



# UV-700

## Ultra Violet Water Sterilizer

### Description

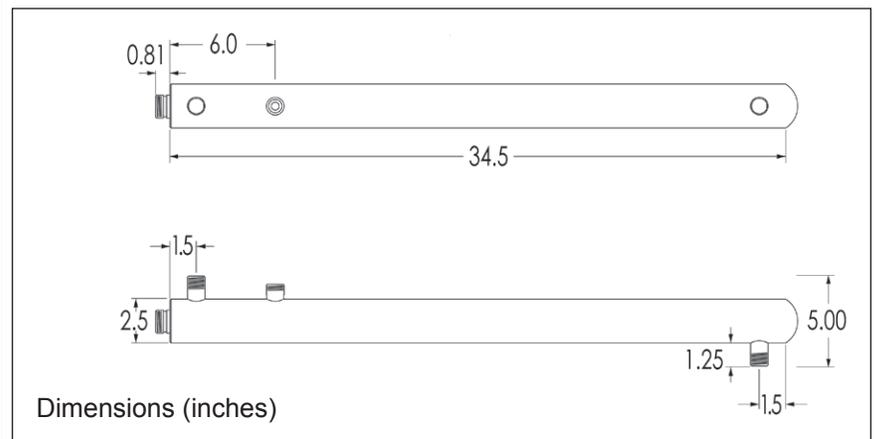
The UV-700 is our best-selling ultra-violet sterilizer designed for the disinfection of drinking water in the average household at a flow flow range between 9.8 and 24.3 GPM (37 - 92 LPM). Typically installed at the point of entry, it can treat municipal water as well as ground water from drilled or dug wells, and surface water from lakes, ponds or rivers. Other uses for this sterilizer are for the purification of all incoming water in various small commercial applications, such as coffee shops, doctor's offices or hair salons.

This 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 and an operations day count on a digital display.

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 # SYS700-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-700 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 (up to 6)
- ▶ Small Commercial Applications, such as Coffee Shops, Doctor's Offices, Hair Salons
- ▶ Light Industrial Applications
- ▶ Food and Beverage Manufacturing

### Benefits

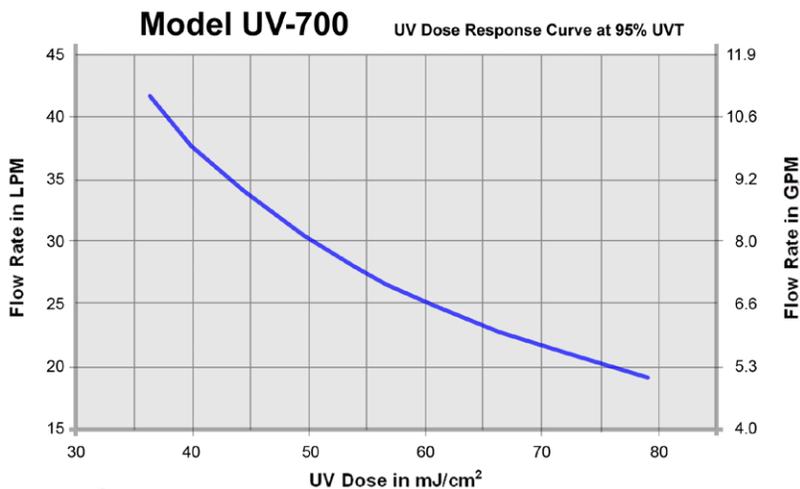
- ▶ Efficient Disinfection, Low Cost per Litre
- ▶ High UV Dose for Peace of Mind
- ▶ Easy Installation
- ▶ Extremely Simple to Use and Maintain
- ▶ Easy Lamp Replacement
- ▶ High Quality Stainless Steel Reaction Chamber
- ▶ Domed Quartz Sleeve with Single Seal
- ▶ Made in Canada



<b>Flow Range:</b>	37 - 92 litres per minute (9.8 - 24.3 GPM) 2,220 l (2.22 m <sup>3</sup> ) - 5,520 l (5.52 m <sup>3</sup> ) /hour / 53.3 - 132.5 m <sup>3</sup> /day 588 - 1,458 gallons/hour, 14,112 - 34,992 gallons/day
<b>UV Dose Applied (95% UVT):</b>	16 mJ/cm <sup>2</sup> (16,000 μWsec/cm <sup>2</sup> ) @ 92 LPM / 24.3 GPM 30 mJ/cm <sup>2</sup> (30,000 μWsec/cm <sup>2</sup> ) @ 50 LPM / 17.2 GPM 40 mJ/cm <sup>2</sup> (40,000 μWsec/cm <sup>2</sup> ) @ 37 LPM / 9.8 GPM
<b>Electrical:</b>	110 Volt AC / 50 - 60 Hz (Part # P700/QD4E-1) 240 Volt AC / 50 - 60 Hz (Part # P700/QD4E-2)
<b>Ballast</b>	Electronic Ballast w/ Lamp Out Alarm, Power LED Count of Total Running Days on LCD Display (Resettable) Model RH51-425-40L (Wyckomar Part # 4-BE-425-ECO-R)
<b>Ballast Enclosure Rating:</b>	IP64
<b>Lamp Current:</b>	0.39 - 0.43 A / <b>U-Out:</b> 300 V / <b>PF(λ):</b> > 0.99% / <b>THD:</b> < 10%
<b>Number of Lamps:</b>	1 at 40 Watts, 425 mA (Part # RL-40/867T5) Low-Pressure UV
<b>UV Monitor:</b>	Optional (Part # 4-UV/MS-1/2 V3)
<b>Min/Max. Operating Temperature:</b>	T <sub>min.</sub> = 3 °C (37 °F), T <sub>max.</sub> = 40 °C (104 °F)
<b>Max. Operating Pressure:</b>	125 psi - 8.6 bar
<b>Plumbing:</b>	3/4" MNPT In/Out
<b>Chamber Material:</b>	304L Stainless Steel (316L SS optional)
<b>Shipping Size and Weight:</b>	1 box 45x7x7 inches, 12 lbs / 5.5 kg

Specifications subject to change

## Dose Chart



## 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
- Available in Explosion-Proof Configuration

## 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 # SYS700/QD4E-1/2) or as pre-assembled All-in-One System for 'plug-and-play' installation (Part # SYS700-POU and SYS-MD1003)