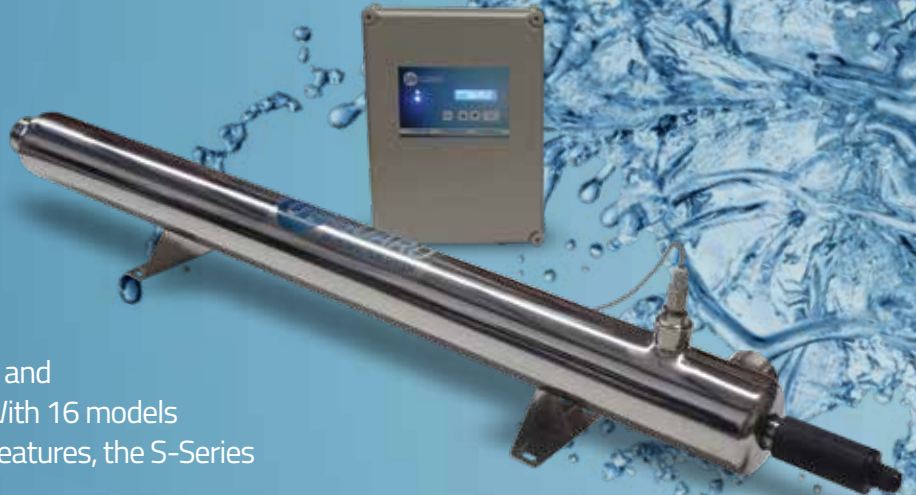




# S-Series™

UV Water Disinfection for Industrial and Commercial uses up to 50m<sup>3</sup>/hr.

The WaterMark certified S-Series is a robust and dependable UV water disinfection system. With 16 models in the range and a number of customisable features, the S-Series is an extremely versatile system.



## Applications

- ✓ **Drinking Water** – protect remote communities, mining camps, apartment residents, employees, customers and more.
- ✓ **Waste Water** – disinfect wastewater to allow it to be recycled or safely discharged to the environment.
- ✓ **Process Water** – protect RO & UF membranes, media filters and other water treatment processes from microbial colonisation.
- ✓ **Aquaculture** – safeguard fish farms and hatcheries from disease.
- ✓ **Swimming Pools** – eradicate bacteria and viruses, reduce chlorine use by up to 90%, break down chloramines and create a healthier environment for users.
- ✓ **Display Fountains** – improve appearance and safety by controlling algae growth and destroying harmful bacteria.
- ✓ **Stormwater** – enable the safe re-use of captured stormwater.
- ✓ **Irrigation Water** – remove crop pathogens and ensure playing fields are safe for human contact.
- ✓ **Warm Water / Hot Water** – control Legionella in nursing homes and other communal facilities.
- ✓ **Food & Beverage** – produce a microbial free product without adding chemicals and impacting on taste or odour.
- ✓ **Medical** – UV disinfection for hospital departments such as Renal and Pathology units.
- ✓ **Pharmaceutical** – ensure water is ultra-pure for processes and products.
- ✓ Any other application where water disinfection is required.



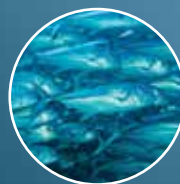
Medical & Pharmaceutical



Agriculture & Horticulture



Mining & Municipal



Aquaculture



Aquatics



Food & Beverage



Industrial & Manufacturing



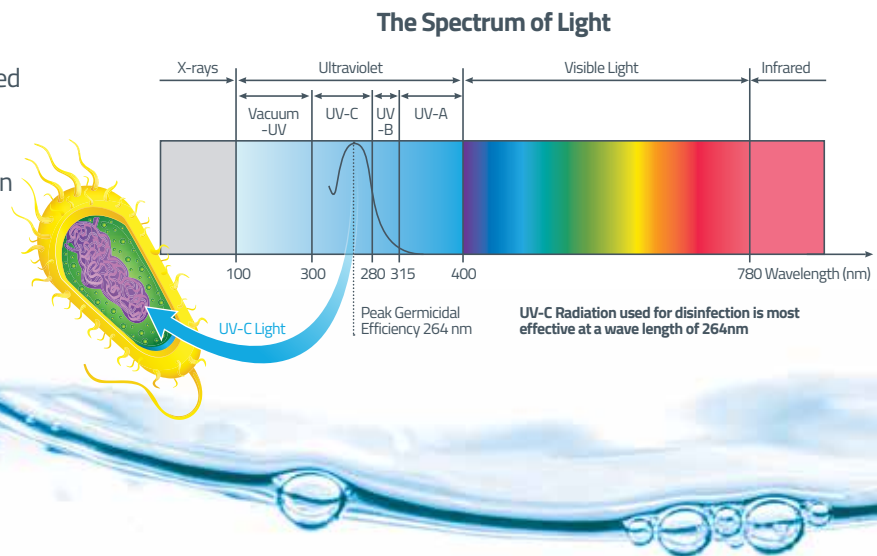
## Benefits

- ✓ **No micro-organism is known to be immune to UV** – even the chlorine resistant Giardia and Cryptosporidium.
- ✓ **Economical and efficient operation** – disinfecting at the point of use, no contact time required.
- ✓ **No harmful by-products** – chemical free, no impact on taste and no corrosion problems.
- ✓ **No risk of overdosing** – reducing the risks associated with chemical overdosing.
- ✓ **Easy maintenance** – lamp can be replaced easily without interrupting water flow.
- ✓ **Proven performance and flexibility** – system designed according to application and project requirements.
- ✓ **Peace of mind** – power supplies show when lamp is in operation and audibly alerts any faults.

## The powers of UV Disinfection

UV disinfection is a technology that uses Ultra-Violet light in the germicidal wavelength range between 200 and 300 nanometers. The optimum UV wavelength for UV disinfection is 264 nanometers which is located within the UV-C spectrum.

When microorganisms are exposed to germicidal wavelengths, they are destroyed outright or rendered incapable of reproducing. The high energy associated with UV-C UV light is absorbed by the DNA of bacteria, viruses, spores and other pathogens. This absorption causes abnormalities within the DNA to occur, resulting in the microorganism being incapable of reproducing and infecting.



## Standard Features

- ✓ **Systems accredited by the WaterMark certification scheme** – guaranteeing quality and fit for purpose.
- ✓ **High quality 316 grade stainless steel reactor** – ensures longevity of the system.
- ✓ **BSP threaded connections in a number of inlet/outlet location choices** – for ease of connection to plumbing infrastructure.
- ✓ **Heavy duty stainless steel brackets** – system permanently mounted securely.
- ✓ **Lamp fail alarm** – alerts user and prevents untreated water from being consumed.
- ✓ **Innovative high output, low pressure UV lamps** – target UV dose is maintained throughout lamp life.
- ✓ **Pure fused quartz sleeves** – allows optimum penetration of UV light through to the water.
- ✓ **Lamps parallel to water flow** – water disinfected from chamber entry point to exit.
- ✓ **View port located on the side of reactor** – user can visually see if the UV lamp is operating.

## Options

- ✓ **Basic indoor controller** – lamp on/off LEDs and lamp fail alarm.
- ✓ **Digital indoor controller** – lamp on/off LEDs, lamp fail alarm, digital lamp life timer and volt free alarm contacts.
- ✓ **Weatherproof PLC** – IP54 & IP65 rated, lamp on/off LEDs, lamp fail alarm, digital lamp life timer, volt free alarm contacts and more.
- ✓ **UV intensity monitoring** – real time monitoring to alert when design UV intensity is not being achieved. Output available to alert BMS of low UV intensity or to display actual UV intensity on remote device (Weatherproof PLC only).



- ✓ **Industrial and Basic Thermal Relief Valves** – ensures UV lamp remains at optimal UV output temperature and protects lamp from overheating.

**Basic Thermal Relief Valve** – 316 stainless steel female bsp automatic thermal relief valve.



**Industrial Thermal Relief** – Reactor temperature measured by thermostat and solenoid valve controlled (Weatherproof PLC only).

- ✓ **Interlocking UV lamp device** – UV lamp cannot be in operation unless fully sealed within the UV reactor improving safety and eliminating UV exposure to users.
- ✓ **Remote controllable** – system can be controlled by external device (Weatherproof PLC only).
- ✓ **Personalised software** – Company name can be displayed on system start-up and designated service phone number can be displayed during system faults (Weatherproof PLC only).
- ✓ **Customisable** – Weatherproof PLC features and options can be custom made to suit project requirements not listed above.

Model	Flow rate per UV Dose figure*		Connection	Lamp Power (W)	Dimensions (cm)
	40ml/cm <sup>2</sup>	30ml/cm <sup>2</sup>			
UVG S20	17 lpm	23 lpm	¾" male BSP	20	32l x 6.2w
UVG S30	25 lpm	34 lpm	¾", 1" male BSP	30	59l x 6.2w
UVG S40-62	35 lpm	46 lpm	1" male BSP	40	97l x 6.2w
UVG S40-76	45 lpm	60 lpm	1", 1½" male BSP	40	97l x 7.6w
UVG S55	51 lpm	70 lpm	1" male BSP	55	59l x 10w
UVG S75	90 lpm	120 lpm	1", 1½" male BSP	80	97l x 7.6w
UVG S80	86 lpm	115 lpm	2" male BSP	80	97l x 7.6w
UVG S80-100	118 lpm	157 lpm	2" male BSP	80	97l x 10w
UVG S125	137 lpm	183 lpm	2" male BSP	125	97l x 7.6w
UVG S172	186 lpm	248 lpm	2" male BSP	172	97l x 7.6w
UVG S125-100	188 lpm	250 lpm	2" male BSP	125	97l x 10w
UVG S160	203 lpm	270 lpm	2" male BSP	160	128l x 7.6w
UVG S245	263 lpm	351 lpm	2" male BSP	245	128l x 7.6w
UVG S160-100	271 lpm	361 lpm	2" male BSP, 3" Table E Flange	160	128l x 10w
UVG S245-100	358 lpm	478 lpm	2" male BSP 3" Table E Flange	245	128l x 10w
UVG S440	553 lpm	737 lpm	3" Table E Flange	440	154l x 10w



**WaterMark**

**Certificate Number:**  
ISC-WM-030013-I02-R00

\*Approximate flow rates calculated using 'UVCalc' software and are based on a UV transmittance (UVT) of 85% and a UV dose at the end of lamp life.

