

The SolarSpring UF 0.5

purification system is a compact and innovative water treatment plant. It guaranties a reliable and safe water supply from dirty and microbiological contaminated water sources without using chemicals. Automatic operation, low maintenance and easy plug & play setup are the features of this system.



Specification – SolarSpring UF 0.5	
Application	Water purification from turbid and microbiological contaminated water
Raw water source	Rivers, lakes, wells, boreholes and contaminated tap water
Water quality	Up to 99.999 % retention of microorganisms, bacteria and viruses
Nominal flow capacity	500 l/h (100 - 600 l/h possible)
Supply capacity	Up to 600 persons calculated with WHO standards (20 liters daily per person)
Filtration yield	99%
Power consumption	150 W
Dimensions	1400 x 1000 x 300 mm (LxWxH)
Weight	105 kg
Housing	Powder coated metal enclosure (lockable)
IP degree of protection	IP55
Pre-treatment	Disk filter 100 µm (2") with automatic back flush system
Main-treatment	High quality UF-module with robust multi-bore membrane 12 m ² / 0.02µm and automatic back flush system
Post-treatment	UV disinfection (17W) 1x 20" activated carbon filter
Operation	Automatic PLC controlled operation with display and data logger
Power source	Solar (24 VDC) or grid (100-240 VAC 50/60Hz)
Ambien temperature	0-50°C
Water temperature	2-40°C
Feed turbidity	Standard membrane <50 NTU / max. 100 NTU (short term peaks) Heavy membrane <200 NTU / max. 400 NTU (short term peaks)
Filtration pressure	0.1 – 1.5 bar
System pressure	1.0 – 2.5 bar
Backwash pressure	3.0 bar
Energy demand	0.25 kWh/m ³
Feed pump flow range	100 -600 l/h (PWM controlled)
Max. feed pump pressure	3.5 bar
Max. system pressure	6 bar
Optional accessories	<ul style="list-style-type: none"> • Submersible feed pump 24 VDC (up to 120m) • Sand filter with automatic valves for back flush • Remote control system (3G) with alarm manager via SMS and email • Solar package including: <ul style="list-style-type: none"> • Solar panels 600Wp, 24V • Solar charge controller 40A, 24V • High cycle AGM battery 100Ah, 24 V, 2500 cycles @ 50% discharge • Drinking water storage (different sizes - hard layer or flexible pillow type) • Anodic oxidation system (electro-chlorination) for post-treatment • Service cleaning package (pump and tanks for CIP)