



UV-WATER-N-90H

UV-C device designed for water disinfection





UV-WATER is a UV-C device designed for water disinfection.

UVC lamps used are specifically designed and manufactured for LIGHT PROGRESS for this use; lamps are high emission (High Output), long-lasting and not affected by the number of switching ON-OFF.

UV-WATER is made of a stainless steel AISI 304 irradiation chamber (AISI 316 on request) which is mirror bright both inside and outside and a control/power supply panel (with different features according to the size of the system). All the products comply the regulations of the EC safety and DM 174 dated 06/04/2004 for materials suitable for contact with water for human consumption.

Selective UV-C tube (at 253.7 nm.) with high efficiency

Stainless Steel AISI 304 body

All used materials are tested for resistance to intense UV-C rays

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Powered by electronic ballasts specific for UV-C rays lamps. UV-C (220-240 V, 50-60 Hz).

CE mark (LVD 73/23 - EMC 89/336 - MD 93/42 - RoHS).

OPERATING

The device purifies water through the action of ultraviolet germicidal rays (254 nm UV-C) from all microorganisms. This system is able to perform an effective water disinfection, obtaining excellent results without the addition of chemicals (such as chlorine-based disinfectants, etc.).

The level of germicidal action effectiveness depends on many factors, such as: exposure time, changes in UV source power, presence of particles in suspension and the ability of microorganisms to resist radiation during exposure.

The treatment is performed through the circulation of water inside the disinfection chamber.

Our researchers develop with a simulation software, a system of disks (septum) that create high turbulence roundabout, mixing the particles in water and allowing the intense flow of UVC radiation to involve the whole mass of liquid assets.

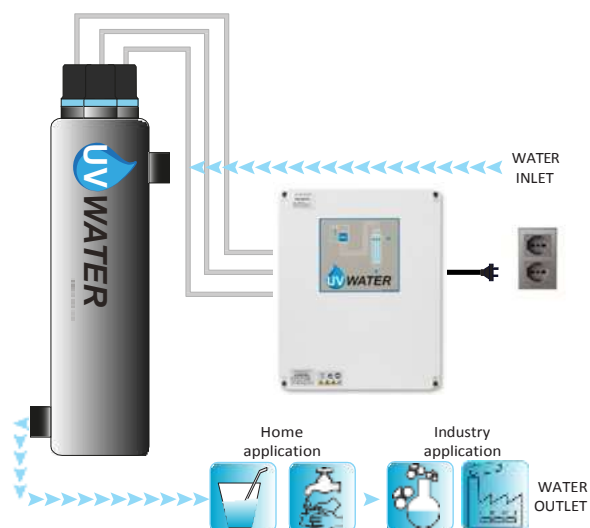
Inside the UV chamber a quartz sleeve containing the UVC lamp has the function to isolate thermally and hydraulically the UV-C bulb, creating the conditions for a optimal water purification.

UV -WATER are entirely produced in Italy and are widely used not only for civil applications but also in various industrial and professional sectors.

The use of UVC allows a disinfection process which does not affect smell, taste and pH of the treated water.

The installation is simple and can be performed by a common plumber.

Use and management of the system does not require special skills: routine maintenance and periodic replacement of UV lamp can be performed without difficulty.



BENEFITS AND ADVANTAGES

- **TOTAL ELIMINATION OF DANGEROUS MICRO-ORGANISMS**

- **SAFE DISINFECTION**

water disinfection without use of chemicals

- **PHYSICAL ACTION AND ECOLOGICAL PROTECTION**

UV-C rays treatment is purely physical, and achieves always the same effect, furthermore there are no problems of over-dose. On the other hands, chemical treatment involve the use of products dangerous for the environment, and difficult to biodegrade, raising the risks of developing resistant microbial forms with consequent dangers to human health.

- **NO CHEMICAL/PHYSICAL ALTERATIONS**

smell, taste and pH are not altered

- **PRACTICAL AND ECONOMIC**

treatment is immediate and ready-to-use.

- Maintenance is minimal with low costs of energy consumption and service.

- **A ENTRY sampling valve:** allow water sampling before UV-C chamber and treatment.

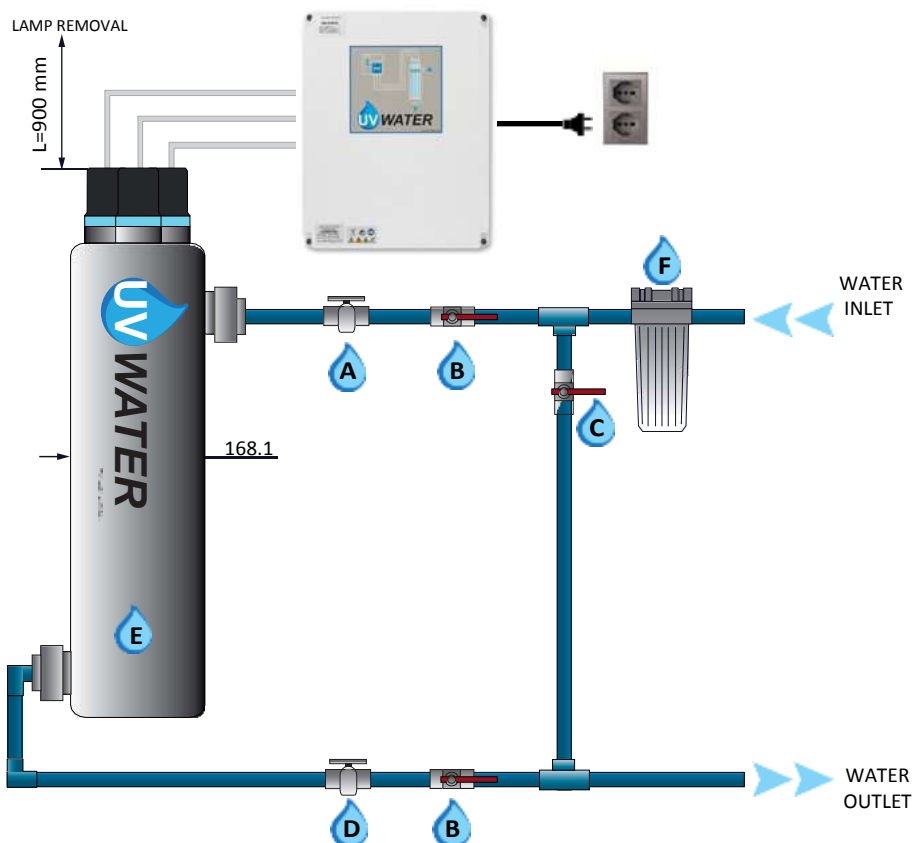
- **B Interception valve:** has to be closed to stop water flow before device maintenance.

- **C By-pass Valve:** has to be opened in case of UV-WATER malfunctioning to have access to water flow in emergency case. IMPORTANT: remember to close it up when UV-WATER is correctly in use.

- **D EXIT sampling valve:** allow water sampling after UV-C chamber and treatment, to check if water qualities are suitable with purification level needed.

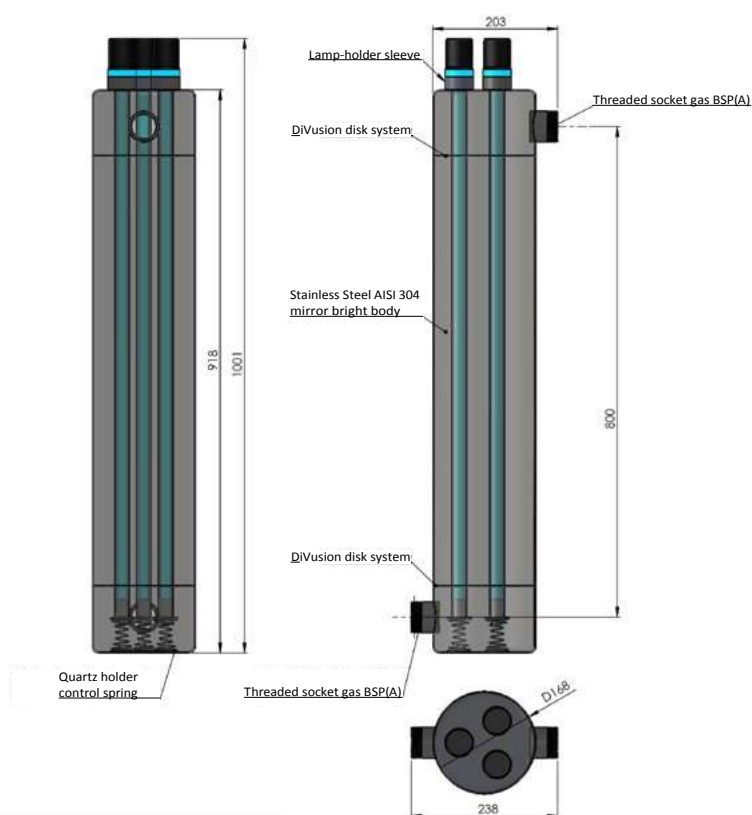
- **E UV-C Chamber:** Made in Stainless Steel AISI 304 (AISI 316 or request) which is mirror bright both inside and outside. Inside the UV chamber a quartz sleeve containing the UVC lamp has the function to isolate thermally and hydraulically the UV-C bulb, creating the conditions for a optimal water purification.

- **F Pretreatment Filter:** In order not to vanish UV-WATER efficacy, the water that reaches the irradiation chamber must meet certain quality parameters. The pre-treatment equipment must be installed before the UV chamber. Pretreatment systems may be composed of one or more of the following elements: filters for sediments; activated carbon filters; Iron removal systems; water softeners; etc.

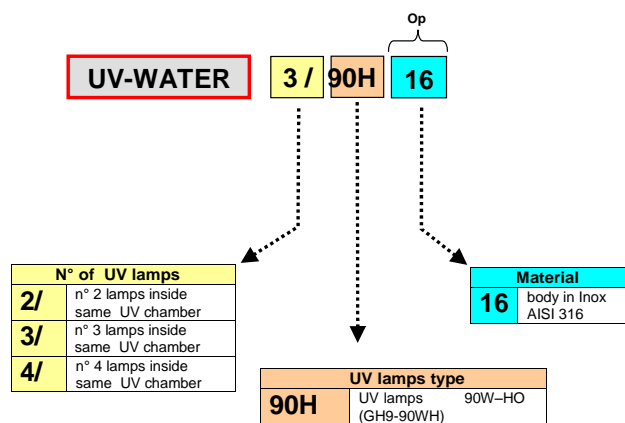


MODELS CHARACTERISTICS

	WATER FLOW RATE (30mJ/cm ² UVT = 95%)	Power supply	Total consumption	Faulty lamp alarm	Exhausted lamp alarm	Faulty remote alarm	S.S. UV reactor	IN / OUT
UV-WATER-2/90H	13.000 lt/h	220/240V-50/60Hz	180 W (HO)	Y	Y	Y	AISI 304	2" GAS BSP
UV-WATER-3/90H	18.000 lt/h	220/240V-50/60Hz	270 W (HO)	Y	Y	Y	AISI 304	2" GAS BSP
UV-WATER-4/90H	24.000 lt/h	220/240V-50/60Hz	360 W (HO)	Y	Y	Y	AISI 304	2" GAS BSP



MODEL CODES





Certificates and results for UV-FAN device:

CE:	European Community Directives (CEE)
IRPA:	International Radiation Protection Agency (FRANCE)
ASHRAE:	American Society of Heating, Refrigerating and Air-Conditioning Engineers (USA)
IUVA:	International Ultraviolet Agency (USA)
UNI EN ISO:	National norm (UNI) European norm (EN) International norm (ISO)

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