

## Solar pumps

VS-WP-8

In areas where electricity supply is inaccessible or unreliable, conventional approaches to obtaining water overwhelm the lifestyle of local inhabitants, such as diesel oil pumps, wind water pumps, hydraulic pumps, and manual lifting.

Nonetheless, with a soaring development of modern science and technology, people crave for water in larger quantity and higher quality. Solar pumping systems, take into account environmental protection as well as its reliability, emerge as the times require. The system is of zero carbon emission and costs less, installs easier, maintains scarcer compared with multiple pumping systems. It is safe to say that solar pumping systems are the first choice to cover the issue of water-shortage.

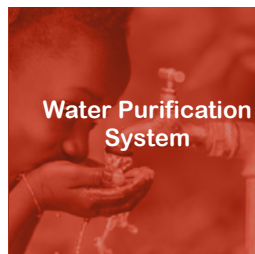
## Applications



Domestic Water



Irrigation Water



Water Purification System



Husbandry Water

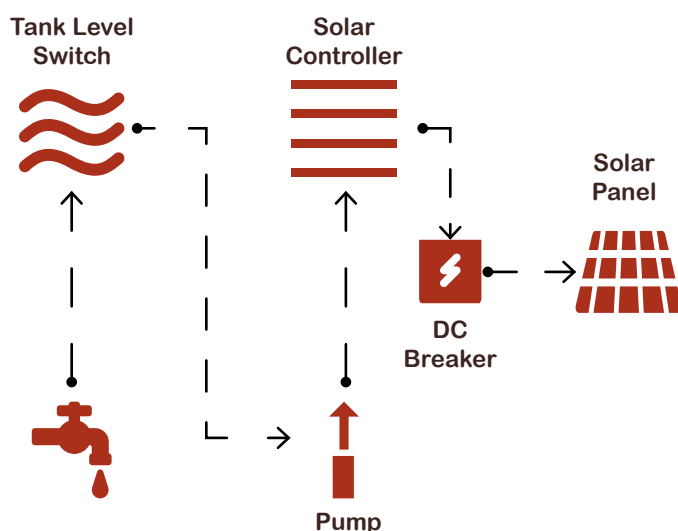


Sea Water Desalination System

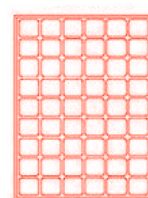
## Features

- Fuel - Free.
- Higher rate of return compared with that of diesel oil pumps.
- Long lifetime approved by international market.
- Applicable to standard Triple-phase Asynchronous Motor System.
- Easy to install.
- Covering a wide range of wattges.
- Applicable to electricity-short areas
- Being mobile.
- Compatible to all kinds of water pumps and most types of solar panels.
- Being designed in integration, ensuring its reliability and relatively low cost

## System Components



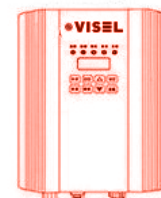
The Solar Pumping System has 3 key components :



PV Array

Composed of a number of solar modules in parallel.

It absorbs sunlight radiation energy and converts into electrical power.



Solar Controller

The Solar Controller adjusts and converts the solar pumping system.

It maximizes the power out put and adjusts the output frequency according to sunlight intensity.



AC Pump with motor

The AC Pump pumps water from water sources into pool or irrigation system.

# Solar pumps

## VS-WP-8

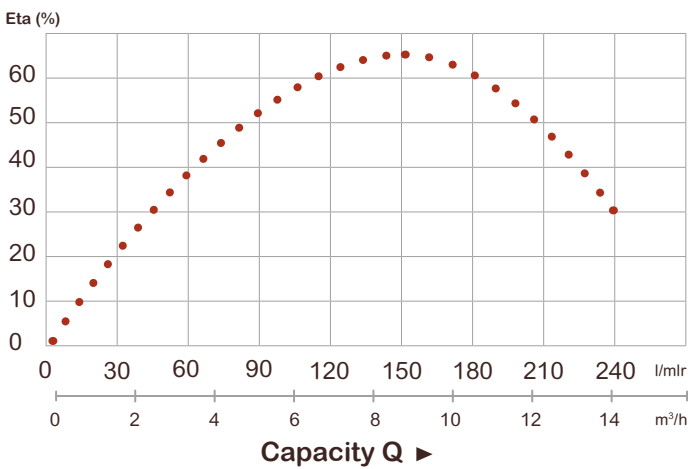
### 1 X Water pump 2.20Kw / 3.00HP

#### Operating Conditions

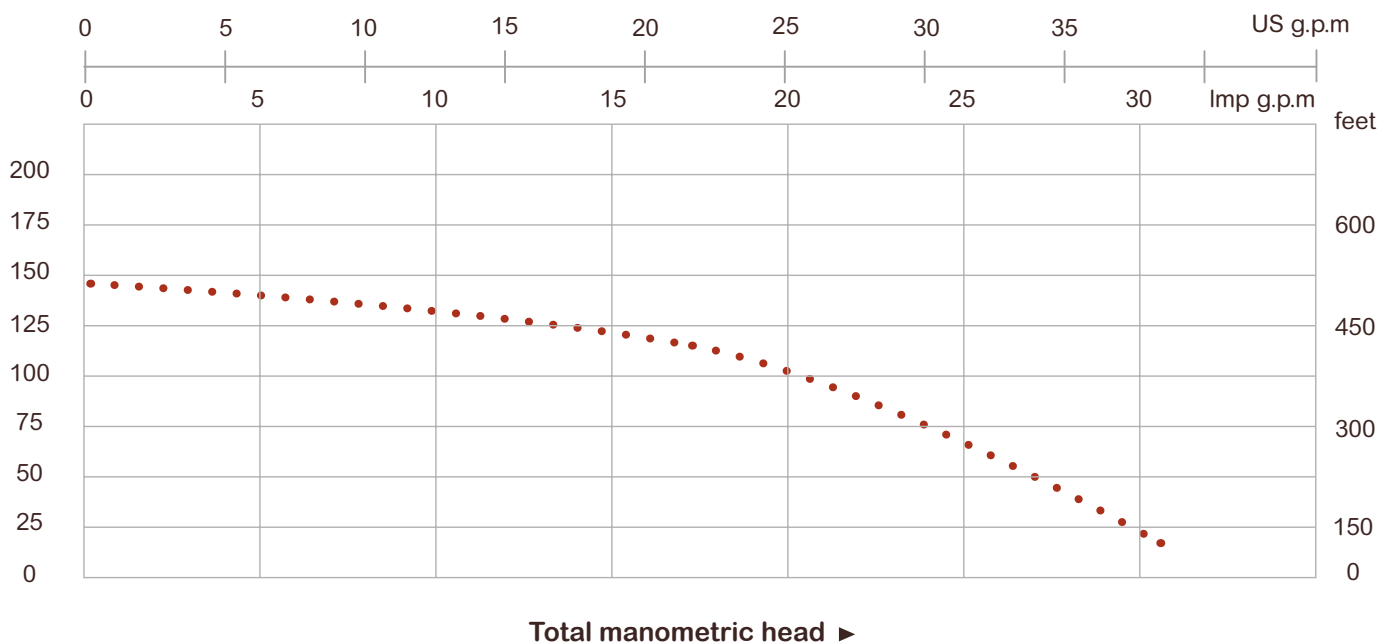
- Maximum fluid temperature up to + 35 °C
- Maximum sand content: 0.25%
- Maximum immersion: 80m
- Minimum well diameter: 3"

#### Motor & Pump

- Rewindable motor or full obturated screen motor
- Three-phase: 380V - 415V / 50Hz
- Single-phase: 220V - 240V / 50Hz
- Pumps are designed by casing stressed



P <sub>2</sub>		Delivery										
KW	HP	Q	m <sup>3</sup> /h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.6	14.4
			l/min	0	30	60	90	120	150	180	210	240
2.2	3			86	83	79	75	70	62	51	36	20

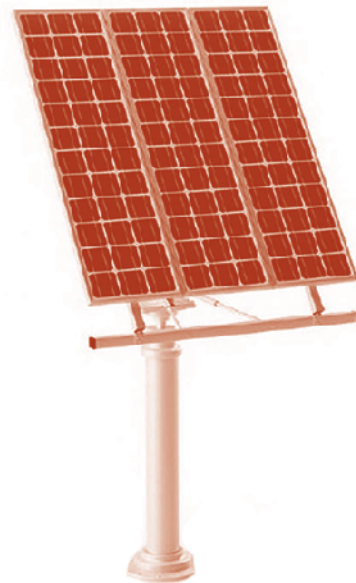


## Solar pumps

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### 12 X 260W Solar Panel

Dimensions	1640 x 992 x 45 mm
Cell Type	156 x 156 mm
Number of Cells	72 (6 x 12)
Maximum Power ( WP)	260 W
Open Circuit Voltage (Voc)	36.8 V
Short Circuit Current (Isc)	8.81 A
Maximum Power Voltge	31.15 V
Maximum Power Current	8.19 A
Maximum Series Fuse	15 A
Number of Diodes	3
Cable Type & Lenght	4 mm <sup>2</sup> 90 cm
Standard Test Conditions	1000 W / M <sup>2</sup> 25C, AM 1.5



### 1 X 2.2Kw Controller



- Soft start prevents effect of water hammer
- Led screen indicates system status and parameters in real time
- Easy installation without extra maintenance
- Built-in function of system diagnostics and protection
- 99% accurate Max Power Tracking technology to maximize power output from solar modules
- High flow output
- Both DC and AD power input available
- Remote monitoring system

Ambient Temperature Range	-20°C -60°C >45°C	Max Amps RMS (A)	23.0	Max Input Voltage (V)	450
Cooling Method	Fan Cooling	Power & VA Capability	5.1	Min Input Voltage at mmp (V)	180
Ambient Humidity	≤95%RH	Output Power Rated	2.2 KW	Recomended Voltage	280-360 VDC
Dimensions (mm)	151.7x101x126.8	Output Voltage rated	220/230/240V AC	Max Amps Input (A)	12.5
Gross Weight (kg)	1.4	Max Amps RMS (A)	10.0	Recomended Power at mpp (KW)	3.52
Standard Warranty	12 month	Output Frequency	0-50Hz / 60Hz	Input Voltage	220/230/240V