

SmartStream™ UV

Ultraviolet Water Disinfection System

**Maximize Water Quality
Without Chemicals**



Water Tech

Tel: (787) 601-6699

Email: admin@watertechgroup.com

Be Sure About Your Water Quality

UV Light Disinfection Ensures Maximum Protection, Safety, and Savings

HOW DOES UV DISINFECTION WORK?

UV light is generated by a special lamp. When water containing harmful organisms is exposed to UV light, the UV light disrupts their genetic DNA material. This quickly inactivates microorganisms by destroying their ability to multiply and infect.

The effectiveness of the disinfection depends on the UV dose level delivered. Different organisms require different UV dose levels to be inactivated. The dose produced can easily be set to suit the target organism(s) by adjusting the UV system's flow rate.

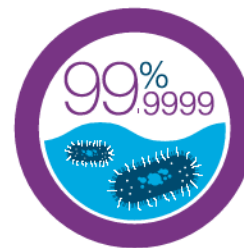
UV sterilization is a simple and rapid physical process that causes molecular re-arrangement of the genetic material within microorganisms that may be present in water. Microbial contamination from sources of water such as wells, lakes, and rivers can bring harmful organisms into our drinking water. This could lead to serious illness and even death.

Highly Effective in Inactivating Cysts, Bacteria, Viruses, and Parasites

- Protozoa Cysts (Cryptosporidium, Giardia lamblia)
- Bacteria (Cholera, E. Coli, Legionella Pneumophila, Salmonella)
- Viruses (Hepatitis A, Polio, Rota)
- Parasites

Environmentally Friendly

- No contact with toxic chemicals
- No creation of harmful disinfection by-products



UV LIGHT INACTIVATES UP TO 99.9999% (6-LOG) OF HARMFUL ORGANISMS

Economical

- Small footprint as no holding tank is needed
- No storage of chemicals needed
- Lamp replacement only required once per year
- Minimal maintenance due to no moving parts



SmartStream™ UV

The UV Disinfection System with Innovation Built In

Up to 50 gpm with Highly Efficient UV Lamps

APPLICATIONS

- Agriculture
- Aquaculture
- Breweries
- Bottling Plants
- Cooling Towers
- Dairies
- Electronics/
Semiconductors
- Food and Beverage
- Hospitals
- Laboratories
- Pharmaceuticals
- Potable Drinking Water
- Residential
- Swimming Pools



**AUTO LAMP DIMMING
REDUCES ENERGY
CONSUMPTION BY UP TO 46%***

*During no-flow conditions.

1

The SmartKey™ **UV Lamp** maximizes performance levels. Its patent-pending wireless Radio Frequency Identification (RFID) lamp ensures that correct replacement UV lamps are being used.

A glow cap lamp indicator visually indicates that the lamp is working.

- Automatic lamp shutoff prevents accidental exposure to UV light during lamp replacement
- Automatic lamp dimming reduces energy consumption by up to 46% and heating of water during no-flow conditions (patent-pending flow sensor)
- No need to depressurize system water supply to replace lamp

2

The **Quartz Sleeve** uses high quality hard glass, which allows high transmission levels of UV light and minimizes the temperature fluctuation effect and regulates the doses transmitted into the water.

3

The **Ballast** is a state-of-the-art high performance power source and control center for the UV lamp.

- Universal voltage input (100V-240V/50-60 Hz) (Available on select models)
- Generates constant current output to drive the UV lamp efficiently
- Automatic lamp identification manages the unique startup parameters for each lamp to maximize lamp life
- CE, cTUVus, WEEE, ROHS, WRAS, Lead Free
- Alarm relay output for solenoid control
- Optional UV transmittance sensor (available for high-output lamp models)
- Displays remaining lamp life in days, power on indication and alarm "sleep" button (Touchscreen display available on select models)
- Includes integrated communication ports for future upgrades on high-output lamp models
- Logs remaining lamp life automatically



Made in USA of Primarily US and Canadian Parts



Touchscreen Display (Available on Select Models)

- Includes three standard languages (English, French, Spanish) with option to add others
- Easy-to-use touchscreen has visual indicators that inform users (e.g., replace lamp, clean lamp, days left to change lamp, service contact, where to buy replacement parts)
- Customizable graphic display allows distributors to have their own service contact information and embedded QR code

4

The Reactor Chamber provides a water path around the clear quartz sleeve. The efficient inlet/outlet port configuration of the reactor chamber creates 10%–15% more efficient UV dose delivery.

- 316 stainless steel (standard on all models)

5

A UV Sensor (optional) measures the UV output of the lamp and an audible alarm alerts the operator of low UV dose levels.

General Specifications

Pipe Sizes: 3/8" to 1-1/2" (10mm to 40mm)

Pipe Connections: NPT & BSP available

Flow Rate: Up to 50 gpm (189 lpm)

Lamps rated for 12-month continuous service life

Highly polished 316 stainless steel reactor chamber

Audible & visual alarm indicates lamp failure

Easy lamp replacement

Universal voltage input (100V-240V/50-60 Hz) (Available on select models)

30 mJ/cm² at 95% UVT dose at specified flow rate at end of lamp life

Limited Warranty

Stainless Steel Reactor Chamber: 10 years

Flow Switch: 3 years

Electronics & Ballast: 5 years prorated

Quartz Sleeve, UV Lamp, UV Sensor & Other Components: 1 year