

# UV-700

## Ultra Violet Water Sterilizer

### Description

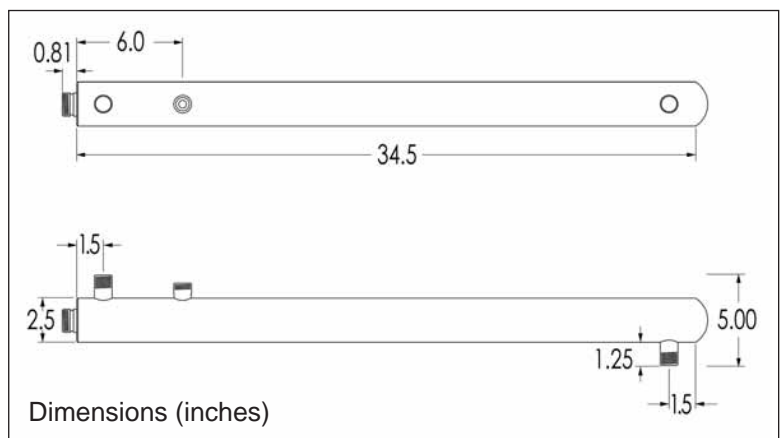
The UV-700 is our best-selling ultra-violet sterilizer designed for the disinfection of drinking water in the average household at a flow rate of 8 GPM (30 LPM). Typically installed at the point of entry, it can treat municipal water as well as ground water from drilled or dug wells, and surface water from lakes, ponds or rivers. Other applications for this sterilizer are for the purification of 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.

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 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*, *Cryptosporidium*, *Vibria cholera*, *Legionella*, *Salmonella*, *Shigella*, *Streptococcus* and many others).



### Applications

- ▶ Potable Water
- ▶ Whole House Water Treatment (up to 6 People)
- ▶ 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



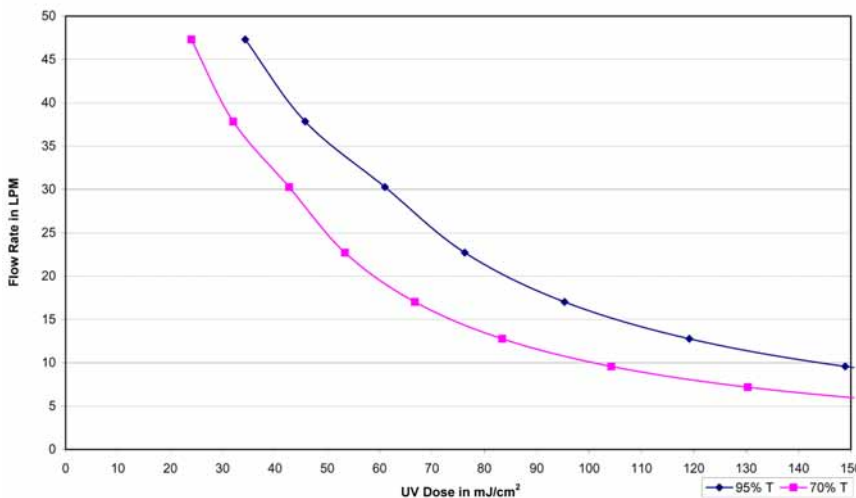
# Specifications

Part # P700/QD4E-1/2

<b>Rated Flow:</b>	30 litres per minute (8 GPM) 1800 litres/hour, 43.2 m <sup>3</sup> /day (480 gallons/hour, 11520 gallons/day)
<b>Initial UV Dose at Rated Flow:</b>	62 mJ/cm <sup>2</sup> (62,000 µsec/cm <sup>2</sup> ) @ 95% UVT 43 mJ/cm <sup>2</sup> (43,000 µsec/cm <sup>2</sup> ) @ 70% UVT
<b>Electrical:</b>	110-130 Volt AC / 50-60 Hz (Part # P700/QD4E-1) 220-240 Volt AC / 50-60 Hz (Part # P700/QD4E-2)
<b>Power Consumption:</b>	53 VA @ 120 V, 66 VA @ 240 V
<b>Ballast:</b>	Electronic Ballast (Part # 4-BE-425W-U) w/ Lamp Out Alarm, Power LED
<b>Number of Lamps:</b>	1 (Part # RL-40/867T5)
<b>Lamp Wattage and Current:</b>	40 Watts, 425 mA
<b>UV Monitor:</b>	Optional (Part # 4-UV/MS-1/2)
<b>Solenoid Valve:</b>	Optional (Part # 4-SV-750-1)
<b>Hour Meter:</b>	Optional (Part # 4-HM-R100)
<b>Max. Operating Temperature:</b>	37 °C (98.6 °F)
<b>Max. Operating Pressure:</b>	125 psi - 8.6 bar (tested to 500 psi)
<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

## Dose Chart

UV-700 UV Dose Response Curve



## 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
- Ballast with Hour Meter for Total Runtime Display
- Available in Explosion-Proof Configuration

## 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 is available as complete system with appropriate pre-filtration (Part # SYS700/QD4E-1/2) or as a pre-assembled All-in-One system for 'plug-and-play" installation (Part # SYS-MD1003-1/2)

