

WATER STERILIZERS WITH UV RAYS

UVC-LIGHTING SERIES

GERMICIDAL ACTION
WITHOUT CHEMICAL
ADDITIVES

ECOLOGIC SYSTEM
TASTE AND
ODOR-FREE

SMALL SIZE
AND EASY TO
INSTALL

MAINTENANCE
EASY AND
ECONOMIC



UV601



UV1201S



UV2401



UV1011



UV201

| Code | UV Sterilizers UVC-LIGHTING series |
|---------|---|
| UV1011 | UV sterilizer UV1011 6W max flow rate 150 lt/h |
| UV1011C | UV sterilizer UV1011C 6W compact version max flow rate 150 lt/h |
| UV201 | UV sterilizer UV201 14W max flow rate 550 lt/h |
| UV601 | UV sterilizer UV601 32W max flow rate 1100 lt/h |
| UV1201S | UV sterilizer UV1201S 39W max flow rate 2500 lt/h |
| UV2401 | UV sterilizer UV2401 2x39W max flow rate 4500 lt/h |

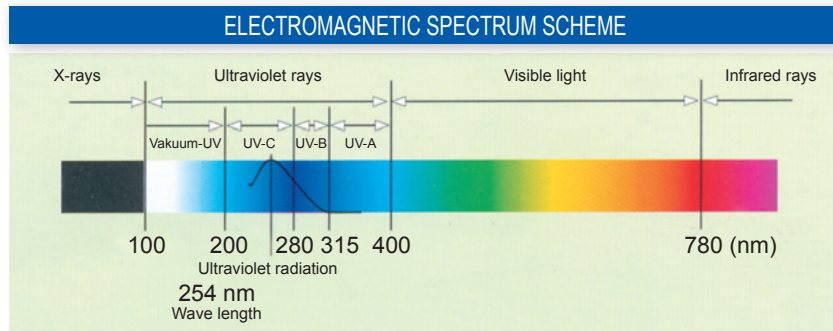
| Code | Accessories and spare parts |
|-----------|-------------------------------------|
| S212T5 | Lamp UV 6W (2+2 Pins) |
| D212T5 | Lamp UV 10W (4 Pins) |
| D287T5 | Lamp UV 14W |
| D645T5 | Lamp UV 32W |
| D842T5 | Lamp UV 39W |
| SQ230242S | Quartz for lamp UV 6W |
| SQ230330 | Quartz for lamp UV 14W |
| SQ230670 | Quartz for lamp UV 32W |
| SQ230895 | Quartz for lamp UV 39W |
| BT06 | Electronic ballast for UV 6W |
| BT14 | Electronic ballast for UV 14W |
| TSS-239UV | Electronic ballast for UV 30W / 39W |

The disinfection of the water through the UV light represents a consolidated technology, technically reliable and successfully used for several years in drinking water treatment and other areas of industry and services. It is a natural physical process capable of destroying in a very short instants, the pathogenic micro-organisms and eliminates 99.99% of bacteria, moulds, yeasts, protozoa and viruses possibly present in the water. The use of UV light as an alternative to the traditional disinfection systems with chlorine compounds offers the following advantages:

- Effective disinfectant action without chemical additives.
- No change of smell, taste and clarity of the water.
- No formation of residual substances or by-products harmful to health.
- Continuously availability of disinfected water without the need for storage.
- Minimum dimensions and ease of installation.
- Low operating costs and minimum maintenance.

The ultraviolet light is an energy zone of the electromagnetic spectrum named UV and positioned between visible light and x-rays. The UV range is divided into 4 areas: Vacuum-UV, UV-C, UV-B and UV-A.

The UV-A (315-400 nm) are normally used as a tanning light, while the UV-B (280-315 nm) and UV-C (200-280 nm) rays are the areas that contain the most effective wavelengths for the sterilization action: it is scientifically proven that the shorter the wavelength measured in nanometre (nm), the more energy is produced. The most effective wavelengths in the germicidal action are below 300 nm.



The UV lamps used in our systems are of the mercury vapour type at low pressure, capable to produce a constant wavelength at 254nm (invisible to the human eye) very close to that of 260-265 nm which is considered the most effective one for the sterilization action. These lamps ensure an irradiation of more than 30,000 mWs/cm², optimal values for the destruction of the organic nucleus of micro-organisms. They are built with a very pure quartz (99.99% SiO₂) which is not sheathing the UV and are positioned inside a quartz tube likewise pure and transparent of high conductivity able to maintain a constant level of irradiation and an excellent sterilization capability. Thanks to this special irradiation, the light penetrates through the plasma membrane of the cell and is absorbed from the nucleic acid (DNA), causing a manipulation of its genetic information and therefore interfering with the reproductive capacity of the cell: a cell that cannot reproduce is considered dead since it can no longer multiply.

UV STERILIZERS SPECIFICATIONS

| MODEL | Max flow rate lt/h. | Number and Power Lamp - | Dimension | | Fittings Ø | Max pressure Supply bar | Max absorption Watt | Duration Lamp h. |
|---------|------------------------|----------------------------|---------------|----------|---------------|----------------------------|------------------------|---------------------|
| | | | Length mm. | Ø mm. | | | | |
| UV1011 | 150 | 1 x 6W | 260 | 50,5 | 1/4" F | 6 | 6 | 5000 |
| UV201 | 550 | 1 x 14W | 340 | 64 | 1/4" F | 6 | 14 | 9000 |
| UV601 | 1100 | 1 x 32W | 680 | 64 | 1/2" F | 6 | 32 | 9000 |
| UV1201S | 2500 | 1 x 39W | 900 | 64 | 3/4" M | 6 | 39 | 9000 |
| UV2401 | 4500 | 2 x 39W | 900 | 100 | 1" M | 6 | 78 | 9000 |

Water sterilizers UVC-LIGHTING series are built entirely of stainless steel externally polished and supplied complete with ballast ignition supplied at 230V-50HZ with audible and visual indicator (LED) for reporting malfunction of the lamp. All models are supplied complete with user and maintenance manual and are in conformity with the EC directive.

