



# PUV25-AM

## Ultra Violet Water Sterilizer

### Description

The PUV25-AM is designed to tackle a wide variety of water disinfection applications and can operate effectively at a wider temperature range than many standard UV systems.

The PUV25-AM is built with amalgam lamp technology to offer excellent performance in hot water applications and in applications requiring a relatively high UV dose vs. standard UV solutions.

Amalgam technology also offers extended lamp life of 12,000 hours between lamp change-outs.

The PUV25-AM is designed with overall efficacy in mind. It's compact size, high flow rate and wide range of application possibilities make it a good choice for difficult water disinfection projects.

Combined with appropriate pre-filtration, this sterilizer is the centre piece of a complete water treatment system for the elimination / reduction of pathogenic microorganisms in the water. It 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*, *Vibrio cholerae*, *Legionella*, *Salmonella*, *Shigella*, *Streptococcus* and many others)



### Applications

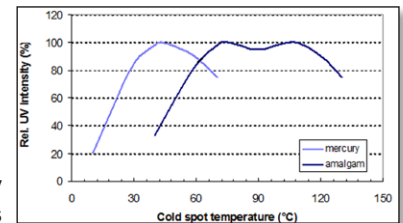
- ▶ Potable water
- ▶ Process water
- ▶ Effluent Water
- ▶ Waste Water
- ▶ Hot Water
- ▶ High UV Dose Applications

### Benefits

- ▶ Compact Design
- ▶ Exceptional High UV Output
- ▶ Extremely Simple to Use and Maintain
- ▶ High Quality Stainless Steel Reaction Chamber
- ▶ Easily Upgradeable with Optional Features
- ▶ Made In Canada



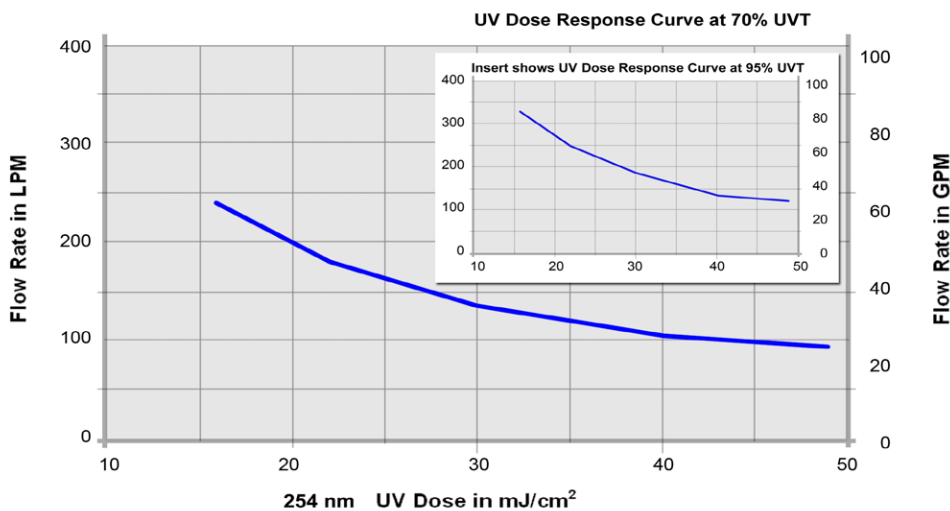
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|--|---|
| <b>Flow Range:</b>   | 27 - 185 litres per minute (7.1 - 48.8 GPM)<br>1,620 l (1.6 m <sup>3</sup> ) - 11,100 l (11 m <sup>3</sup> )/hour / 39 - 266 m <sup>3</sup> /day<br>426 - 2,928 gallons/hour, 10,200 - 70,000 gallons/day                           |
| <b>UV Dose Applied (95% UVT):</b><br>(Temperature Dependent) | 30 mJ/cm <sup>2</sup> (30,000 μWsec/cm <sup>2</sup> ) @ 185 LPM / 48.8 GPM<br>40 mJ/cm <sup>2</sup> (40,000 μWsec/cm <sup>2</sup> ) @ 140 LPM / 37 GPM<br>200 mJ/cm <sup>2</sup> (200,000 μWsec/cm <sup>2</sup> ) @ 27 LPM / 7.1GPM |
| <b>Electrical:</b>   | 230 Volt AC / 50 - 60 Hz  |
| <b>Ballast:</b>  | Electronic w/ Lamp Out Alarm, Power LED (Part #4-BE-2100-2)   |
| <b>UV Lamp:</b>  | 172 Watts 660 mA (Part #RL-172/843T6HVA) Low-Pressure Amalgam   |
| <b>Ballast Enclosure Rating:</b>                             | IP64  |
| <b>Hour Meter:</b>   | Optional (Part # 4-HM-R100)   |
| <b>Min/Max. Operating Temperature:</b>                       | T <sub>min.</sub> = 3 °C (37 °F), T <sub>max.</sub> = 60 °C (140 °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  |



Thermal Efficiency  
Amalgam vs Mercury UV Lamps

Specifications subject to change

## UV Dose Chart



## Additional Features

### (Optional):

- Electronic Deposit Control System with PVC or Stainless Reaction Chamber
- Panel- or Rack-Mounted for Easy Installation
- Dry (Volt-Free) Contacts on Ballast for Remote Signal
- Various Pre-Filter Configurations Available

## 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

This UV unit can be manifolded in parallel for higher flow rates and can be customized for many applications with pre-filtration into All-In-One panel mounted systems.