



The Saphir system is a compact, economical UV system that is designed with the consumer in mind.

It uses commonplace single ended low pressure UV lamp technology, thus making the system not only economical for energy running costs, but also for replacement UV lamps. The single ended UV lamp also makes servicing the equipment very simple.

Ultraviolet sterilisation works by destroying the genetic structure of the living cells thus preventing their multiplication.

The UV disinfection unit comprises an enclosed chamber with an inner sleeve of high purity quartz, which contains one or more shortwave ultraviolet lamp/s. Water passes through the chamber and is subjected to the UV light which shines through the quartz sleeve. As the genetic structure of bacteria or viruses in the water are exposed to the UV radiation it will be destroyed.

The benefits of ultraviolet disinfection:

- It is **economical** – significantly lower capital, operating and maintenance costs than other disinfection methods.
- UV **does not create toxic substances** as do traditional chlorine or newer ozone treatments.
- It **does not** alter the taste or physico-chemical properties of the water.
- It is a **safe and reliable** method as nothing is added to the water and it is impossible to overdose UV.
- UV is **highly effective** against viruses unlike most chemicals. No organisms are known to be immune to UVC light, although the required doses vary.

All systems comply with international UV dose standards.

Our units are designed for effective disinfection, even at the end of lamp life.

| System Selection: | | | | | | | |
|---|---|---|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Model | | Saphir 1 15W | Saphir 2 25W | Saphir 3 45W | Saphir 4 36W | Saphir 7 65W | Saphir 10 65W |
| Flowrate litres/min | Domestic | 12.5 | 22.5 | 40 | 44 | 88 | 116 |
| | Maximum | 18 | 30 | 53 | 60 | 118 | 160 |
| Connections | | ¾" BSP male thread | | | 1" BSP male thread | | 1.5" BSP male thr. |
| Chamber | | Electropolished 304 stainless steel | | | | | |
| Length(mm) | | 405 | 554 | 554 | 962 | 962 | 962 |
| Pressure Rating | | 10 Bar | | | | | |
| Recommended Prefilter | | 10" Standard | | 10" LD | | 20" LD | 20" Bag |
| Electrical | Power | 240V single phase | | | | | |
| | UV Lamp | GER15SE | GER25SE | GER25SEXO | GER36SE | GER36SE | GER36SE |
| <p>UV disinfection units are rated according to the transparency of the water, flow rate and the level of bacteria kill.</p> <p>The rated domestic flowrate is conservative to ensure effective treatment of all types of spring and well supplies.</p> <p>The maximum flowrate is based on UV transmission @ 98% per cm² which is only applicable to good quality water and should not be used on domestic water without transparency tests.</p> <p>All these sterilisers use standard, high reliability, single-ended lamps and the lamp life is rated 8760 hours continuous use (approx 1 year).</p> <p>It should be noted that elevated concentrations of iron and manganese can reduce the effectiveness of the units and if these metals are know to be a problem further consideration is needed.</p> | | | | | | | |
| Filtration: | <p>It is important that sediment in the water does not obstruct the UV light and so we strongly advise that a 5 micron sediment prefilter is fitted before the steriliser.</p> <p>The recommended size of prefilter is shown on the above table and we can supply a suitable kit.</p> | | | | | | |
| Features: | Standard | <ul style="list-style-type: none"> • Water-resistant control model(IP55) with lamp-on indicator. | | | | | |
| | Saphir + | <ul style="list-style-type: none"> • UV Lamp running Indicator • UV Lamp status - three-way indicator display • Switch to reset the internal hour counter • Volt free Contact output for remote display of lamp indicator | | | | | |
| | Saphir Pro | <ul style="list-style-type: none"> • As + versions but also with • UV output performance sensor, digital UV-intensity, lamp-life readout | | | | | |



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