

The Dankoff Solar Electric SlowPump

The Dankoff Solar SlowPump was the world's first commercially available low power solar pump. It was developed by Windy Dankoff in 1983, in response to those who said "that's impossible." Thousands of Solar SlowPumps have been installed worldwide by ranchers, homeowners, missionaries, health workers, and government agencies. Some of the oldest Solar SlowPumps are still in use today.

The Solar SlowPump is used to draw water from shallow wells, springs, cisterns, tanks, ponds, rivers, and streams, and push it as high as 450 vertical feet and through miles of pipeline. Output is from 200 to 2,600 gallons per day depending on the model.

The Solar SlowPump is less expensive than most submersible DC pumps, and made in a much wider range of sizes. Wearing parts typically last 5 to 10 years. Overall life expectancy is 15 to 20 years.

Suction capacity:

20 vertical feet at sealevel; subtract 1 foot for every 1000 feet of altitude (1 meter for every 1000 meters). The pump should be installed as close to the water source as possible to reduce suction lift.

Construction and Features:

- Rotary Vane mechanism (positive displacement) mad of forged brass, carbon-graphite, and stainless steel
- NSF Approved for drinking water
- Handles sea water and dissolved minerals
- Survives most freezes
- Permanent magnet, brush-type motor for maximum energy efficiency
- DC (Direct Current) motors are standard
- Models with an AC motor are an available option and use a low-surge motor that greatly reduces starting surges, inverter size, and wire size requirements
- The Installation and Service Manual is highly detailed and illustrated



Array Direct (no battery) applications:

- Rated power of the PV Array must meet the watts listed in the PV Watts column in the chart on the next page.
- A pump controller is usually required and will increase system performance by 30% over the course of a year.

Filtration Requirement:

This pump cannot tolerate dirt. The intake water must be filtered clear. Failure to use a Dankoff Solar Pump Filter Unit will void the warranty of the pump. If the water is very dirty, preclean it by running through a settling tank, or use a more dirt tolerant pump from Dankoff such as the SolarForce, the SunCentric, or the Solaram, also available from High Lifter Pump Service.

Warranty:

One year against defects in materials and workmanship.

Model Series	1300	1400	2500	2600
Dimensions	5 ¾ x 17 ¾	6 ½ x 18 ¾	5 ¾ x 17 ¾	6 ½ x 18 ¾
Fittings	½ " Female	½ " Female	¾ " Male	¾ " Male
Weight	12 lbs	25 lbs	13 lbs	29 lbs



Solar array with four 60 watt solar panels is installed on a mounting pole and rack



Storage tank receives water from the spring. Pump is in a waterproof, theft resistant lockbox.



Dankoff SlowPump and pump controller



10 micron filter assembly for the pump



Water flows into the receiving tank. The pump is controlled by the float switch.



Putting the finishing touches on the wiring at the receiving tank. Pump will provide about 1,000 gallons per day.