serious injury (including shock or death).

Neither UVePEM nor its retailers assume any responsibility or liability for any injuries or damages, physical or otherwise, resulting, directly or indirectly, from the use or possession of this product.

The manufacturer reserves the right to make changes to the design of the device without prior notice.

This product is not suitable or intended for use by children under 8 years of age.

UV@PEM

