

# **Treatment Systems**

## **TSWSOLAR Series**

Reverse Osmosis coupled with Autonomous Photovoltaic Systems

#### **Globally Awarded Technologies**



- GOLD Award
- Category Green City Water Resources Management - Desalination International "Mohammed Bin



- Second Global Water Award
- . Innovative Project Award Category of the Rashid Al Maktoum Global Water Award'
- · Dubai, U.A.E.





## **TSW Solar Series**

## Water Treatment Systems Powered by Photovoltaic Panels

The systems are designed taking into consideration that they will be installed in isolated regions where continuous water production is essential, electricity is not available and easy access for servicing is not possible.

Model	TSW Solar 1	TSW Solar 2
Inlet	Sea Water	Sea Water
Production m³/h	0.26	0.85
Production m³/day	2.6	8.5
Drain m³/h	0.59	1.76
Submersible Pump	1 m³/h - 3.5 bar	3 m³/h - 4 bar
Operation Hours	10	10
Autonomy	1 day	1 day
Power Required	3.5	7.0
Panels	26 x 265W	54 x 265W
Accumulators	24 at 2V (1250 Ah)	24 at 2V (2900 Ah)
Charging Regulator	•	•
Inverter	•	•



- 1. Seawater TDS: 42.000ppm
- 2. Temperature range: 20 °C 30 °C
- 3. Capacity of PV and accumulators based on meteorological data of Middle East areas

Upon request design for other areas in the world

### **FEATURES**

**Reliability:** Flawless technical design minimizing the risk of problems while ensuring water quality to International WHO standards. **Robustness:** Robust construction that can endure under extreme conditions. Extra care has been given to the materials and components, including redundancy for all crucial parts. **Cost effective:** Operation exclusively via solar power, ensures drastic reduction in the cost of produced water, since power consumption is a key factor in the operational cost.

**Flexibility:** Solar power operation, allows for totally flexible plant location, as there is no need for a power grid. Being containerized, the system can easily be relocated.

#### **APPLICATIONS**

- Remote areas including Islands & Islets
- Inaccessible areas
- Regions away from the power grid
- Areas with high cost of transporting water
- Areas with a high cost of electrical power
- Coastal areas with water scarcity









