

Solar powered drinking water solution

HVR's SolAqua is a solar driven drinking water solution that can purify different feed water streams ranging from well and river water to salty sea water. This self-standing system comprises the water purification modules and the energy generation units.

SolAqua

Removes all non-volatile pollutants including heavy metals, nano particles, plastics, fluoride, arsenic, and pharmaceutical residuals.

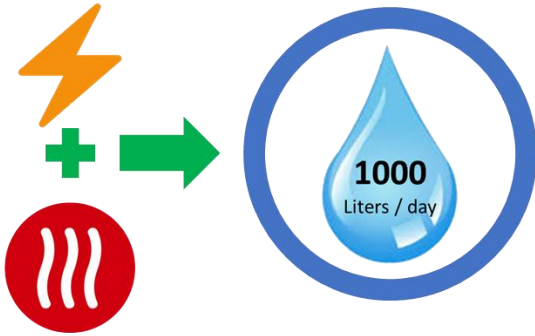
99.9%

Purification Efficiency

HVR
water purification

SYSTEM SPECIFICATIONS

0.053 kWh/L
Solar PV Energy



0.77 kWh/L
Solar Thermal Energy

No grid connection or
other fuel needed



**HVR's water purification technology
is based on low temperature
evaporation followed by
hydrophobic membrane filtration**

Drinking Water Quality Results

Contaminants	Amount in Feed water	Detection Limit	Test by	Result
Bacteria	14000 (after 7 days)	-	National Bacteriologic Laboratory, Stockholm	BDL
Chlorine	3.4 mg/l	<0.01 mg/l	Water Protection Association of Southwest, Finland	BDL
Salt Water	31000 ppm	<1 ppm	VBB Viak, Stockholm	BDL
Trihalomethanes	1000 µg/l	<1 µg/l	University of Turku, Finland	BDL
Radon	380 Bq/l	4 Bq/l	Swedish Radiation Protection Institute	BDL
Cesium, Strontium, Plutonium, Radium	2.4 Bq	<0.1 Bq	Radiation Physics Department, University of Lund	BDL
Arsenic +3	10 mg/l	<0.003 mg/l	Analytica AB, Stockholm	BDL
Arsenic +5	10 mg/l	<0.003 mg/l	Analytica AB, Stockholm	BDL
Ag nanoparticles	3100 µg/l	<2 µg/l	IVL Swedish Environmental Research Institute	BDL
SiO ₂	10000 µg/l	<5 µg/l	Vattenfall AB, Stockholm	BDL
Sertraline & 20 other pharmaceutical residuals	4 ng/l	<0.8 ng/l	IVL Swedish Environmental Research Institute	BDL

Essential minerals are added after purification to give the taste and nutritional value of a drinking water.