

# UV-3000

## The Great Bear | Purifier

### Description

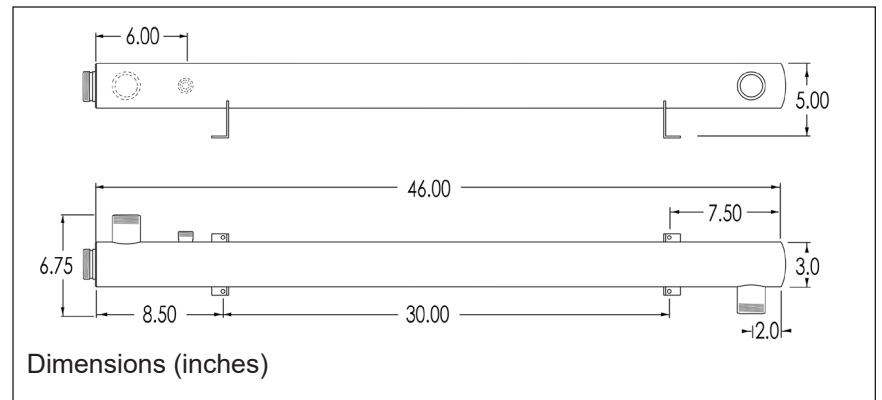
The UV-3000 is a robust, high quality ultra-violet water sterilizer that offers very efficient treatment at a low cost per unit volume. Typically installed at the point of entry, it can treat municipal water as well as ground water from drilled or dug wells, or surface water from lakes, ponds or rivers (pre-filtration necessary). This sterilizer is perfectly sized to provide drinking water or purified process water for large houses and mansions, as well as for commercial and light industrial applications.

The model UV-3000 sterilizer contains a low-pressure, high output UV lamp in a 316L stainless steel reaction chamber. 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 (see SYS3000/QS4E-1/2).

Additional features are available, such as a UV-monitoring system for fail-safe operation, a thermo-sensitive purge valve at the out port to prevent overheating under no-flow conditions, and volt-free contacts or 4-20 mA output on the ballast for remote signaling.

The UV-3000 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, Process Water
- ▶ Many Different Commercial Applications
- ▶ Health Clinics and Hospital Areas
- ▶ Herbal Medicine Production
- ▶ Hotels and Restaurants
- ▶ Fish Farming, Greenhouse Irrigation
- ▶ Pools and Spa's
- ▶ Campgrounds, Trailer Parks

### Benefits

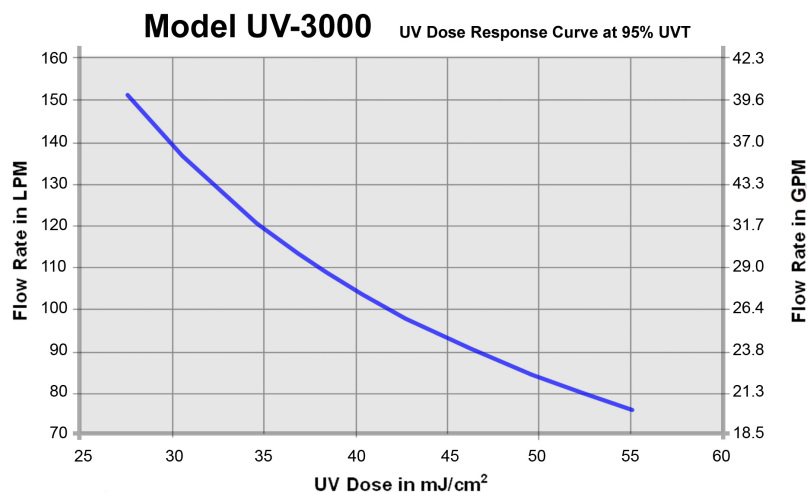
- ▶ Efficient Disinfection, Low Cost per Litre
- ▶ Exceptional High UV Dose
- ▶ Extremely Simple to Use and Maintain
- ▶ High Quality Stainless Steel Reaction Chamber
- ▶ Easily Upgradeable with Optional Features
- ▶ Made in Canada



<b>Flow Range:</b>	105 - 250 litres per minute (27.8 - 66 GPM) 6,300 l (6.3 m <sup>3</sup> ) - 15,000 l (15 m <sup>3</sup> ) /hour / 151.1 - 360 m <sup>3</sup> /day 1,668 - 3,960 gallons/hour, 40,032 - 95,040 gallons/day
<b>UV Dose Applied (95% UVT):</b>	16 mJ/cm <sup>2</sup> (16,000 μWsec/cm <sup>2</sup> ) @ 250 LPM / 66 GPM 30 mJ/cm <sup>2</sup> (30,000 μWsec/cm <sup>2</sup> ) @ 135 LPM / 35.7 GPM 40 mJ/cm <sup>2</sup> (40,000 μWsec/cm <sup>2</sup> ) @ 105 LPM / 27.8 GPM
<b>Electrical:</b>	110 Volt AC / 50 - 60 Hz (Part # P6000/QS4E-1) 240 Volt AC / 50 - 60 Hz (Part # P6000/QS4E-2)
<b>Ballast:</b>	Electronic Ballast w/ Lamp Out Alarm, Power LED, Running Days Countdown on LCD Display (Resettable) Model RH51-800-95L (Wyckomar Part # 4-BE800-14/30ECO)
<b>Lamp Current:</b>	0.75 A - 0.85 A / <b>U-Out:</b> 300 V / <b>PF(λ):</b> > 0.99% / <b>THD:</b> < 10%
<b>Ballast Enclosure Rating:</b>	IP64
<b>Number of Lamps:</b>	1 at 100 Watts, 800 mA (Part # RL-100/1197T6) Low-Pressure UV
<b>Optional UV Monitor:</b>	Analog (Part # 4-UV/MS-1/2 V3) / Digital (Configuration Dependent)
<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>	1.5" MNPT In/Out
<b>Chamber Material:</b>	316L Stainless Steel (PVC available)
<b>Shipping Size and Weight:</b>	1 box 52x9x9 inches, 24 lbs / 11 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 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 # SYS3000/QS4E-1/2) and can be customized for many applications into an All-in-One panel-mounted system (Part # SYSMD1006-1/2).