

# High Flow Whole House UV Systems

Ultra Violet (UV) Water Sterilizers are a world renowned and proven form of water disinfection within all forms of the water treatment industry. UV is an efficient, simple and rapid method of water disinfection without the use of heat or dangerous chemicals and does not leave a residual taste or odour in the water supply. UV technology uses 254nm germicidal ultraviolet light to quickly and reliably disable bacteria, viruses and other micro organisms present in the water supply.

The **SP Series** was designed for (but not limited to) the domestic and light commercial markets for simplistic, economical and efficient sterilization. The High Flow Filter UV system comes as a fully assembled Plug & Play 3 stage Filtration system which includes Large Diameter housings, 25-1 $\mu$  Dual Gradient Depth sediment filter, Carbon Block filter for organics reduction & taste issues followed by Wonderlight UV technology. The reactor chambers are high quality 304 electro-chemically passivated and hand polished stainless steel. The High Flow UV systems come complete with UV-HO lamp, quartz thimble, Viton O-ring with a proprietary made internal earthed two piece knurled end nut and a reliable purpose built Standard Waterproof (IP65) ballast with LED light and lamp fail audible alarm or optional IP55 rated Digital 9000 hour counter ballast which alarms when lamp needs replacing or lamp fail alert.

The **SP Series** range is perfect for whole house applications on all types of water supplies giving you peace of mind and bacteria free drinking water.



**Optional Digital Ballast**  
Models: UVABUVT6  
UVABUVT8



Model Shown: UVSP-165Z-304-SWB



**Optional Addition:**  
Temperature Management  
Valve

## Benefits

- Simple Plug & Play Installation.
- Fast Efficient Disinfection
- Small Footprint
- High Quality SS Reactor Chamber
- Low Maintenance
- High Quality Housings & Filters
- High UV Dosage
- No Chemicals
- Low Cost per Litre
- Impossible to Overdose
- Easy Installation

## Applications

- Domestic Potable Water
- Process Water
- Food and Beverage
- Hotels and Restaurants
- Health Clinics and Hospital Areas
- Herbal Medicine Production
- Aquarium and Aquaculture
- Ice Manufacturing
- Camp Grounds

# Specifications:

| Model             | Flow rate LPM | No. of lamps | Lamp Wattage | Ballast               | Lamp Fail Alarm | Plumbing BSPM | Chamber Material |
|-------------------|---------------|--------------|--------------|-----------------------|-----------------|---------------|------------------|
| UVSP133Z-304-SWB  | 40            | 1            | 33HO         | Std Waterproof (IP65) | Audible/LED     | 25mm (1")     | 304SS            |
| UVSP133Z-304-UVT6 | 40            | 1            | 33HO         | Digital 9000 Hr Reset | Audible/LED     | 25mm (1")     | 304SS            |
| UVSP165Z-304-SWB  | 70            | 1            | 65HO         | Std Waterproof (IP65) | Audible/LED     | 25mm (1")     | 304SS            |
| UVSP165Z-304-UVT8 | 70            | 1            | 65HO         | Digital 9000 Hr Reset | Audible/LED     | 25mm (1")     | 304SS            |

Flow rate shown is based on UV dosage of > 30mJ/cm<sup>2</sup>

## Operational Requirements

The UV System requires the following minimum water quality for correct disinfection. Pre-treatment must be considered if the raw water supply does not meet the following minimum requirements.

- Turbidity (Suspended Solids):** < 1 NTU (5 micron filtration recommended)
- Recommended Ambient & Water temperature:** 2°C - 40°C (35°F - 104°F)
- Maximum recommended operating pressure:** 690kPa (100psi)
- Power requirements:** 240V AC 10amp
- Chloride (Cl):** < 250mg/L
- Hardness (CaCo<sub>3</sub>):** < 120mg/L
- Iron (Fe):** < 0.3mg/L
- Manganese (Mn):** < 0.05mg/L



**UVT Ballast:** Waterproof (IP55) rated digital 9000 Hr reset ballast with audible alarm with an optional extra dry contact feature.

Over the year the radiation within the lamp loses its efficiency. After an approx. 9 - 10,000 hours continuous run time the lamp will not deactivate bacteria coliforms effectively. The advantage of the UVT digital ballast is it will alert the home owner or operator to replace the UV lamp and is simply reset for another year. The control is water-proof (IP55) and comes with the option of a dry contact feature if required. The ballast has a high frequency range and meets many European Electrical standards such as UL, CUL, TUV for peace of mind.

Watermart have combined an All in one complete assembled system on a Stainless steel bracket using High Flow 10" or 20" large diameter housings incorporated with well proven dual gradient sediment and carbon block filters for the removal of fine dirt, sediment, rust and Protozoan Cysts such as Giardia and Cryptosporidium. Followed up by UV disinfection for deactivation of harmful viruses and bacteria coliforms for safe drinking water from every tap within the premises.

### Model UVSP-133Z

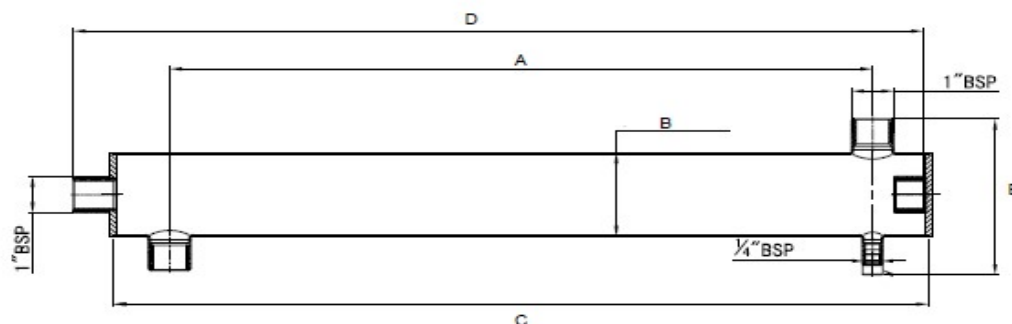
#### Replacement Items:

Stage one, Sediment: WCMBL10L01  
 Stage Two, Carbon: WCCBL10L10  
 33HO Watt lamp: UVAT533HO  
 Quartz Thimble: UVAQT245680  
 Silicon O-Ring: UVAORD245

### Model UVSP-165Z

#### Replacement Items:

Stage one, Sediment: WCMBL20L01  
 Stage Two, Carbon: WCCBL20L10  
 65HO Watt lamp: UVAT565HO  
 Quartz Thimble: UVAQT245680  
 Viton O-Ring: UVAORD245V



| Model     | A   | B    | C   | D   | E     | Standard Inlet & Outlet Size |
|-----------|-----|------|-----|-----|-------|------------------------------|
| UVSP-133Z | 554 | 63.5 | 640 | 675 | 129.5 | 25mm (1")                    |
| UVSP-165Z | 554 | 76.2 | 640 | 675 | 142.2 | 25mm (1")                    |

Measurements are in millimetres.