



# UV-250HO

## Ultra Violet Water Sterilizer

### Description

The UV-250HO (High Output) is a robust, efficient and powerful ultra-violet sterilizer designed for the disinfection of drinking water in residential and commercial applications where a small footprint is required. 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 process water in manufacturing.

This sterilizer contains a low-pressure, very 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 appropriate pre-filtration, this UV 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.

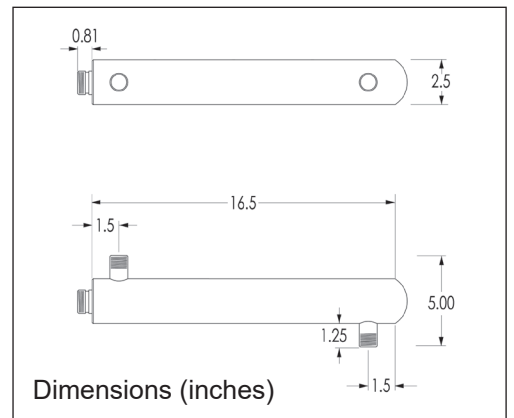
Additional features for this sterilizer can be ordered, such as a thermo-sensitive purge valve at the out port to prevent overheating in no-flow conditions, or volt-free contacts on the ballast for remote signaling.

The UV-250HO 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
- ▶ Cottages
- ▶ Laboratories
- ▶ Restaurants
- ▶ RO Systems
- ▶ HVAC Systems



### Benefits

- ▶ Efficient Disinfection, Low Cost per Litre
- ▶ Very 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



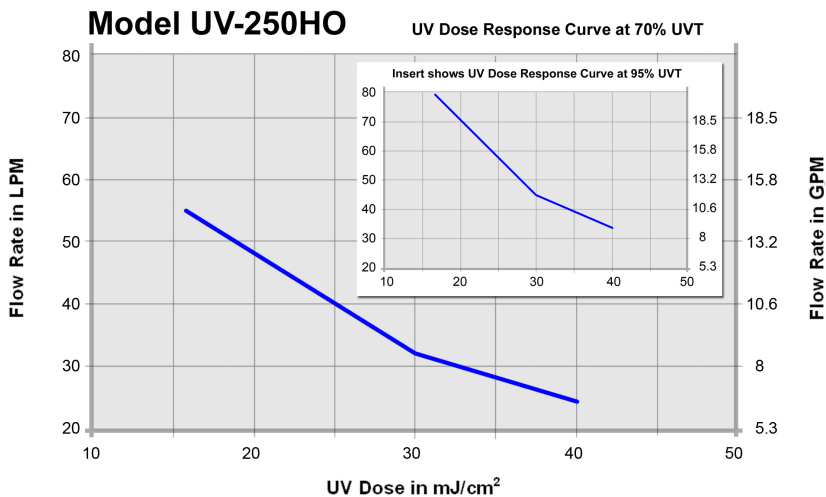
# Specifications

Part # P250/QD4E-1/2HO

<b>Flow Range:</b>	33 - 82 litres per minute (8.7 - 21.6 GPM) 1,980 l (1.98 m <sup>3</sup> ) - 4,920 l (4.92 m <sup>3</sup> ) /hour / 47.5 - 118 m <sup>3</sup> /day 522 - 1,296 gallons/hour, 12,528 - 31,104 gallons/day
<b>UV Dose Applied (95% UVT):</b>	16 mJ/cm <sup>2</sup> (16,000 μWsec/cm <sup>2</sup> ) @ 82 LPM / 21.6 GPM 30 mJ/cm <sup>2</sup> (30,000 μWsec/cm <sup>2</sup> ) @ 45 LPM / 11.9 GPM 40 mJ/cm <sup>2</sup> (40,000 μWsec/cm <sup>2</sup> ) @ 33 LPM / 8.7 GPM
<b>Electrical:</b>	110 Volt AC / 50 - 60 Hz (Part # P250HO/QD4E-1) 240 Volt AC / 50 - 60 Hz (Part # P250HO/QD4E-2)
<b>Ballast</b>	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)
<b>Ballast Enclosure Rating:</b>	IP64
<b>Lamp Current:</b>	0.75 - 0.85A / <b>U-Out:</b> 300 V / <b>PF(λ):</b> > 0.99% / <b>THD:</b> < 10%
<b>Number of Lamps:</b>	1 at 44 Watts, 800 mA (Part # RL-44/436T5) Low-Pressure UV
<b>Optional UV Monitor:</b>	Analog / Digital, Special Order Only
<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>	1" MNPT In/Out
<b>Chamber Material:</b>	304L Stainless Steel (316L SS optional)
<b>Shipping Size and Weight:</b>	1 box 26x7x6 inches, 8 lbs / 3.6 kg

Specifications subject to change

## Dose Chart



## Additional Features / Configuration Options:

- Volt-Free (Dry) Contacts on Ballast for Remote Signaling
- Thermosensitive Purge Valve at Out Port for Overheat Protection
- Integrated Control Panel with Digital Touch Screen Display and Remote Access for Comprehensive System Management and for Capturing / Logging of Sensor and Operation Data
- Available w/ Sanitary Tri-Clamp 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