UV-5000

Ultra Violet Water Sterilizer

Description

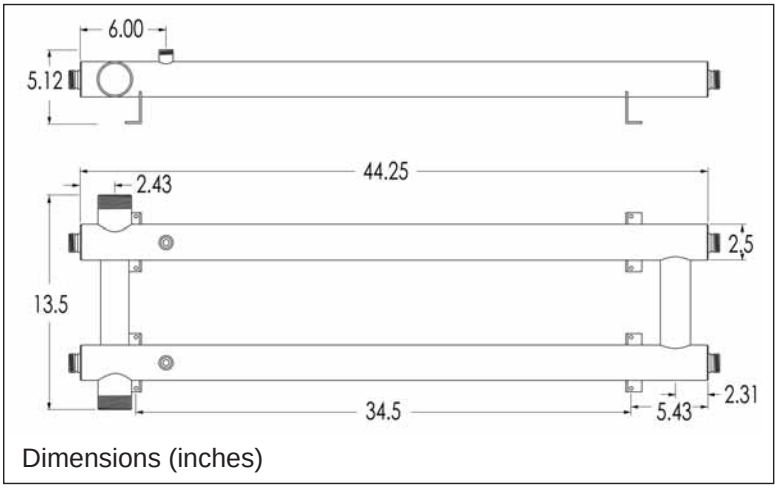
The UV-5000 is a robust, high quality ultra-violet sterilizer that offers very efficient treatment at a low cost per unit volume. Typically installed at the point of entry, it can treat municipal water as well as ground water from drilled or dug wells, and surface water from lakes, ponds or rivers (pre-filtration necessary). This sterilizer is perfectly sized to provide drinking water or purified process water for commercial and light industrial applications, including food and beverage processing, pharmaceutical manufacturing, or cooling towers. It is also a very popular system for the disinfection of pools and spa's.

The UV-5000 contains two low-pressure, high output UV lamps in a manifolded 316L stainless steel reaction chamber. It comes with two electronic ballasts that feature a lamp-out alarm if there is no power to the lamp.

Combined with appropriate pre-filtration, this sterilizer is the centre piece of a complete water treatment system for the elimination of bacteria and viruses and reduction of taste and odour at the point of entry.

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 over-heating in no-flow conditions, or volt-free contacts on the ballasts for remote signaling.

The UV-5000 kills most harmful pathogens such as viruses, bacteria and protozoa with a powerful UV disinfection dose that will inactivate the pathogens at a kill rate of 99.99% (log 4) or more (*Giardia, E. coli, Cryptospiridium, Vibria cholera, Legionella, Salmonella, Shigella, Streptococcus* and many others).



Dimensions (inches)

Applications

- **Potable Water**
- **Water Bottling Plants**
- **Food Processing and Packaging Centres**
- **Hospitals and Health Clinics**
- **Vegetable Processors**
- **Pools and Spa's**
- **Beverage Production**

We Stand On Guard

Benefits

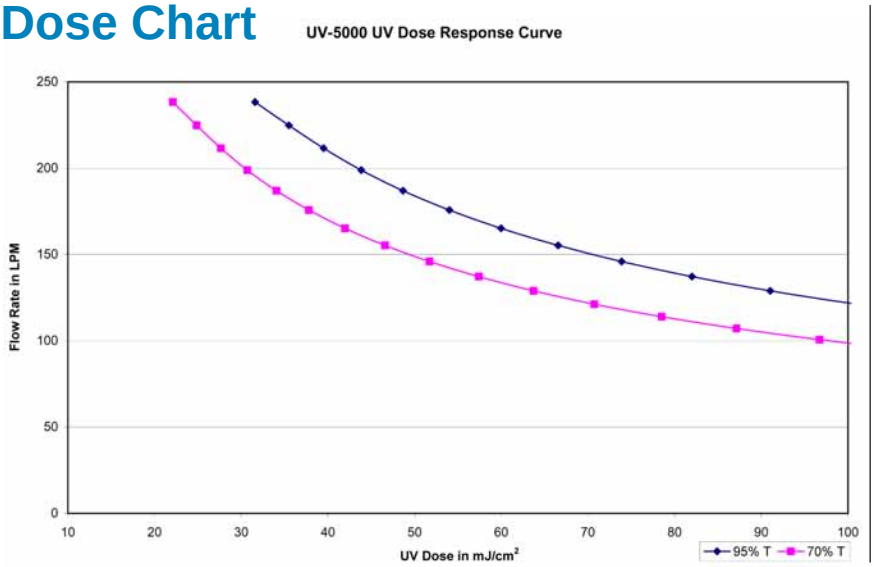
- **Efficient Disinfection, Low Cost per Litre**
- **Exceptional High UV Dose**
- **Extremely Simple to Use and Maintain**
- **High Quality Stainless Steel Reaction Chamber**
- **Easily Upgradeable with Optional Features**
- **Made in Canada**

Specifications

Part # P5000/QS4E-1/2

Rated Flow:	189 litres per minute (50 GPM) 11,340 litres (11.3 m^3)/hour, 272 m^3/day (3,000 gallons/hour, 72,000 gallons/day)
Initial UV Dose at Rated Flow:	47 mJ/cm^2 (47,000 µsec/cm^2) @ 95% UVT 34 mJ/cm^2 (34,000 µsec/cm^2) @ 70% UVT
Electrical:	110-130 Volt AC / 50-60 Hz (Part # P5000/QS4E-1) 220-240 Volt AC / 50-60 Hz (Part # P5000/QS4E-2)
Power Consumption:	102 VA @ 120 V, 107 VA @ 240 V
Ballast:	Electronic Ballast (Part # 4-BE-800WL-1/2) w/ Lamp Out Alarm, Power LED
Number of Lamps:	2 (Part # RL-110/1197T5)
Lamp Wattage and Current:	110 Watts, 800 mA
UV Monitor:	Optional (Part # 4-UV/MS50-1/2)
Solenoid Valve:	Optional (Part # 4-SV-2000-1)
Hour Meter:	Optional (Part # 4-HM-R100) (one each per lamp)
Max. Operating Temperature:	37 °C (98.6 °F)
Max. Operating Pressure:	125 psi - 8.6 bar (tested to 500 psi)
Plumbing:	2” MNPT In/Out
Chamber Material:	316L Stainless Steel
Shipping Size and Weight:	1 box 52x16x9 inches, 46 lbs / 21 kg

Dose Chart



Additional Features (Optional):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber
- Volt-Free Contacts on Ballasts for Remote Signaling
- Purge Valve at Out Port for Overheat Protection
- Ballasts with Hour Meter for Total Runtime Display
- Rack-Mounted or Skid-Mounted for Easy Installation

Filtration

This UV sterilizer 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

This UV unit can be manifolded in parallel for higher flow rates (see Part # SYS5100F, SYS5100F3) and can be customized for many applications with pre-filtration into All-in-One rack-mounted systems

Manufactured in Canada by **Wyckomar Inc.** 111 Malcolm Road, Guelph, Ontario Canada N1K 1A8
Phone ++1-519-822-1886 Fax ++1-519-763-6580 sales@wyckomaruv.com www.wyckomaruv.com