

## Waste Water Treatment



# WSR1PS

|                            |   |
|----------------------------|---|
| <b>Connections</b>         | 25mm; 1.0" (F)  |
| <b>Flow &amp; Pressure</b> | 30 Lpm @ 60 psiG<br>90 psiG MAWP  |
| <b>Dosage</b>              | 54 mJcm <sup>2</sup> / 70% UVT<br>BOD/TSS 10/10<br>Manufacturers Rating |
| <b>Dimensions</b>          | 1040x560x230<br>24 kg   |

### Use

- This system is designed to reduce E.coli counts below 200 MPN/100 mL
- Fit after advanced secondary treatment; prior to discharge onto disposal field; Designed for outdoor installation; all components are housed under a white aluminium waterproof cover, and the power supply is fully moisture protected.

### Servicing

- Inspect quartz sleeve at 1 month then 3 months following installation to determine level of fouling, and likely inspection/cleaning interval
- 50 Micron Pleated Paper cartridge in 10" Jumbo filter housing (w/Pressure Gauge)
- UV lamp rated 365 days continuous use; if actual use is 1 hour per day then replacement interval will be 24 years
- Annual servicing is inexpensive with lamps and cartridge available online from us

### UV Dosage

- 'Pump Delay Timer' ensures the UV lamp is at maximum output before use
- For single 80 watt lamp UVC output is 54mJ/cm<sup>2</sup> at 70%UVT at 30 Lpm; Contact time 5.4 seconds, UV Intensity 12.9 mJ/cm<sup>2</sup>; Velocity 8 cm/sec
- UVT% is closely related to the BOD/TSS count; the lower the count the higher the UVT%
- A count of less than 10/10 will have a UVT% greater than 70%, and likely result in an annual service interval for sleeve cleaning and cartridge replacement

***Bolt to the wall, connect the inlet /outlet and plug in simplicity***

### Warnings :

It is the responsibility of the installer to ensure that the evacuation pump flow rate does not exceed the UV systems rated flow. Exceeding this flowrate will reduce the UV dosage, possibly to a level that renders the system unable to reduce E.coli count below the 200 required level.

This System is NOT fitted with a Pump Timer Delay, therefore MUST be fitted with an Advanced Secondary Treatment System that has its own PLC controlling the 2 minute delay required for the lamp to heat up.



# Cover

**Dimensions**

1035 x 535 x 235

**Material**

ACM (allu composite)

**Fixing**

Riveted & Glued

**Electrical Specification**

- UV lamp 80 watt output; 800 mA; 100 watt input
- Digital '365 day countdown' ballast; Gel filled to prevent any moisture contacting the circuitry
- Surge Protector & RCBO wired into 100/240 V AC power supply
- ALL components mounted in an IP55 Box

**Piping**

- 304 SS Hex Unions at inlet, filter to chamber, and outlet; 3.2mm rubber gasket sealing; 'hand tight' connection
- 304 SS UV chamber for 850 mm lamp
- 1.0" BSP inlet and outlet connections (F)
- SS 1" Ball Valves

**Mounting**

- All components bolted into SS inserts
- 15mm White durable non fade PVC backing board
- Weatherproof ACM (alloy composite material) security cover

**Dimensions**

- Shipping Carton: 1.1 x 0.6 x 0.3 (0.2 m3); 24kg
- System Dimensions: 1040x530

**Typical Installation**

- Outdoors close to Septic tanks and pump
- Fix the two SS brackets to studs, then hang the system onto the brackets
- Run inlet and outlet pipes horizontally then up to the ball valves (to allow flexibility for ease of disconnect)
- Position system with 1 meter clearance to the left (for removal of the lamp & quartz sleeve)