

potable water

The SolarSpring UF 0.1

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 0.1	
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	100 l/h (50 - 200 l/h possible)
Supply capacity	Up to 120 persons calculated with WHO standards (20 liters daily per person)
Filtration yield	99%
Power consumption	40 W
Dimensions	1200 x 400 x 168 mm (LxWxH)
Weight	22 kg
Housing	PP Transport-Box
IP degree of protection	IP55
Pre-treatment	Screen filter 1,000 μm
Main-treatment	High quality UF-module with robust multi-bore membrane 2.5 m²/ 0.02 μ m and automatic back flush system
Post-treatment	Optional
Operation	Automatic PLC controlled operation with display and data logger
Power source	Solar (12 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	0.3 kWh/m³
Feed pump flow range	50 -200 I/h (PWM controlled)
Max. feed pump pressure	3.5 bar
Max. system pressure	6 bar
Optional accessories	 Submersible feed pump 12 VDC (up to 5m) Solar package including: Solar panels 100Wp, 12V Solar charge controller 10A, 12V High cycle AGM battery 15Ah, 12 V, Service cleaning package (tank and hoses for CIP)