PRODUCTS 2019 - CATALOGUE

Solar powered desalination and water purification

SOLAR WATER SOLUTIONS

WORLD'S LEADING PRODUCTS IN WATER PURIFICATION POWERED BY RENEWABLE ENERGY

Solar Water Solutions is a Finnish water technology company. Our job is to provide safe and sustainable drinking water locally in remote off-grid locations.

WWW.SOLARWATERSOLUTIONS.FI

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WORLD’S GREENEST REVERSE OSMOSIS SOLUTION

Make your own clean, 100% disinfected drinking water from seawater, lakes, rivers or boreholes.

Stand-alone SolarRO units operate directly with solar energy, without the need of batteries or energy storage.

Quality drinking water production as low as 1 USD per 1000 liters or 0,001 USD per one liter.

Low life-cycle costs. SolarRO PRO unit’s pay-back period using free solar energy is only 2–4 years.

PRODUCE DRINKING WATER LOCALLY USING SOLAR ENERGY

Mobile and scalable products to suit your capacity requirements.

The SolarRO units are easy to install and operate with low maintenance. No adjustments needed.

The units operate effectively, with optimal water production rate regardless of the fluctuations in solar irradiation.

The system can start, operate and stop automatically.

PRODUCT LINE

FRESH AND BRACKISH WATER PRODUCTS

	SolarRO MINI 50	SolarRO MINI 150	SolarRO PRO 300	SolarRO PRO 700	SolarRO PRO 1500
Permeate production max L/ hour*	50	150	300	660	1550

SEA WATER PRODUCTS

	SolarRO PRO 250 SW	SolarRO PRO 750 SW	SolarRO PRO 1500 SW	SolarRO PRO 3500 SW
Permeate production max L/ hour*	250	750	1500	3500

BW Brackish water TDS 500–6.000 mg/L; SW* Seawater: TDS 30.000–40.000 mg/L. Please refer to technical details and daily solar production curve for tested results.*

Design and specifications are subject to change without prior notice.

FRESH AND BRACKISH WATER

SolarRO **MINI** Series

FRESH AND BRACKISH WATER

SolarRO MINI Series

Safe and durable system.

Easy and quick maintenance.

High quality product water. In our MINI units we use modern, high quality thin-film composite RO (Reverse Osmosis) membranes, which remove all impurities, bacteria, viruses and other contaminants from the feed water, leaving only high-quality water as the end product. Active Carbon filter and the UV treatment at the end of the purification process give the drinking water a good taste and ensure its 100% disinfection.

Energy source. The SolarRO MINI units operate directly with solar panels, without any batteries between. But you can switch it to grid, generator or batteries anytime.

Easy to use. Just install the unit´s suction hose into the water source, connect the solar PV cables and push the start button and you begin to get clean water. No adjustments needed.

Self-priming pump. Up to 1.5m height. For greater lifts you can use a feed pump, which we can provide.

Quick and easy maintenance. All the filters and membranes are readily accessible for very easy replacement. They can be changed in a few minutes. Depending on the user case, pre-treatment filters should be changed 2–4 times per year. We recommend changing the RO membranes every 3–5 years.

Great durability. The MINI units are made from the very best materials and the metallic body, pressure vessels and tubes can withstand tens of years.

- Designed, built and tested in Finland
- Lightweight, compact and mobile
- Frame is made of non corrosive sea aluminum
- Can operate continuously the whole day
- Low energy consumption
- Silent operation
- Output Ph 6.7-8.5
- UV lamp operating time 9000 hours
- Fully CE compliant

SolarRO **MINI 50**

Make your own, high quality drinking water from boreholes, lakes, rivers or floodwater.

Light and portable solution.

SolarRO **MINI 50**

Easy to operate. No adjustments needed.

Production capacity from lakes, rivers, ponds or floodwater 50 L/h and from 0.6% saline brackish water 25 L/h.

Technical Specification

Tested approx. product water (permeate) flow	50L/hr — 25L/hr
Feed water	Lake/ River Brackish
Feed water TDS	500 mg/L — 6.000 mg/L
Test water temperature	18°C
Salt rejection	99%
Motor	12VDC /120W
Pump	Diaphragm
System pressure	9bar, automatically self-adjusting
Pressure Vessel	2521, SS 316L
Membrane	1 x 2521, polyamide
RO tubing	SS 316L
Pre-filter	3 x 5” 5µm, 50µm PP filter and 5µm Activated Carbon
Pre filter casing	3 x 5" PVC
Permeate post treatment	Ultraviolet-disinfection + Activated Carbon
Ultraviolet lamp life span	9000 hours
Permeate quality	pH 6.5 -8.5, 100% disinfected
Power requirement	max. 150Wp
PV panel (recommended)	2 x á 140 Wp / 17Voc or 1 x 250-275 Wp / 37Voc
Dimensions	L=73cm, B=28cm, H=29cm
Weight	15Kg

Optional equipment & accessories

- Submersible or on site feed water pump (230VAC or 12VDC) when lift height is over 1.5m
- Feed water hose 25m or 50m, including 100mic mesh filter
- Water storage tank for permeate 60L, 100L, 150L
- Replacement filters (2 pcs PPT filters + 1pc active carbon, 1 pc membrane)
- AC/DC transformer for grid application
- PV panel package (example: 2x 140Wp + DC controller)
- Back-up battery package 85Ah
- TDS meter

SolarRO **MINI 50** Emergency Case

Easy to transport.

Suitable for acute need of clean drinking water.

SolarRO **MINI 150**

Produce clean high-quality drinking water from lakes, rivers, boreholes or floodwater.

Compact and mobile solution.

SolarRO **MINI 150**

Clean drinking water production from lakes, rivers, ponds or floodwater
150 L/h and 0.6% saline brackish water 60 L/h.

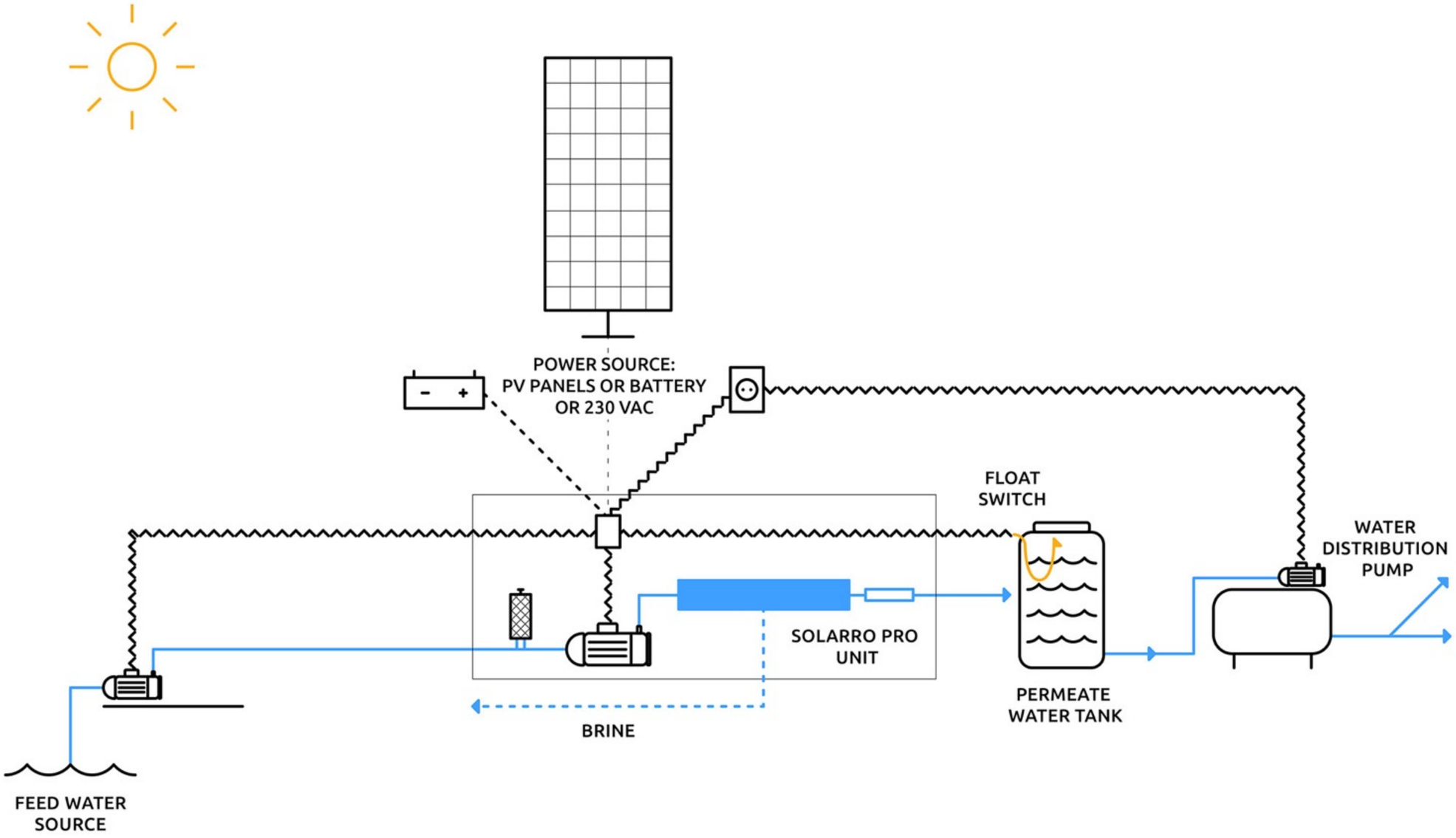
Technical Specification

Tested approx. product water (permeate) flow:	150L/hr — 60L/hr
Feed water	Lake/ River Brackish
Feed water TDS	500 mg/L — 6.000 mg/L
Test water temperature	18°C
Salt Rejection	99 %
Motor	0,37kW/230 VAC or 300W/24 VDC
Pump	Rotary vane
System pressure	9 - 12 bar, automatically self adjusting
Pressure Vessel	2 x 2521, SS316L
Membrane	2 x 2521, polyamide
RO tubing	SS 316L
Pre-filter	3 x 10” (5µm, 50µm ,100µm PP filter)
Pre-filter casing	3 x 10" PVC
Permeate post treatment	1 x 5” 5um 800mg Active Carbon, Ultraviolet
UV lamp life span	9000 hours
Permeate quality	pH 6.5–8.5, 100% disinfected
Power requirement	max. 250Wp
PV panels recommended	4 x 250-275 Wp / <37Voc
Dimensions	L =77cm, B =45cm, H =44cm
Weight	28 Kg

Optional equipment & accessories

- Submersible or on site feed water pump (230VAC or 24VDC) when lift height is over 1.5m)
- Feed water hose 25m or 50m, including 100mic washable pre-filter
- Water storage tank for permeate 100L, 200L, 300L
- Replacement filters (3 pcs PPT filters + 1pc Active Carbon + 2pcs membranes)
- PV panel package (example: 4 x 265Wp + DC controller)
- Backup battery package 250Ah
- TDS meter

SolarRO MINI INSTALLATION EXAMPLE



FRESH AND BRACKISH WATER

SolarRO **PRO** Series

FRESH AND BRACKISH WATER

SolarRO **PRO** Series

Self-sufficient and affordable drinking water supply.

Operational costs reduced up to 90%, low life-cycle costs.

High quality product water. In our units we use modern, high quality thin-film composite RO (Reverse Osmosis) membranes, which remove all impurities, bacteria, viruses and other contaminants from the feed water, leaving only high-quality water as the end product. Active Carbon filter and UV treatment at the end of the purification process give the drinking water a good taste and ensure its 100% disinfection.

Energy source. SolarRO PRO unit operates directly with solar panels, without any batteries between. You can also switch it to grid or generator for clean water production during non-solar hours.

Easy use. Install the unit´s suction hose into the water source, connect the solar PV cables and push the start button and you begin to get clean water. No other adjustments needed.

Water source. When water source is a borehole or well, usually a submersible pump is used to feed water into an intermediate tank, which can be on the ground level or higher installed. The unit uses this tank as its water source.

Easy maintenance. All the filters and membranes are readily accessible for very easy replacement. The filters can be changed to new ones in a couple of minutes. Also the membranes are very easy to replace, taking 5–10 minutes each. Depending on the user case, pre-treatment filters should be changed 2–4 times per year. We recommend changing the RO membranes every 3–5 years.

The PRO units have an integrated membrane cleaning system for better production efficiency and longer membrane life span.

Great durability. The SolarRO PRO units are made from the very best materials and the aluminium frame, pressure vessels and tubes are expected to withstand at least twenty years.

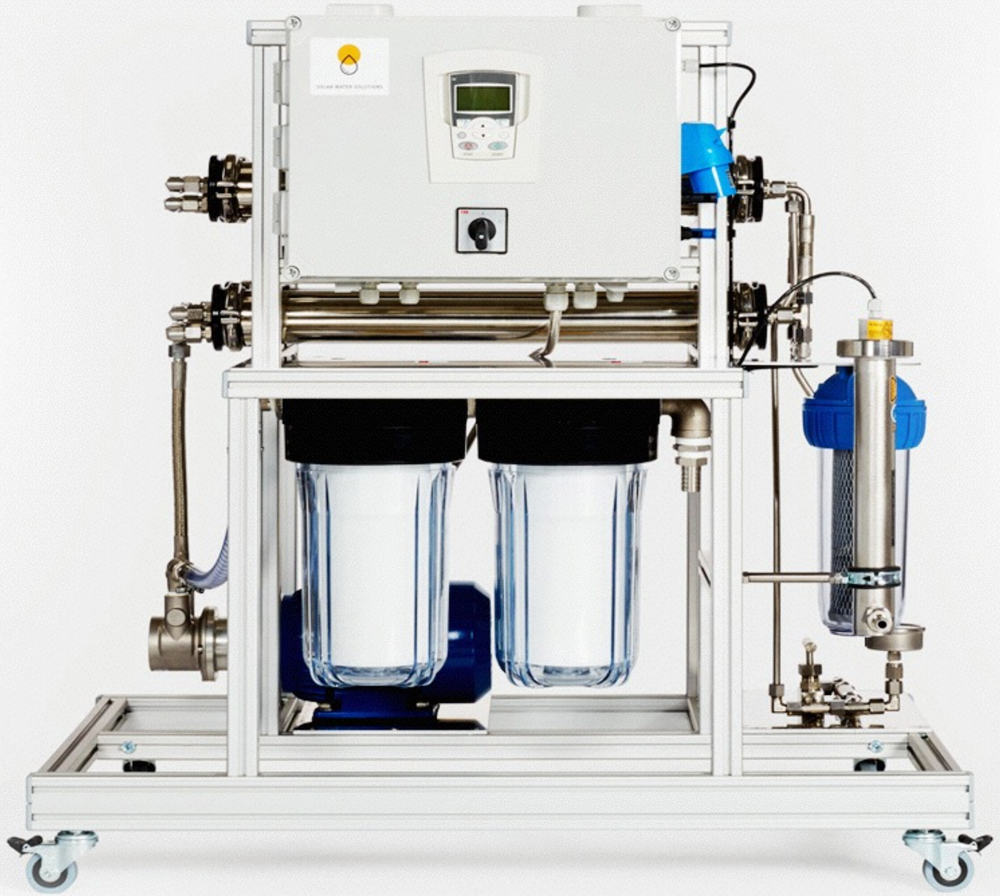
- Frame is sea aluminum
- Can operate continuously the whole day
- Low energy consumption
- Silent run (< 54 dB from 1meter distance)
- Fully CE compliant
- Competitive investment cost – no batteries or energy storage needed
- Easy to install, plug & play system
- The system can run dry
- Fully automatic system
- Low energy consumption
- No chemicals used

SolarRO **PRO 300**

Make your own clean quality drinking water from brackish water sources.

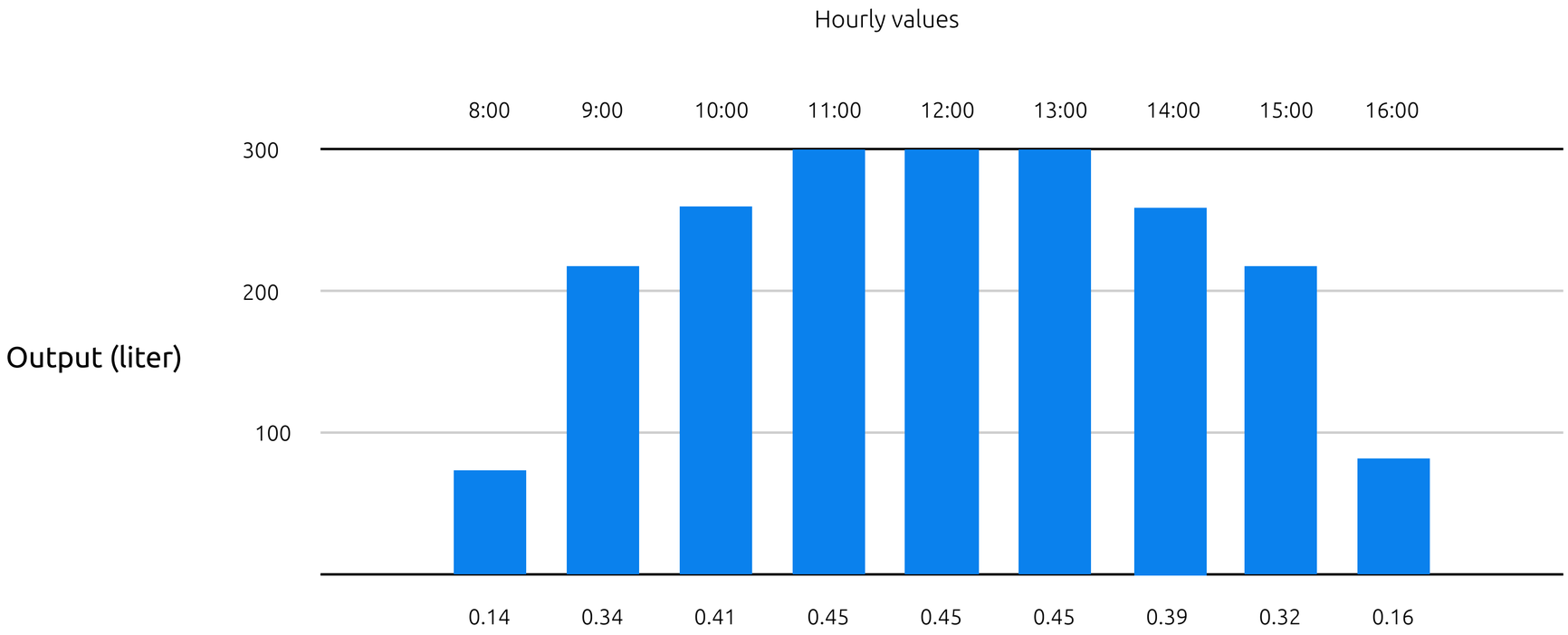
Sustainable water production.

SolarRO PRO 300 BW



Clean drinking water production from lakes, rivers and boreholes 300 L/h and from 0.6% saline brackish water 190 L/h.

Solar daily output 2 m³



Output with generator or electricity: 7 m³ / day (24h) // Output from borehole water when TDS 6.000 mg/L; max. 190 LPH

SolarRO PRO 300

<u>Daily permeate output</u>

Feed water: Borehole

Feed water TDS 500 mg/L

Feed volume 7 LPM max.

Water temperature 20 °C

Permeate output 300LPH max.

Permeate TDS 37 mg/L

<u>Power options</u>

Solar PV panels 8 pcs á 250 Wp

Generator 1 kW / 230 VAC / 50 Hz

Grid 230 VAC

SolarRO **PRO 300**

Technical Specification

Tested approx. product water (permeate) flow:	300 L/h — 190 L/h
Feed water	Lake/ River Brackish
Feed water TDS	500 mg/L — 6.000 mg/L
Test water temperature	20°C
Salt Rejection	99 %
Motor	0,5kW/230 VAC or 400W/24 VDC
Pump	Rotary vane
System pressure	14 - 15 bar, automatically self-adjusting
Pressure Vessel	4 x 2521, SS316L
Membrane	4 x 2521, polyamide
RO tubing	SS 316L
Pre-filter	2 x Big Blue 10” (5µm, 50µm PP filter)
Pre-filter casing	2 x Big Blue 10" PVC
Permeate post treatment	1 x 10” 5um 800mg Activated Carbon + Ultraviolet
UV lamp life span	9000 hours
Permeate quality	pH 6.5–8.5, TDS 37- 95 mg/L, 100% disinfected
Power requirement	max. 500W
PV panels recommended	8 x 250-290 Wp / < 40 Voc
Alternative power supply	Grid 230VAC or 1kW Generator or Battery 24V
Dimensions	L =91cm, B =90cm, H =62cm
Weight	105 kg

Optional equipment & accessories

- Submersible or on site feed water pump (230VAC or 24VDC) when lift height is over 1.5m)
- Feed water hose 25m or 50m, including 100mic washable pre-filter
- Water storage tank for permeate 100L, 200L, 300L
- Replacement filters (3 pcs PPT filters + 1pc Active Carbon + 2pcs membranes)
- PV panel package (example: 4 x 250Wp + DC controller
- Backup battery package 250Ah
- TDS meter

SolarRO **PRO 700**

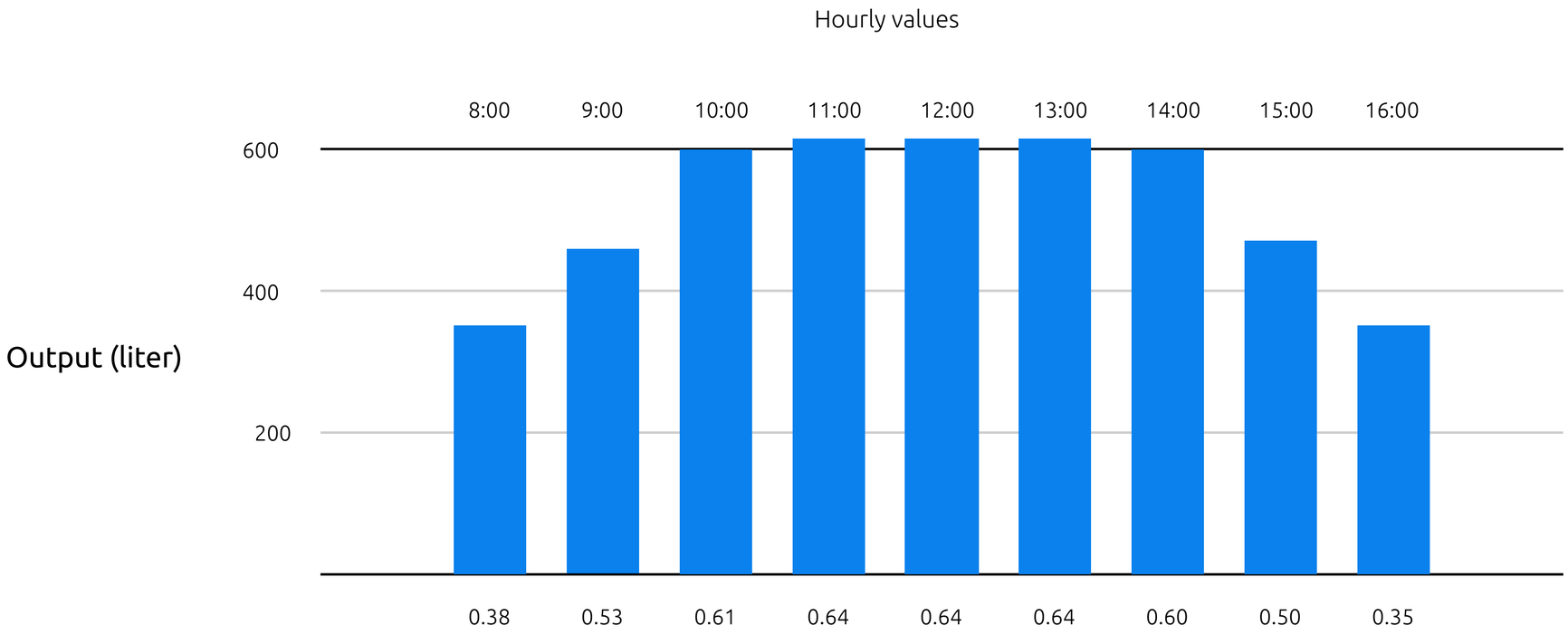
Clean quality drinking water from brackish water sources.

Low operational costs. Affordable water supply.

SolarRO PRO 700 BW

Clean drinking water production from lakes, rivers and boreholes 660 L/h and from 0.6% saline brackish water 440 L/h.

Solar daily output 4.8 m³



Output with generator or electricity: 15 m³ / day (24h) // Output from borehole water when TDS 6.000 mg/L; max. 440 LPH
Output from borehole water when TDS 500 mg/L; max. 660 LPH

SolarRO PRO 700

Daily permeate output

Feed water: Borehole

Feed water TDS 500 mg/L

Feed volume 15 LPM max.

Water temperature 20 °C

Permeate output 0.66m³ / h

Permeate TDS < 42 mg / L

Power options

Solar PV panels 10-12 pcs á 265 Wp

Generator 1 kW / 400 VAC / 50 Hz

Grid 230 VAC

Technical Specification

Tested approx. product water (permeate) flow:	660 L/h — 440 L/h
Feed water	Lake/ River Brackish
Feed water TDS	500 mg/L — 6.000 mg/L
Test water temperature	20°C
Salt Rejection	99 .4%
Motor	0.75 kW/230 VAC/50Hz
Pump	Rotary vane
System pressure	16bar, automatically self-adjusting
Pressure Vessel	4 x 2540, composite
Membrane	4 x 2540, polyamide
RO tubing	SS 316L
Pre-filter	3 x Big Blue 10” (5µm, 50µm,100µm PP filter)
Pre-filter casing	3 x Big Blue 10" PVC
Permeate post treatment	1 x 10” 5µm 800mg activated carbon + Ultraviolet
UV lamp life span	9.000 hours
Permeate quality	pH 6.5 - 8.5, TDS 37- 75 mg/L, 100% disinfected
Power requirement	max. 0.75kW
PV panels recommended	10 x 250-290 Wp / < 40 Voc
Alternative power supply	Grid 230VAC or 1kW/ 230VAC/ 50Hz generator
Dimensions	L = 1.5m, W = 0.6m, H = 1.4m
Weight	170kg

SolarRO **PRO 1500**

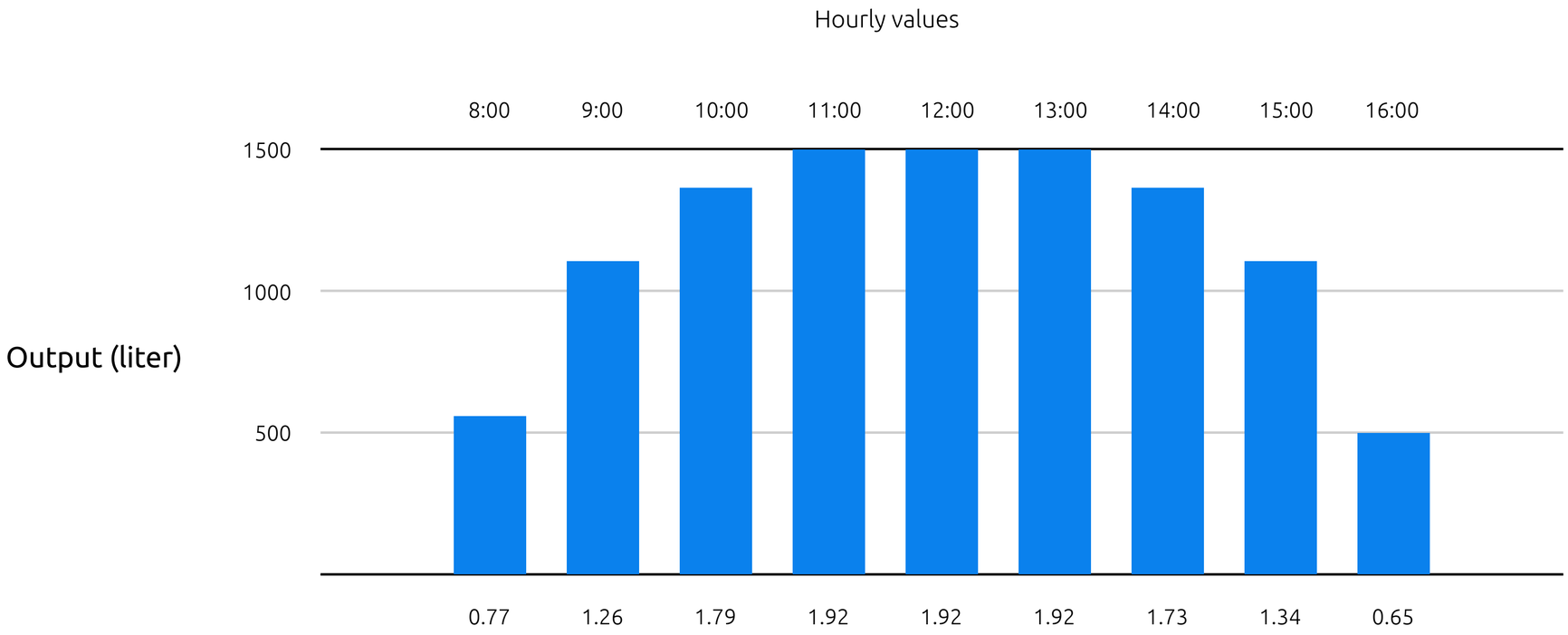
Potable drinking water from brackish water sources.

Weatherproof and durable solution.

SolarRO PRO 1500 BW

Clean drinking water production from lakes, rivers and boreholes 1550 L/h and from 0.6% saline brackish water 1100 L/h.

Solar daily output 10 m³



Output with generator or electricity: 36 m³ / day (24h) // Output from borehole water when TDS 6.000 mg/L; max. 1100 LPH
Output from borehole when TDS 500 mg/L; max. 1500 LPH

SolarRO PRO 1500

Daily permeate output

Feed water: Borehole

Feed water TDS 2.100 mg/L

Feed volume 38 LPM max.

Water temperature 20 °C

Permeate output 1.5m³ / h

Permeate TDS < 150 mg / L

Power options

Solar PV panels 20 pcs á 265 Wp

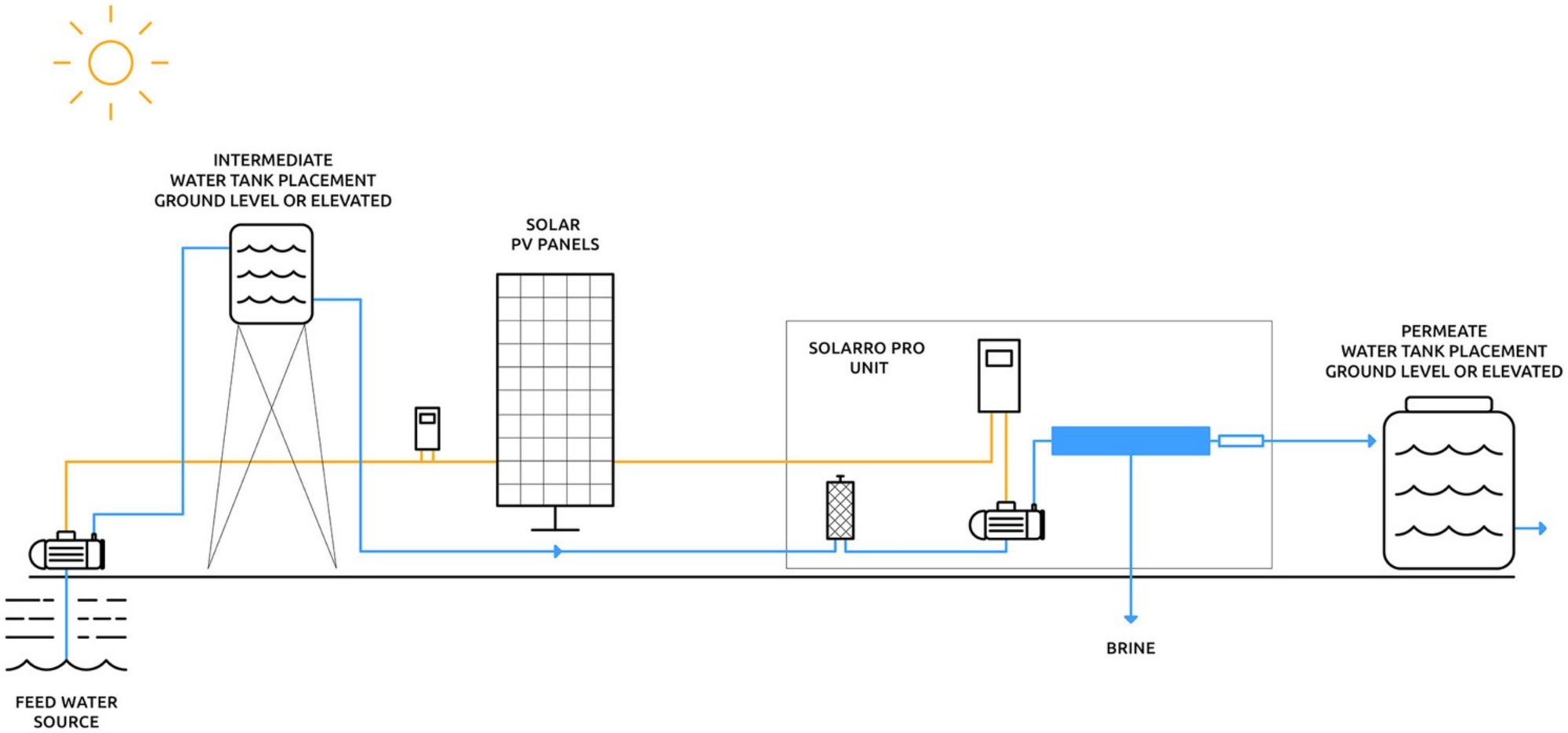
Generator 3 kW / 400 VAC / 50 Hz

Grid 400 VAC

Technical Specification

Tested approx. product water (permeate) flow:	1500 L/h	—	1100 L/h
Feed water	Lake/ River		Brackish
Feed water TDS	500 mg/L	—	6.000 mg/L
Test water temperature	20°C		
Salt Rejection	99.4%		
Motor	2.2kW/230 VAC/50Hz		
Pump	Rotary vane		
System pressure	16bar, automatically self-adjusting		
Pressure Vessel	6-8 x 4040, composite		
Membrane	6-8 x 4040, polyamide		
RO tubing	SS 316L		
Pre-filter	3 x Big Blue 20” (5µm, 50µm,100µm PP filter)		
Pre-filter casing	3 x Big Blue 20" PVC		
Permeate post treatment	Ultraviolet-disinfection		
UV lamp life span	9.000 hours		
Permeate quality	pH 6.5 - 8.5, TDS 37- 75 mg/L, 100% disinfected		
Power requirement	max. 2.2kW		
PV panels recommended	20 x 250-290 Wp / < 40 Voc		
Alternative power supply	3-ph/ 400VAC or Generator 3kW/ 400VAC 50Hz		
Dimensions	L = 1.65m, W = 0.9m, H = 1.6m		
Weight	400kg		

SolarRO PRO INSTALLATION EXAMPLE



SolarRO **PRO** Series

OPTIONAL EQUIPMENT & ACCESSORIES

- Submersible pump
- Feed water supply pump
- Water storage tanks for permeate
- PV panel package + inverter according to customer requirement
- Filtration maintenance packages (PPT filters & membranes)

SEAWATER

SolarRO **PRO** SW Series

SEAWATER

SolarRO **PRO** SW Series

Modular design makes the system scalable to required water needs.

Potable water from seawater.

High quality product water. In our products we use modern, high quality thin-film composite RO (Reverse Osmosis) membranes, which remove all impurities, bacteria, viruses and other contaminants from the feed water, leaving only high-quality water as the end product. Active Carbon filter and UV treatment at the end of the purification process give the drinking water a good taste and ensure its 100% disinfection.

Energy source. SolarRO PRO (SW) units operates directly with solar panels, without any batteries between. You can also switch it to grid or generator for clean water production during non-solar hours.

Easy use. Install the unit´s suction hose into the water source, connect the solar PV cables and push the start button and you begin to get clean water. No other adjustments needed.

Water source. When water source is a borehole or well, usually a submersible pump is used to feed water into an intermediate tank, which can be on the ground level or higher installed. The unit uses this tank as its water source.

Easy maintenance. All the filters and membranes are readily accessible for very easy replacement. The filters can be changed to new ones in a couple of minutes. Also the membranes are very easy to replace, taking 5–10 minutes each. Depending on the user case, pre-treatment filters should be changed 2–4 times per year. We recommend changing the RO membranes every 3–5 years.

The PRO (SW) units have an integrated membrane cleaning system for better production efficiency and longer membrane life span.

Great durability. The SolarRO Pro units are made from the very best materials and the aluminium frame, pressure vessels and tubes are expected to withstand at least twenty years.

- Operates 100% with solar energy
- Can be switched to grid or generator as back-up
- 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
- Low maintenance
- Low energy consumption
- No chemicals used
- Weatherproof

SolarRO **PRO 250** SW

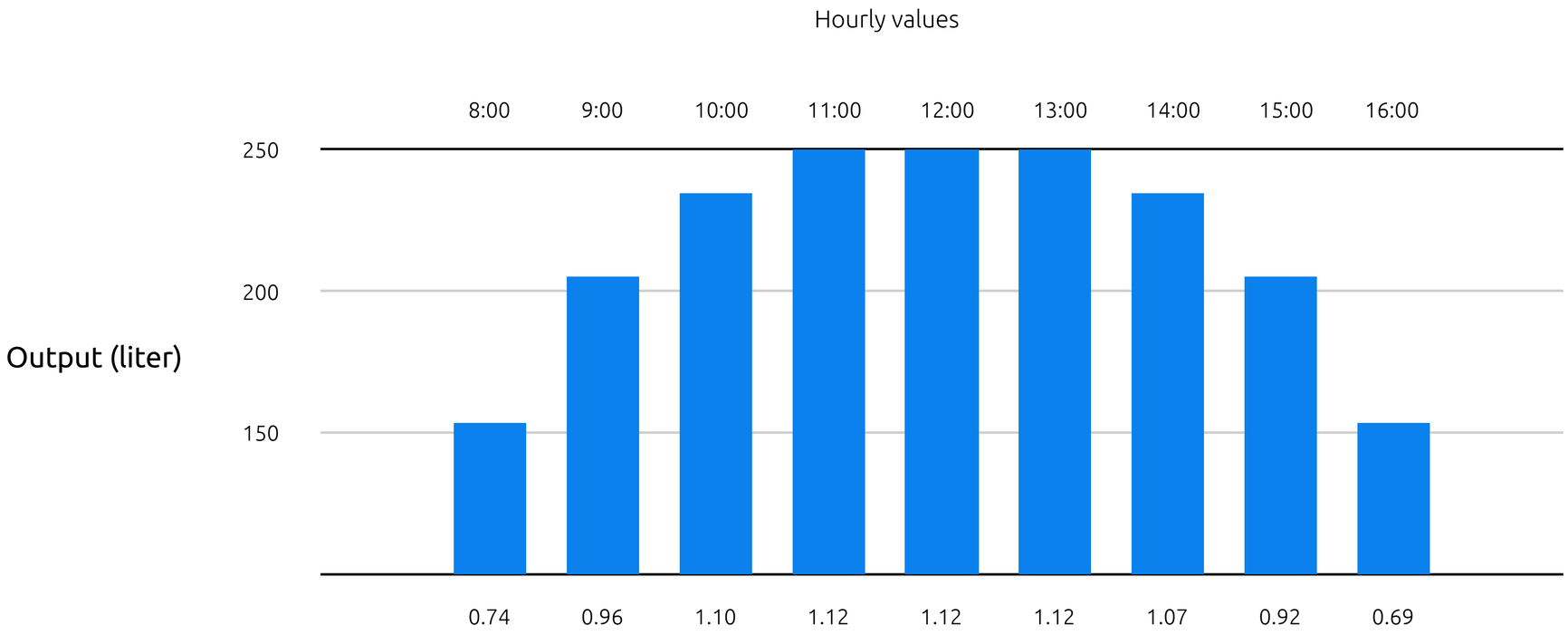
High-quality drinking water from the sea
in off-grid locations.

Safe and durable solution.

SolarRO PRO 250 SW

Clean drinking water production from seawater 250 L/h.

Solar daily output 2 m³



Output with generator or electricity: 6 m³ / day (24h) // Output from Atlantic water when TDS 36.000 mg/L; max. 230 LPH
Output from Mediterranean water when TDS 40.000 mg/L; max. 200 LPH

SolarRO PRO 250 SW

Daily permeate output

Feed water: Pacific

Feed water TDS 33.000 mg/L

Feed volume 9.5 LPM max.

Water temperature 20 °C

Permeate output 250 liters/ h

Permeate TDS < 96 mg / L

Power options

Solar PV panels 10 pcs á 265 Wp

Generator 2 kW / 230 VAC / 50 Hz

Grid 230 VAC

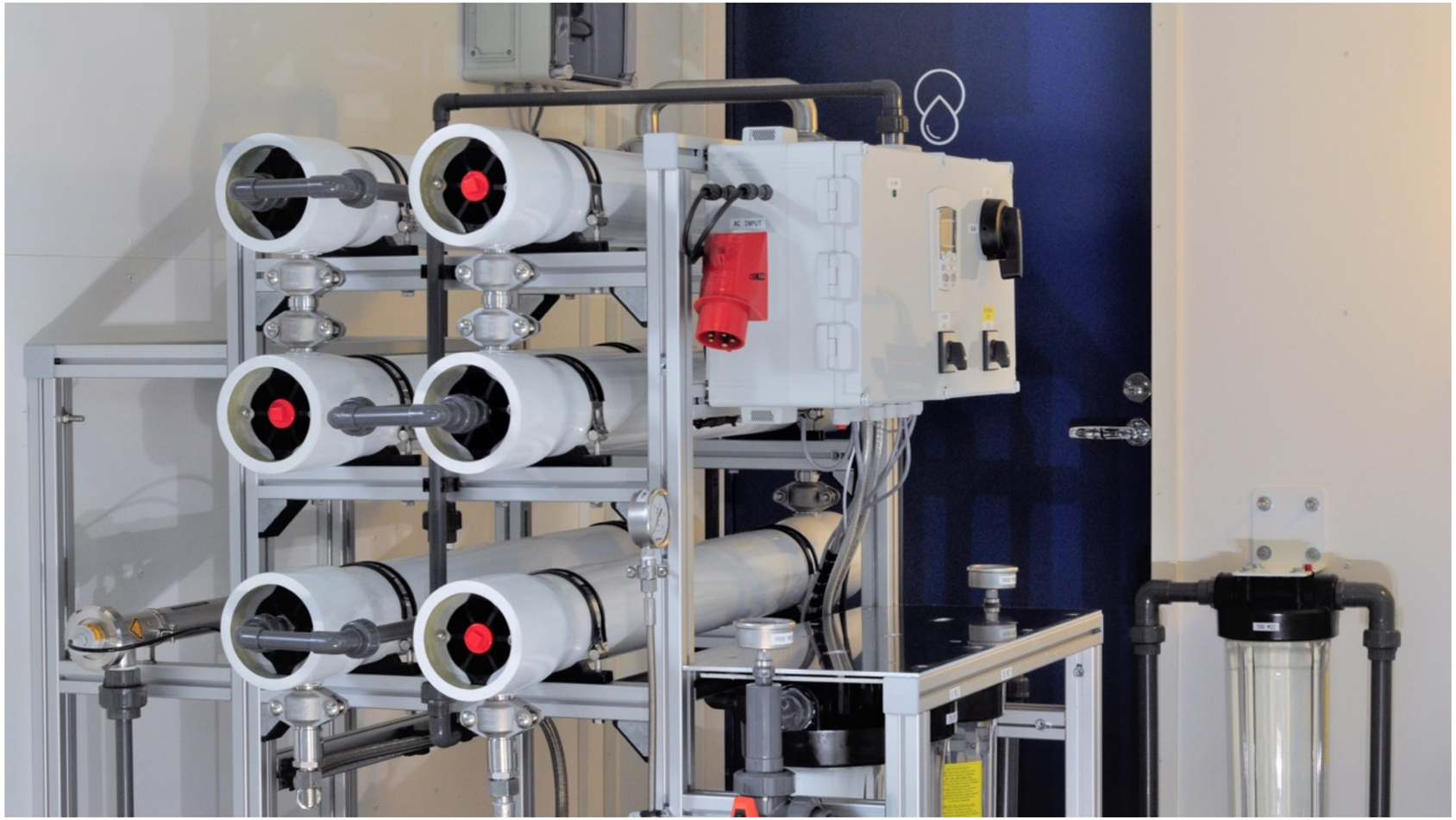
Technical Specification

Tested approx. product water (permeate) flow:	250 L/h	—	230 L/h
Feed water	Pacific		Atlantic
Feed water TDS	33.000 mg/L	—	36.000 mg/L
Test water temperature	20°C		
Salt Rejection	99.4%		
Motor	1.5kW/230 VAC/50Hz		
Pump	High pressure feed max. 9.5 LPM		
System pressure	52bar, automatically self-adjusting		
Pressure Vessel	4 x 2540 SW, composite		
Membrane	4 x 2540 SW, polyamide		
RO tubing	SS 316L		
Pre-filte	3 x Big Blue 10” (5µm, 50µm,100µm PP filter)		
Pre-filter casing	3 x Big Blue 10" PVC		
Permeate post treatment	1 x 10” 5um 800mg Activated Carbon + Ultraviolet		
UV lamp life span	9.000 hours		
Permeate quality	pH 6.5 -8.5, TDS 85 - 160 mg/L, 100% disinfected		
Power requirement	max. 1.5kW		
PV panels recommended	10 x 250-290 Wp / < 40 Voc		
Alternative power supply	Grid 230VAC or Generator 2kW/230VAC/50Hz		
Dimensions	L = 1.5m, W = 60cm, H = 1.4m		
Weight	170kg		

SolarRO **PRO 750** SW

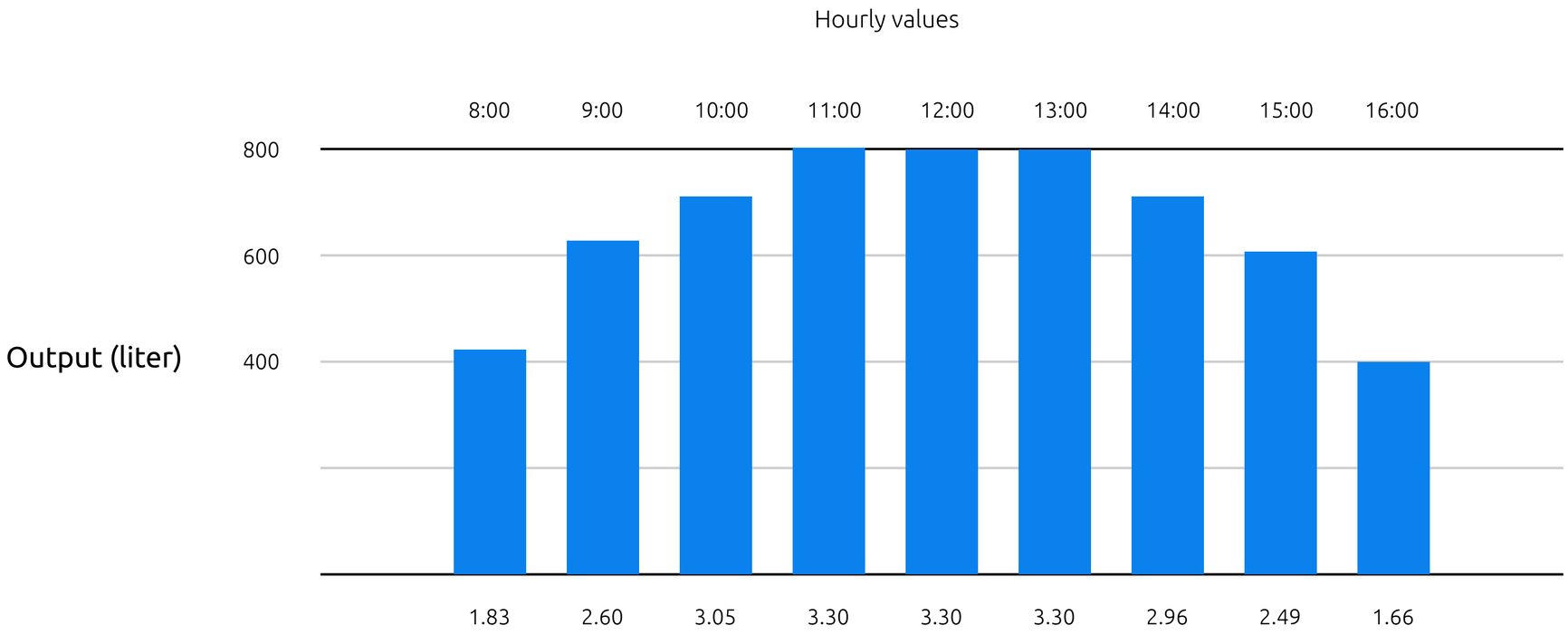
Potable drinking water from the sea in remote locations.

Just plug and switch.



Clean drinking water production from seawater up from 600 litres/hour.

Solar daily output 6 m³



Output with generator or electricity: 18 m³ / day (24h) // Output from Atlantic (TDS 36.000 mg/L): max. 0.7 m³/h
Output from Mediterranean (TDS 40.000 mg/L): max. 0.6 m³/h

SolarRO PRO 750 SW

Daily permeate output

Feed water: Pacific

Feed water TDS 33.000 mg/L

Feed volume 30LPM max.

Water temperature 20 °C

Permeate output 0.8 m³/h

Permeate TDS 220 mg/L

Power options

Solar PV panels 20 pcs á 265 Wp

Generator 4 kW / 440 VAC / 50 Hz

Grid 400 VAC

Technical Specifications

Feed water type	**Pacific**	**Atlantic**	**Mediterranean**
Tested average permeate flow	750 L/h	700 L/h	600 L/h
Feed water TDS	33.000 mg/L	36.600 mg/L	40.000 mg/L

Salt Rejection	99,40 %
Motor	4 kW; 400VAC, 50Hz
Pump	High pressure feed 30 LPM/50Hz
System pressure	55bar, automatically self-adjusting
Pressure Vessels	6 x 4040 SW, composite
Membranes	6 x 4040 SW, polyamide
RO tubing	Duplex and SS 316L
Prefilters	4 x Big Blue 20” (5µm, 25µm, 50µm,100µm PP filter)
Permeate post treatment:	
Ultraviolet lamp	400 J/m2
Ultraviolet lamp rated life	9.000 h
Product water:	
Water (permeate) quality	pH 6.5 - 8.5; TDS < 270 mg/L; 100% disinfected

Power Supply:	
Solar PV panels recommended	32 x 265Wp / < 40Voc
Solar Inverter	5kW
Alternative/ Back-up power supply:	3-ph 380 - 480VAC 50 Hz
Dimensions:	
RO Unit Stand	L = 148cm, W =100cm, H = 160cm

SolarRO **PRO 1500** SW

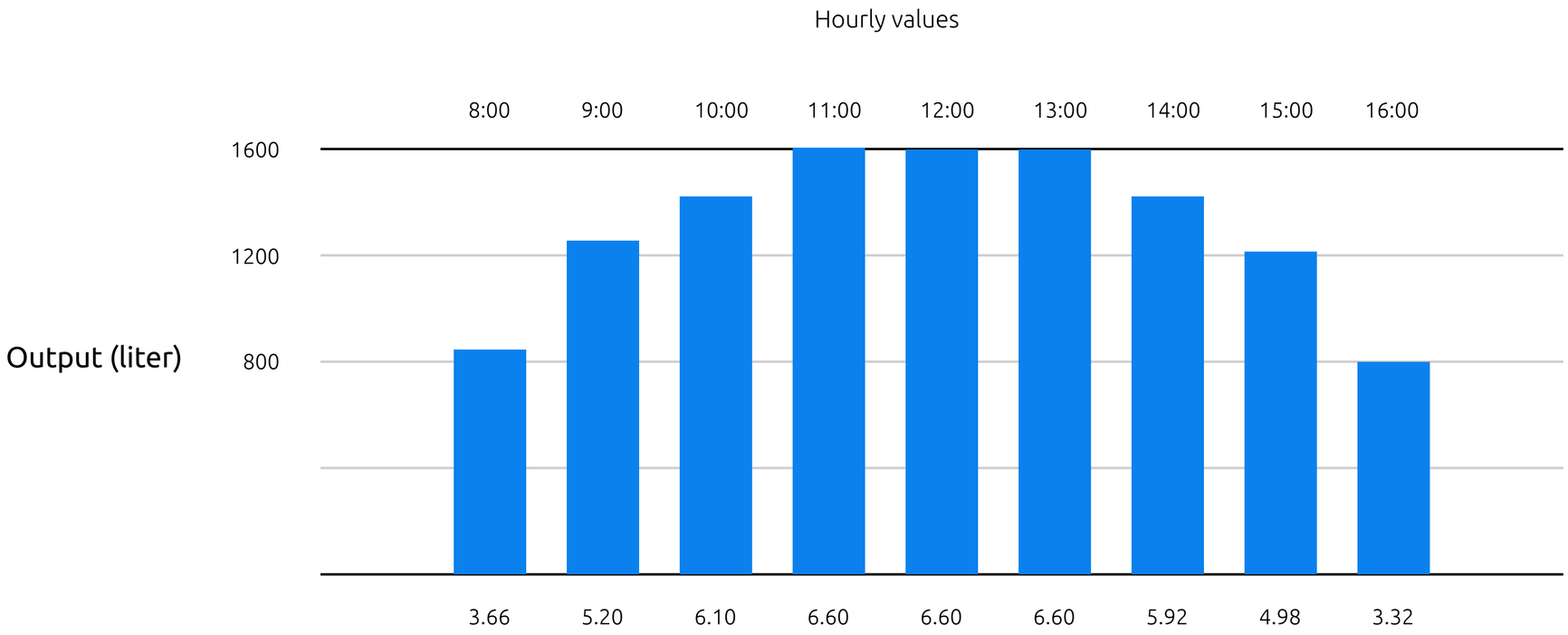
SolarRO **PRO 3500** SW

Potable drinking water from seawater.

Modular design makes the system scalable.

Clean drinking water production from seawater up from 1300 litres/hour.

Solar daily output 12 m³



Output with generator or electricity: 38 m³ / day (24h) // Output from Atlantic (TDS 36.000 mg/L): max. 1.5 m³/h
Output from Mediterranean (TDS 40.000 mg/L): max. 1.3 m³/h

SolarRo PRO 1500 SW

Daily permeate output

Feed water: Pacific

Feed water TDS 33.000 mg/L

Feed volume 60LPM max.

Water temperature 20 °C

Permeate output 1.6m³ / h

Permeate TDS 260 mg / L

Power options

Solar PV panels 40 pcs á 265 Wp

Generator 8 kW / 440 VAC / 50 Hz

Grid 400 VAC

Technical Specifications

Feed water type	**Pacific Ocean**	**Atlantic**	**Mediterranean**
Tested average permeate flow	1500 L/h	1400 L/h	1300 L/h
Feed water TDS	<33.000 mg/L	<36.000 mg/L	<40.000 mg/L

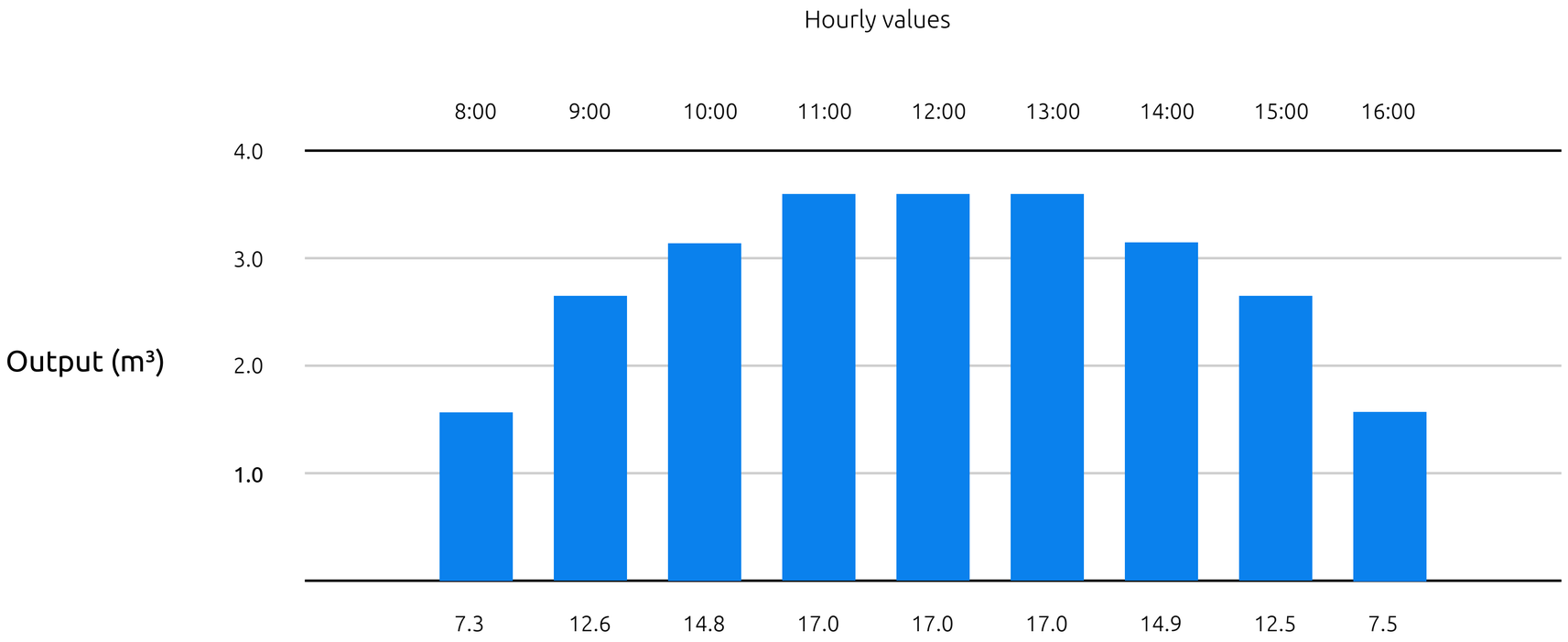
Salt Rejection	99,40 %
Motor	7kW; 400VAC, 50Hz
Pump	High pressure feed 60 LPM/50Hz
System pressure	56bar, automatically self-adjusting
Pressure Vessels	6 x 4080, 1000psi composite
Membranes	12 x 4040 SW, polyamide
RO tubing	Duplex and SS 316L
Prefilters	20 inch x 5 element (5µm, 50µm,100µm PP filter)
Permeate post treatment:	
Ultraviolet lamp	400 J/m2
Ultraviolet lamp rated life	9.000 h
Product water:	
Water (permeate) quality	pH 6.5–8.5; TDS < 270 mg/L; 100% disinfected

Power Supply:	
Solar PV panels recommended	40 x 250-290 Wp / < 40 Voc
Solar Inverter	8kW
Alternative/ Back-up power supply:	3-ph 380 - 480VAC 50 Hz
Dimensions:	
RO Unit Stand	L=260cm, W=100cm, H=158cm

SolarRO PRO 3500 SW

Clean drinking water production from seawater up from 3000 litres/hour.

Solar daily output 25 m³



Output with generator or electricity: 84 m³ / day (24h) // Output from Atlantic (TDS 36.000 mg/L): max. 3.3 m³/h
Output from Mediterranean (TDS 40.000 mg/L): max. 3.0 m³/h

SolarRo PRO 3500 SW

Daily permeate output

Feed water: Pacific

Feed water TDS 33.000 mg/L

Feed volume 136 LPM max.

Water temperature 20 °C

Permeate output 3.5m³ / h

Permeate TDS 320 mg / L

Power options

Solar PV panels 80 pcs á 265 Wp

Generator 20 kW / 440 VAC / 50 Hz

Grid 400 VAC

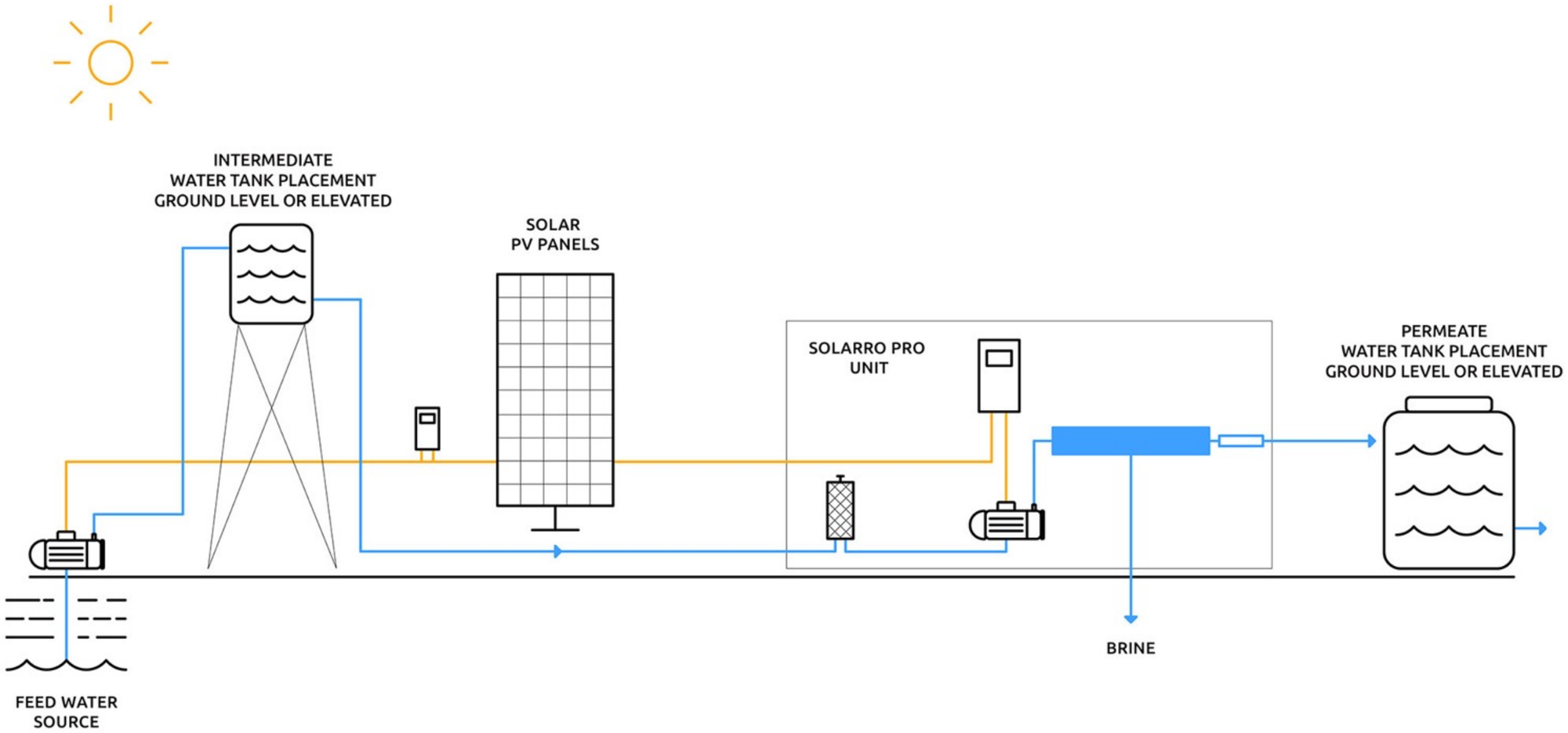
Technical Specifications

Feed water	**Pacific**	**Atlantic**	**Mediterranean**
Tested average permeate flow	3.5 m³/h	3.3 m³/h	3.0 m³/h
Feed water TDS	33.000 mg/L	36.000 mg/L	40.000 mg/L

Salt Rejection	99,40 %
Motor	15kW; 460VAC, 60Hz
Pump	High pressure feed max. 138 LPM
System pressure	56bar, automatically self-adjusting
Pressure Vessels	3 x 8080, 1000psi composite
Membranes	6 x 8040 SW, polyamide
RO tubing	2205 Duplex
Prefilters	30 inch x 5element (5µm, 50µm,100µm PP filter)
Permeate post treatment:	400 J/m2
Ultraviolet lamp	9.000 h
Ultraviolet lamp rated life	
Product water:	pH 6.5 - 8.5; TDS < 270 mg/L; 100% disinfected
Water (permeate) quality	

Power Supply:	
Solar PV panels recommended	80 x 250-290 Wp / < 40 Voc
Solar Inverter	20kW
Alternative/ Back-up power supply:	3-ph 380 - 480VAC 50 Hz
Dimensions:	
RO Unit Stand	L=280cm, W=90cm, H=170cm

SolarRO PRO SW INSTALLATION EXAMPLE




SOLAR WATER
SOLUTIONS

SolarRO **PRO** SW Series

OPTIONAL EQUIPMENT & ACCESSORIES

- Submersible pump
- Pre filtration
- Feed water supply pump
- Water storage tanks for permeate
- PV panel package + inverter according to customer requirements
- Filtration maintenance package (PPT filters + membranes)

SolarRO KEY BENEFITS

- Operates 100% with solar energy
- Zero CO2 emissions
- Competitive investment cost – no batteries or energy storage needed
- Mobile and easy to relocate
- Easy to install and operate with low maintenance
- Fully automatic system – filters and RO membranes are quick to replace
- Integrated membrane cleaning system
- Energy source can be simply switched to grid or a generator – 24/7 hybrid models

SOLAR WATER SOLUTIONS

Global Water Awards prize 2017

Save the Baltic Sea award 2019

Laboratory tested, clean and safe drinking water

Economical life-cycle costs

Operates worldwide with **local service partners**

Committed to environmental **sustainability**

Cleantech design **from Finland**

JUST PLUG & DRINK

Let’s get in touch!

www.solarwatersolutions.fi