

Clean quality drinking water from sea water, lakes, rivers and boreholes using solar energy.

Designed for demanding island and desert conditions.





Self-sufficient and affordable drinking water supply.

Operating costs reduced up to 90%.



Sustainable and cost-effective water production in off-grid locations

The SolarRO Pro 1000 operates 100% with solar energy without any fossil fuels or expensive batteries. The payback period is 2-4 years only by saving the fuel costs.

Ideal for houses, small businesses and villages in off-grid locations. Self-sufficient water production for drinking, showering and irrigation. The unit is mobile and easy to relocate. The power source can be easily switched to an electrical grid or a diesel generator as a back-up system during non-solar hours.

Easy to operate with low maintenance

The SolarRO Pro 1000 is easy to install with solar panels, generator or electrical grid. Depending on user case, the pre-treatment filters should be changed 2-4 times per year. We recommend changing the membranes every two years. The pump is self-priming and runs up to 6,000 hours without any maintenance. It can run dry without damage. All components are very easy to replace.

Safe and durable solution

In our products, we only use the best-quality components combined with the most modern technological solutions.

In our systems, we use reverse osmosis (RO) technology. All impurities, bacteria, viruses and other contaminants are removed leaving only high quality water as the end product. UV-disinfection is used at the end of the purification process. Product research and testing have been done in close collaboration with Aalto University in Finland.

Your benefits:

Operates 100% with solar energy

Competitive investment cost – no batteries or energy storage needed.

Operational costs reduced up to 90% Easy to install, plug & play system

The system can run dry

Fully automatic system

Lightweight, compact and mobile

Self-priming pump (up to 3m)

Low maintenance

Low energy consumption

No chemicals used

Weather proof

Designed, built and tested in Finland

SolarRO PRO 1000

EASY-TO-USE - ECO-FRIENDLY - AFFORDABLE

Feed water type
Tested average permeate flow
Feed water TDS mg/L

Brackish water 1000 L/hr <10.000TDS **Pacific Ocean 750L/hr**<33.000TDS

Atlantic 700L/hr <36.000TDS Mediterranenan 650L/hr <39.000TDS

560L/hr <45.000TDS

Arabian Gulf

Salt Rejection

Motor

Pump

System pressure Pressure Vessels

Membranes

RO tubing Prefilters

Permeate post treatment:

Ultra violet lamp
Ultraviolet lamp rated life

99,40 %

3 kW; 400VAC, 50Hz

RO high pressure pump feed max. 30 LPM

17bar - 51bar

4040 / 600psi or 1000psi 4 x 4040 BW or 4040 SW

SS 316L

3 x 20" (100μm, 25μm, 5μm)

400 J/m2 10 000 h **Product water:**

Water (permeate) quality

Power Supply:

Solar PV panels needed

Solar Inverter

Alternative/Back-up power supply:

3-phase AC supply

Dimensions and weight:

RO Unit Stand Warranty pH 6.5 -8.5; TDS < 270 mg/L; UV disinfected

≈ 18 x á 250Wp

3kW

200 to 240VAC or 380 480VAC

Length 158cm x Width 50cm x Height 84cm

2 Years (filters & membranes not under warranty)

Optional equipment & accessories:

- Submersible pump
- Feed water supply pump
- Feed water hose 20m or 50m
- Water storage tanks for permeate

- PV panel package + inverter according to customer requirements
- Filtration maintenance package (3 pcs PPT filters + 1 pc membrane)
- UV-steriliser maintenance package



Manufacturer: Solar Water Solutions Oy

