



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 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.

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 (6 m) at sea level; subtract 1 ft. for every 1000 ft. altitude (1 m for every 1000 m). Pump should be installed as close to water source as possible to reduce suction lift.

Construction & Features

- Rotary vane mechanism (positive displacement) made of forged brass, carbon-graphite, and stainless steel
- NSF approved for drinking water
- Handles sea water and dissolved minerals
- Survives most freezes
- Permanent 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

Filtration Requirement

This pump CANNOT tolerate dirt. Water MUST be filtered clear. Failure to use a Dankoff Solar Pump filter unit, or use of a filtration unit not approved by Dankoff Solar Pumps, **will void the warranty of the pump**. If water is very dirty, improve the source or consider using one of our dirt-tolerant pump models (SolarForce, SunCentric, and Solaram).



Solar-Direct Applications ("PV-Direct"/non-battery)

- Rated power of the PV array must meet Watts listed in the PV Watts column in the chart below
- **DSP 200 Controller:** Will increase system performance approximately 30% over the course of one year. Required to start and run in low light conditions

Mechanical Characteristics

1300 Models

- Dimensions: 5 ¾ x 17 3/8 inch (14.61 x 44.14 cm)
- Fittings: ½ inch Female
- Weight: 12 lbs (5.45 kgs)

1400 Models

- Dimensions: 6 ½ x 18 ¾ inch (16.51 x 47.63 cm)
- Fittings: ½ inch Female
- Weight: 25 lbs (11.34 kgs)

2500 Models

- Dimensions: 5 ¾ x 17 3/8 inch (14.61 x 44.14 cm)
- Fittings: ¾ inch Male
- Weight: 13 lbs (5.9 kgs)

2600 Models

- Dimensions: 6 ½ x 18 ¾ inch (16.51 x 47.63 cm)
- Fittings: ¾ inch Male
- Weight: 29 lbs (13.16 kgs)

Warranty

1 year against defects in materials and workmanship

Total Lift		Model #1322 PV			Model #1310 PV			Model #1308 PV			Model #1304 PV			Model #1303 PV			Model #2505 PV			Model #2507 PV		
Feet	Meters	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts
0-20	0-6	0.51	1.93	40	0.92	3.48	40	1.25	4.73	40	1.75	6.62	45	2.5	9.46	65	3.25	12.3	70	4	15.14	80
40	12	0.51	1.93	45	0.92	3.48	50	1.25	4.73	65	1.75	6.62	65	2.5	9.46	80	3.23	12.23	75	3.95	14.95	100
60	18	0.51	1.93	45	0.89	3.37	60	1.2	4.54	70	1.68	6.36	80	2.44	9.24	90	3.15	11.92	110	3.9	14.76	130
80	24	0.49	1.85	50	0.88	3.33	65	1.2	4.54	80	1.64	6.21	90	2.36	8.93	110	3.1	11.73	135	3.9	14.76	150
100	30	0.49	1.85	65	0.88	3.33	70	1.2	4.54	85	1.64	6.21	100	2.33	8.82	130	3.08	11.66	155	3.85	14.57	180
120	36	0.48	1.82	65	0.88	3.33	75	1.2	4.54	90	1.62	6.13	110	2.33	8.82	140	3.02	11.43	180	3.8	14.38	210
140	42	0.47	1.78	70	0.88	3.33	80	1.2	4.54	95	1.6	6.06	125	2.27	8.59	160	2.92	11.05	210	3.65	13.82	245
160	48	0.47	1.78	80	0.87	3.3	95	1.2	4.54	110	1.6	6.06	140	2.21	8.36	180	2.85	10.79	235			
180	54	0.47	1.78	85	0.86	3.26	100	1.18	4.47	120	1.57	5.94	150	2.11	7.99	190	2.75	11.41	255			
200	60	0.45	1.7	100	0.85	3.22	110	1.16	4.39	130	1.56	5.91	165	2.03	7.68	220						
240	72	0.44	1.67	120	0.83	3.14	130	1.14	4.31	150	1.54	5.83	190	1.96	7.42	235						
280	84	0.41	1.55	130	0.81	3.07	150	1.12	4.24	170	1.51	5.72	220									
320	96	0.41	1.55	150	0.79	3	170	1.1	4.16	195	1.48	5.6	245									
360	108	0.41	1.55	170	0.76	2.88	195	1.05	3.97	220												
400	120	0.4	1.51	190	0.73	2.76	220	1	3.79	250												
440	132	0.39	1.48	210	0.7	2.65	250															
480	146	0.25	0.95	260																		
520	158	0.25	0.95	310																		
560	170	0.2	0.76	340																		

Motor
1/5 Horsepower
PV-Direct Voltage
12 VDC, 24VDC, 48 VDC
Inverted Voltage (AC)
115VAC

Total Lift		Model #1408 PV			Model #1404 PV			Model #1403 PV			Model #2605 PV			Model #2607 PV		
Feet	Meters	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts
0-20	0-6	1.92	7.27	110				3.64	13.78	130				6.2	23.47	185
40	12	1.9	7.19	120				3.6	13.63	150				6.1	23.09	240
60	18	1.88	7.12	130				3.61	13.66	170				6.09	23.05	250
80	24	1.88	7.12	140				3.5	13.25	200				6.04	22.86	290
100	30	1.85	7	150				3.5	13.25	220				6.04	22.86	330
120	36	1.83	6.93	160				3.43	12.98	235				6	22.71	355
140	42	1.82	6.89	180				3.43	12.98	255				6	22.71	390
160	48	1.82	6.89	185				3.43	12.98	280				5.93	22.45	430
180	54	1.81	6.85	200				3.4	12.87	300	3.35	12.68	350	5.83	22.07	470
200	60	1.81	6.85	210				3.35	12.68	330	3.33	12.61	370	5.8	21.95	500
240	72	1.77	6.7	235				3.38	12.79	360	3.3	12.49	415	5.75	21.76	585
280	84	1.79	6.78	260				3.3	12.49	405	3.25	12.3	465	5.59	21.16	675
320	96	1.72	6.51	290	1.66	6.28	320	3.3	12.49	450	3.2	12.11	515			
360	108	1.75	6.62	310	1.66	6.28	350	3.2	12.11	520	3.16	11.96	565			
400	120	1.69	6.4	330	1.64	6.21	390	3.2	12.11	545						
440	132	1.69	6.4	355	1.62	6.13	430	3.1	11.73	610						
480	146	1.7	6.43	380												
520	158	1.61	6.09	400												
560	170	1.67	6.32	435												

Motor
1/2 Horsepower
PV-Direct Voltage
24 VDC, 48VDC
Inverted Voltage (AC)
115VAC

Performance at 15 or 30V (PV-Direct Voltage)
For battery, subtract 20% from Flow & Watts
24V pump may be run at 12V to yield 1/2 flow at 1/2 watts
Actual performance may vary ± 10%

Actual performance may vary ± 10%
24V pump may be run at 12V to yield 1/2 flow at 1/2 watts
For battery, subtract 20% from Flow & Watts
Performance at 12 or 30V (PV-Direct Voltage)

280	130	1.93	7.23	432
230	120	1.91	7.08	400
480	146	1.7	6.43	380
440	132	1.69	6.4	355
400	120	1.69	6.4	330
360	108	1.75	6.62	310
320	96	1.72	6.51	290
280	84	1.79	6.78	260
240	72	1.77	6.7	235
200	60	1.81	6.85	210
160	48	1.82	6.89	185
140	42	1.82	6.89	180
120	36	1.83	6.93	160
100	30	1.85	7	150
80	24	1.88	7.12	140
60	18	1.88	7.12	130
40	12	1.9	7.19	120
0-20	0-6	1.92	7.27	110

Subject to technical changes
For more information, please visit or call:
www.dankoffsolarpumps.com
1 (505) 471-3469