

# **UV-1200**

# **Ultra Violet Water Sterilizer**

### **Description**

The UV-1200 is a robust, high quality ultraviolet sterilizer designed for the disinfection of drinking water in the larger house where there is a 1" line, at a flow range between 13.2 and 33 GPM (50 - 125 LPM). 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. Other applications for this sterilizer are for the purification of drinking and process water in small commercial applications.

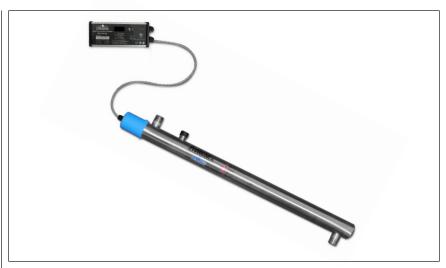
This UV sterilizer contains a low-pressure, high output UV lamp in a 304L stainless steel reaction chamber (also available in 316L). It comes with an electronic ballast that features a lamp-out alarm if there is no power to the lamp.

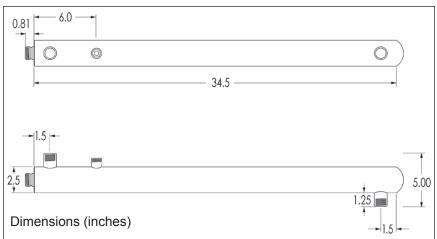
Combined with a Wyckomar filter set, this sterilizer is the centre piece of a complete water treatment system for the elimination of bacteria and viruses and reduction of taste and odour at the point of entry (see part # SYS1200-QD4E-1/2).

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

The UV-1200 kills most harmful microbiological contaminants, 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, Cryptosporidium, Vibrio cholerae, Legionella, Salmonella, Shigella, Streptococcus and many others).







# **Applications**

- Potable Water
- Whole House Water Treatment
- ► Small Commercial Applications
- ► Coffee Shops, Hair Salons, Doctor's Offices
- Pharmaceutical Manufacturing

#### **Benefits**

- ► Efficient Disinfection, Low Cost per Litre
- ► High UV Dose for Peace of Mind
- Easy Installation
- ► Extremely Simple to Use and Maintain
- ► Easy Lamp Replacement
- ► High Quality Stainless Steel Reaction Chamber
- Domed Quartz Sleeve with Single Seal
- ► Made in Canada

## **Specifications**

UV Dose Applied (95% UVT):

50 - 125 litres per minute (13.2 - 33 GPM) Flow Range:

3,000 I (3.0m<sup>3</sup>) - 7,500 I (7.5 m<sup>3</sup>) /hour / 72 - 180 m<sup>3</sup>/day 792 - 1980 gallons/hour, 19,000 - 47,250 gallons/day 16 mJ/cm<sup>2</sup> (16,000 μWsec/cm<sup>2</sup>) @ 125 LPM / 33 GPM

30 mJ/cm<sup>2</sup> (30,000 μWsec/cm<sup>2</sup>) @ 68 LPM / 18 GPM

40 mJ/cm<sup>2</sup> (40,000 μWsec/cm<sup>2</sup>) @ 50 LPM / 13.2 GPM

**Electrical:** 110 Volt AC / 50 - 60 Hz (Part # P1200/QD4E-1)

240 Volt AC / 50 - 60 Hz (Part # P1200/QD4E-2) Electronic Ballast w/ Lamp Out Alarm, Power LED,

Count of Total Running Days on LCD Display (Resettable)

Model RH51-800-95L (Wyckomar Part # 4-BE-800-ECO)

**IP64 Ballast Enclosure Rating:** 

**Lamp Current:**  $0.75 \text{ A} - 0.85 \text{ A} / \text{U-Out: } 300 \text{ V} / \text{PF(}\lambda\text{): } > 0.99\% / \text{THD: } < 10\%$ Number of Lamps: 1 at 84 Watts, 800 mA (Part # RL-84/893T5) Low-Pressure UV

**UV Monitor:** Optional (Part # 4-UV/MS-1/2 V3)

Min/Max. Operating Temperature:  $T_{min} = 3 \, ^{\circ}\text{C} \, (37 \, ^{\circ}\text{F}), \, T_{max} = 40 \, ^{\circ}\text{C} \, (104 \, ^{\circ}\text{F})$ 

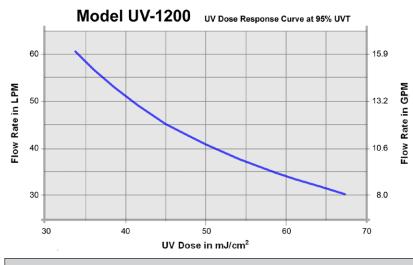
125 psi - 8.6 bar **Max. Operating Pressure:** Plumbing: 1" MNPT In/Out

**Chamber Material:** 304L Stainless Steel (316L SS optional) **Shipping Size and Weight:** 1 box 45x7x7 inches, 12 lbs / 5.5 kg

Specifications subject to change

#### **Dose Chart**

**Ballast:** 



#### **Additional Features** (Optional):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber
- Volt-Free Contacts on Ballast for Remote Signaling
- Purge Valve at Out Port for Overheat Protection
- Pre-Assembled and Panel Mounted for Easy Installation

## **Important Considerations**

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 is available as complete system with appropriate pre-filtration (Part # SYS1200/QD4E-1/2) or as pre-assempbled All-in-One System for 'plug-and-play' installation (Part # SYS-MD1004-1/2)

