

## The SolarSpring UF2.0

purification system is a compact and innovative water treatment plant. It guarantees 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 UF2.0	
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	2.500 l/h (2.000 - 6.000 l/h possible)
Supply capacity	Up to 3.000 persons calculated with WHO standards (20 liters daily per person)
Filtration yield	99%
Power consumption	500 W
Dimensions	1800 x 1200 x 400 mm (LxWxH)
Weight	315 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 60 m <sup>2</sup> / 0.02µm and automatic back flush system
Post-treatment	UV disinfection (36W) 2x 20" big 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	1,5 – 3,0 bar
Backwash pressure	3,0 bar
Energy demand	0,2 kWh/m <sup>3</sup>
Feed pump flow range	2.000 - 2.500 l/h (PWM controlled)
Max. feed pump pressure	4 bar
Max. system pressure	6 bar
Optional accessories	<ul style="list-style-type: none"> <li>• Submersible feed pump 30 - 300 VDC/AC (up to 120m)</li> <li>• Sand filter with automatic valves for back flush</li> <li>• Remote control system (3G) with alarm manager via SMS and email</li> <li>• Solar package including: <ul style="list-style-type: none"> <li>• Solar panels 1.800Wp, 48V</li> <li>• Solar charge controller 50A, 48V</li> <li>• High cycle AGM battery 150Ah, 48 V, 2.500 cycles @ 50% discharge</li> </ul> </li> <li>• Drinking water storage (different sizes - hard layer or flexible pillow type)</li> <li>• Anodic oxidation system (electro-chlorination) for post-treatment</li> <li>• Service cleaning package (pump and tanks for CIP)</li> </ul>