



The water treatment specialist

ultraviolet triogen® SMP-TSO

The **triogen® SMP-TSO** offers a compact and high efficiency disinfection system for **aquarium, aquaculture and water feature applications**. These systems provide advanced lamp and vessel efficiency with a range of options including energy saving features, for disinfection and improved water quality.

applications

- Aquariums
- Aquaculture
- Water features
- Process water
- TOC reduction

benefits +

- Safely control background levels of general bacteria
- Significant improvement in water clarity and air quality
- Simple control logic / easy to operate
- Helps to inhibit the growth of algae
- Savings in water, energy and chemical consumption
- Low capital and installation costs, with minimal service and plant room space required
- Low service requirements

main features

- Polychromatic 10,000 hour medium pressure UV lamp system
- Auto dose pacing options
- 316L stainless steel electro-polished vessel
- Automatic "Smartdrive" wiper system and UV monitor
- Touchscreen and PLC
- Advanced lamp efficiency and low power setting function
- Data logging, BMS, Ethernet and Modbus communication ready
- Manual and remote operation and status
- Models available with reduced feature options



UV technology

- Medium pressure polychromatic ultraviolet (UV) light is a highly effective means to inactivate bacteria and viruses, and will oxidise organic species in water.
- UV disinfection consists of a physical, chemical-free process, directly attacking the vital DNA of bacteria and micro organisms.

technical data

Model	Flow Rates		Lamp Power	Supply Rating ^(*)	Inlet/outlet Connections	Reactor dimensions	Control Panel dimensions
	m ³ /h ⁽¹⁾	m ³ /h ⁽²⁾	kW	V / ph / Hz	mm/inches	mm (L x W x H)	mm (L x W x H)
SMP150-100-1/1,5	45	53	1 x 1.5	220-240 / PH+N/ 50-60	DN100	1381 x 275 x 278	600 x 300 x 600
SMP150-100-1/3	90	105	1 x 3.0		DN100	1381 x 275 x 278	600 x 300 x 600
SMP250-150-1/3	175	181	1 x 3.0		DN150	1381 x 375 x 378	600 x 300 x 600
SMP200-150-2/3	242	260	2 x 3.0	380-415 / 3 PH+N/ 50-60	DN150	1381 x 325 x 328	800 x 400 x 600
SMP250-200-3/3	482	488	3 x 3.0		DN200	1381 x 375 x 371	800 x 400 x 600
SMP250-200-1/6	351	363	1 x 6.0		DN200	1731 x 375 x 378	-
SMP300-250-2/6	802	767	2 x 6.0		DN250	1731 x 450 x 428	-
SMP400-350-3/6	1678	1436	3 x 6.0		DN350	1731 x 550 x 529	-
SMP350-200-6/6	-	-	6 x 6.0		DN400	1731 x 525 x 478	-

(1) flow rates based on a dose of 40mJ/cm² at 98 % UVT

(2) flow rates based on a dose of 30mJ/cm² at 95 % UVT

* Electrical supply must be confirmed at time of order

quality standard

- CE Approved

materials

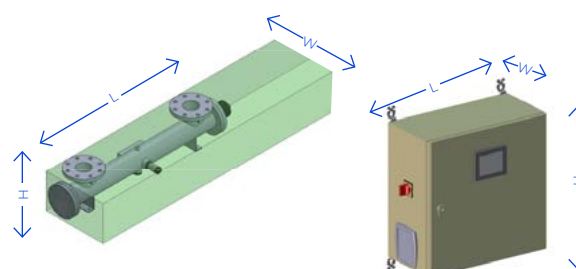
- Reactor Vessel: Electropolished 316L stainless steel, rated to 10 Bar(g)
- Flanges: BS EN1092, PN10 / ANSI 150
- Lamp: high purity quartz
- Lamp(s) covers safety
- Thimble: high purity quartz
- Panel: Painted steel, IP54 protection

options

- No wiper
- Power step regulation
- Triclamp inlet/outlet connections
- Welded reactor surfaces (0.35µm) & electro polished
- 316L stainless steel ancillaries
- Additional cable (5m standard)
- UV sensor deletion
- TOC Reduction

controls and outputs

- BMS, Modbus and Ethernet
- Local and remote:
 - Lamp on / off / low power control
 - Lamp on / off indication
 - Fault alarms
 - Lamp hours
 - Lamp change required
 - UV intensity
- Local:
 - UV intensity in W/m², mJ/cm² or % requires a 4-20 mA signal from a water flowrate for mJ/cm² display
 - Languages options (English, French, Spanish, German)
 - Reactor temperature (°C or °F)
 - Panel temperature (°C or °F)
 - Real time clock with date
 - Data logging trends (lamp current, temperature, UV Intensity)
- Contacts outputs :
 - ON/OFF
 - General
 - Alarm, Alarm 1, Alarm 2
 - Warning



contact

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