

Solar pumps surface | Technical data

Conergy Solar Slowpump

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 Slowpumps have been installed worldwide by ranchers, homeowners, missionaries, health workers and government agencies. Some of our oldest Slowpumps are still in daily service.

Slowpump is not submersible, but can draw water from shallow wells, springs, cisterns, tanks, ponds, rivers and streams, and push it as high as 450 vertical feet and through miles (kilometers) of pipeline. Slow pumping minimizes the size and cost of the solar array, wire and piping.

Slowpump is less expensive than 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.



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Total Lift		13	1322		1310		1308		1304		1303		2505		
Feet /	Meters	GPM	Watts												
20	6	0.51	27	0.92	29	1.25	30	1.75	37	2.50	48	3.25	55	4.00	57
40	12	0.51	32	0.92	41	1.25	48	1.75	53	2.50	60	3.23	69	3.95	78
60	18	0.51	36	0.89	46	1.20	54	1.68	64	2.40	78	3.15	90	3.90	102
80	24	0.49	40	0.88	51	1.20	60	1.64	73	2.30	93	3.10	106	3.90	120
100	30	0.49	45	0.88	57	1.20	66	1.64	82	2.30	105	3.08	124	3.85	144
120	36	0.48	50	0.88	61	1.20	70	1.62	90	2.25	121	3.02	142	3.80	165
140	42	0.47	56	0.88	66	1.20	75	1.60	100	2.20	138	2.92	166	3.65	195
160	48	0.47	62	0.87	74	1.20	84	1.60	112	2.20	153	2.85	187		
180	54	0.47	66	0.86	82	1.18	93	1.57	122	2.15	165	2.75	205		
200	60	0.45	74	0.85	89	1.16	101	1.56	133	2.15	180				
240	72	0.44	90	0.83	105	1.14	117	1.54	152	2.15	204				
280	84	0.41	102	0.81	120	1.12	135	1.51	175						
320	96	0.41	120	0.79	138	1.10	153	1.48	196						
360	108	0.41	134	0.76	154	1.05	171								
400	120	0.40	150	0.73	176	1.00	198								
440	132	0.39	168	0.70	202										

| performance at 15 or 30 V (PV-Direct voltage)

| For battery, substract 20 % from Flow & Watts

24 V pump may be run at 12 volts to yield 1/2 flow at 1/2 watts.
Actual performance may vary ±10 % from specifications.

Conergy Solar Slowpump



Construction & Features

- Rotary vane mechanism (positive displacement) made of forged brass, carbon-graphite and stainless steel
- NSF® approved for drinking water
- Handles sea water, dissolved minerals
- Survives most freezes
- magnet, DC motor
- AC models use a low-surge PM motor that greatly reduces starting surges, inverter and wire size requirements
- Installation and Service Manual is highly detailed and illustrated

Suction Capacity

20 vertical feet (6 m) at sea level – subtract 1 ft. for every 1,000 ft. altitude (1 m for every 1,000 m). Pump should be placed as low as possible.

Filtration Requirement

This pump cannot tolerate dirt. Water must be filtered clear. If water is very dirty, improve the source or consider a different pump.

PV-Direct (non-battery) Requirements

- The rated power of the PV array must exceed pump watts by 20 % or more.
- A linear current booster (controller) is required to start and run in low light.
- Solar Tracker (optional) will increase daily yield (40-55 % in summer)

Fittings

- 1300/1400 Series: 1/2" female
- 2500/2600 Series: 3/4" male

Dimensions (1300/2500 Series)

- 5.7 x 15.5" (14 x 39 cm)
- Weight 16 lbs (7 kg)

Warranty

1 year against defects in materials and workmanship

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Total Lift		1408		1404		1403		2605		260	17
Feet /	Meters	GPM	Watts								
160	48									4.30	283
180	54							3.35	280	4.25	305
200	60							3.33	296	4.20	338
240	72					2.55	266	3.30	331	4.05	396
280	84					2.50	302	3.25	373	4.00	444
320	96			1.66	255	2.50	338	3.20	410		
360	108			1.62	280	2.50	374	3.16	450		
400	120			1.64	312	2.50	406				
440	132	1.10	269	1.66	342	2.50	451				

Performance at 15 or 30 V (PV-Direct voltage)

| For battery, substract 20 % from Flow & Watts

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