



SYS-5100F

Ultra Violet Water Sterilizer

The SYS-5100F is a robust, high quality and economical ultra-violet sterilizer that offers very efficient treatment at a very low cost per unit volume. Typically installed as a component in a larger water treatment system, it can be used in all applications where safe drinking water is required. In process water applications such as rain-water harvesting, fish farming or irrigation water disinfection, this sterilizer is perfect for the reduction of harmful organisms such as viruses, fungi and protists due to its exceptional high UV efficacy, as well as in other commercial and industrial applications, including food and beverage processing, pharmaceutical manufacturing, or cooling towers.

The system contains four low-pressure, high output UV lamps in manifolded 316L stainless steel reaction chambers. It comes with electronic ballasts that feature a lamp-out alarm if there is no power to the lamp.

Additional features for this sterilizer can be ordered, such as a UV-monitoring system for fail-safe operation, a thermo-sensitive purge valve at the out port to prevent overheating in no-flow conditions, or volt-free contacts on the ballasts for remote signaling.

The SYS-5100F kills most microbiological contaminants, such as bacteria, protozoa and viruses with a powerful UV disinfection dose that will inactivate the microorganisms at a kill rate of 99.99% (log 4) or more (*Giardia*, *E. coli*, *Cryptosporidium*, *Vibrio cholerae*, *Legionella*, *Salmonella*, *Shigella*, *Streptococcus* and many others).



Similar to image.
Configurations may vary.

Applications

- ▶ Potable Water, Process Water
- ▶ Water Bottling Plants
- ▶ Food Processing and Packaging Centres
- ▶ Hospitals and Health Clinics
- ▶ Vegetable Processors and Irrigation Systems
- ▶ Rainwater Harvesting
- ▶ Beverage Production

Benefits

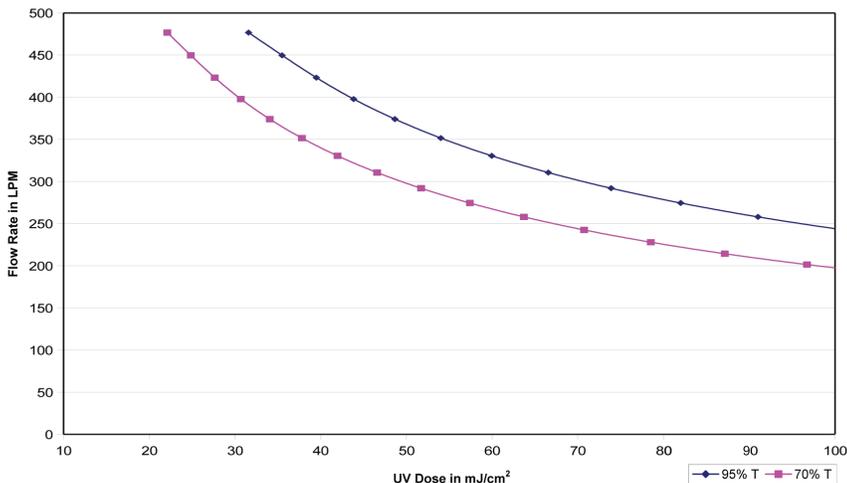
- ▶ Efficient Disinfection, Low Cost per Litre
- ▶ Exceptional High UV Dose
- ▶ Extremely Simple to Use and Maintain
- ▶ High Quality Stainless Steel Reaction Chamber
- ▶ Easily Upgradeable with Optional Features
- ▶ Made in Canada

Flow Range:	270 - 660 litres per minute (71.3 - 174.3 GPM) 16,200 l (16.2 m ³) - 39,600 l (39.6 m ³) /hour / 389 - 950 m ³ /day 4,278 - 10,458 gallons/hour, 102,670 - 251,000 gallons/day
UV Dose Applied (95% UVT):	16 mJ/cm ² (16,000 μWsec/cm ²) @ 660 LPM / 174.3 GPM 30 mJ/cm ² (30,000 μWsec/cm ²) @ 360 LPM / 95.1 GPM 40 mJ/cm ² (40,000 μWsec/cm ²) @ 270 LPM / 71.3 GPM
Electrical:	110-130 Volt AC / 50-60 Hz (Part # SYS-5100F-1) 220-240 Volt AC / 50-60 Hz (Part # SYS-5100F-2)
Power Consumption Overall:	408 VA @ 120 V, 428 VA @ 240 V
Ballast:	4 x Electronic Ballast w/ Lamp Out Alarm, Power LED, Running Days Countdown on LCD Display (Resettable) Model RH51-800-95L (Wyckomar Part # 4-BE-800-ECO)
Number of Lamps:	4 (Part # RL-110/1197T5)
Lamp Wattage and Current:	110 Watts, 800 mA
UV Monitor:	Optional (2 x Part # 4-UV/MS50-1/2 V3)
Max. Operating Temperature:	40 °C (104 °F)
Max. Operating Pressure:	125 psi - 8.6 bar
Plumbing:	2" MNPT In/Out (Flanges Optional)
Chamber Material:	316L Stainless Steel
Shipping Size and Weight:	1 Rack 24x33x56 inches, 210 lbs / 96 kg

Specifications subject to change

Dose Chart

SYS5100F UV Dose Response Curve



Additional Features

(Optional):

- UV Monitoring System for Failsafe Operation
- Volt-Free Contacts on Ballasts for Remote Signaling
- Purge Valve at Out Port for Overheat Protection
- Sanitary Tubing and Fittings

Important Considerations

This UV System assumes certain water quality parameters to be met for proper operation. If the source water does not meet the following criteria, pretreatment has to be considered:

Turbidity (Suspended Solids): must be < 1 NTU at the time of disinfection. There must be a 5 micron or less sediment prefiltration system installed before the UV system.

Total Hardness (Sum of Calcium and Magnesium): Must be < 10 gpg (grains per gallon)

Iron: Must be < 0.3 ppm (parts per million)

Manganese: Must be < 0.05 ppm

Pre-Filtration for this UV system is available. Please inquire