

## The problem



### Addressing Water Challenges

- Widespread contamination of water resources
- Limited access to clean and safe drinking water for people, animals, and crops
- Health hazards from consuming impure water
- Reduced farming productivity
- Hindered economic development

## The solution








### Improving Water Quality Using Solar Energy

#### Our approach: Water Pumping & Purification

- Innovative water pumping technology
- Sustainable tapping of underground sources
- Advanced purification systems
- Intelligent use of solar energy
- Enabling access to safe, potable water

## WHAT WE OFFER

 <b>Reverse osmosis</b>	 <b>Ultra Filtration</b>	 <b>UV Protection</b>	 <b>Water Dispenser</b>	 <b>Chlorine</b>
Brackish water	Surface water	Disinfection	Easy Payment	Micro Dosage
Sea water	Ground water	Storage water	Distribution	WHO Standards

Optional: solar water pumping (surface, borehole)

A compact, innovative, and efficient water treatment plant that can be intelligently linked with AC PV power plant, or as a standalone solar system. It guarantees a reliable and safe water supply from dirty, saline and microbiological contaminated water sources. Automatic operation, low maintenance, and easy plug & play setup are the features of this system. Intelligent control insures mainly free solar energy usage.

An engineering analysis is required to customize our solution to the quality of your water. In order to ensure that we proceed efficiently, we would appreciate your input through our design questionnaire.

### Monitor, Control, Manage, Collect

Simplify your business with our all-in-one solution for monitoring, intelligent control, customer management, and payment tracking/collection.

## Technical Specification

The provided details are preliminary; a final quotation will be determined by the results of the water analysis and the input from the provided design questionnaire.



### Filtration - Small

### Filtration - Large

### Reverse osmosis

Nominal flow capacity (l/h)	300 - 900	3,000 - 6,000 / unit	Up to 670 / unit
Supply capacity (m <sup>3</sup> /day)	7.2 - 21.6	72 - 144 / unit	Up to 12 / unit
Power consumption (W)	8 - 150	8 - 500 / unit	950 / unit
Pre-treatment	Strainer 1000 µm or a disk filter 100 µm (2") with automatic back flush system		10" Micron filtration with a filtration degree of 5 microns
Main-treatment	High quality UF-module with robust multi-bore membrane 6, 12, or 60 m <sup>2</sup> / 0.02µm and automatic back flush system		Hydranautics reverse osmosis polyamide membrane, recovery rate of 75%
Post-treatment	Optional: UV disinfection with activated carbon filter Recommended if water storage is required		Optional: UV disinfection Recommended if water storage is required

### Chlorine solution



#### Advantages

- Compliance with drinking water guidelines (WHO Standards)
- Freshly produced on site
- Low energy required (solar powered)
- Water micro dosing as needed
- High salt yield (25%-50%)
- Add-on modules to remove different contaminants

### Water dispenser



#### Advantages

- Off-grid water dispenser with powerful controller
- NFC card reader
- Stainless steel mounting panel
- High flow water meter
- High flow electronic controlled water tap.

Optional: feed pump or distribution pump (solar powered)

