

Datasheet

Saphir Series

Domestic & Small Commercial

Description

WRAS-approved UV water disinfection system, for the disinfection of clean water to meet relevant water standards.

Main Applications

- Private drinking water supplies
- Process water
- Water cooling supplies
- Legionella growth in warm water supplies
- Rainwater harvesting and recycling

Temperatures

- Standard water temperature 5-23°C
- Temperature range 0-60°C

Standards

- Water regulatory advisory service (WRAS) approved (2204342)
- Kiwa Regulation 4 KUKREG4 (2205732)

Technical Description

- Single-centred low-pressure lamp UV system
- Single-ended UV lamp and quartz sleeve

Flow Rates (m³/hr)

	Saphir 1	Saphir 2	Saphir 3	Saphir 4	Saphir 7	Saphir 10
30 mJ/cm ² @ 98% UVT	1.00	1.80	3.20	3.50	7.05	9.50
40 mJ/cm ² @ 98% UVT	0.75	1.35	2.40	2.65	5.30	7.00
30 mJ/cm ² @ 95% UVT	0.95	1.72	3.00	3.35	6.70	8.90
40 mJ/cm ² @ 95% UVT	0.72	1.25	2.20	2.50	4.95	6.20

All flows are calculated at end of lamp life time

Please contact us for further information regarding flow rates



Technical Datasheet

	Saphir 1	Saphir 2	Saphir 3	Saphir 4	Saphir 7	Saphir 10
Certification - WRAS approved (2204342)	✓	✓	✓	✓	✓	✓
UV Reaction Chamber						
Material - 316 stainless steel	✓	✓	✓	✓	✓	✓
Internal/ external finish - pickled and passivated/electropolished	✓	✓	✓	✓	✓	✓
Lamp access - single ended	✓	✓	✓	✓	✓	✓
Quartz sleeve type - high purity silica quartz	✓	✓	✓	✓	✓	✓
Mounting - integral fixing bracket	✓	✓	✓	✓	✓	✓
Connection size - (BSPT male)	¾"	¾"	¾"	1"	1"	1½"
Dimensions	Please refer to general arrangement drawings					
Reactor volume approx - litres	1.9	2.7	2.7	5.0	5.0	8.5
Total weight (dry) - kilograms	1.5	2.0	2.0	3.5	3.5	8.5
Operating pressure (max) - bar	10	10	10	10	10	10
Protection class	IP54	IP54	IP54	IP54	IP54	IP54
Installation - horizontal/vertical	✓	✓	✓	✓	✓	✓
Saphir Basic features	High efficiency electronic ballast power supply, lamp on indicator					
Saphir Plus features	All Saphir features, plus lamp fail indicator, power on indicator, lamp change reminder with 365-days counter, microcontroller, visual display indication for lamp failure and end of life, volt free contact for remote telemetry or solenoid shut off valve connection					
Saphir Pro features	All Saphir Basic and Saphir Plus features, plus touchscreen with UV output performance indicator, UV intensity display (%), with low UV warning, digital display / lamp life readout					
UV Lamp						
Type	GER15SE	GER25SE	GER25XOSE	GER36SE	GER36XOSE	GER36XOSE
Lamp design - single-ended 4 pin	✓	✓	✓	✓	✓	✓
Lamp power - watts	15	25	45	40	75	75
UVC output @ 254nm - watts	4	7.5	13	15	25	25
Quantity	1	1	1	1	1	1
Lamp life - hours	8760	8760	8760	8760	8760	8760
Control Panel						
Material - powdercoated mild steels (blue)	✓	✓	✓	✓	✓	✓
Dimensions - millimetres	190 x 260 x 62	190 x 260 x 62	190 x 260 x 62	190 x 260 x 62	190 x 260 x 62	190 x 260 x 62
Weight - kilograms	2.5	2.5	2.5	2.5	2.5	2.5
Mains Power - VAC/PH/Hz	110-240 / Single Phase / 50-60	110-240 / Single Phase / 50-60	110-240 / Single Phase / 50-60	110-240 / Single Phase / 50-60	110-240 / Single Phase / 50-60	110-240 / Single Phase / 50-60
Power Consumption - watts	16.5	30	38.5	42	68	68
Current Rating - amps	0.07	0.13	0.17	0.18	0.30	0.30
Protection - 3A mains fuse	✓	✓	✓	✓	✓	✓
Lamp power supply - electronic ballast	✓	✓	✓	✓	✓	✓