

PS1200 Daily Flow Chart



for solar direct operated pumps

Calculated on
6 kWh/m²/day

C-xx = Centrifugal pump end
HR-xx = Helical Rotor pump end

System Voltage: 72 – 96V nominal, e.g. 6 to 8 standard 12V modules wired in series

How to select the right pump system:

Find the LIFT you require, and read the column below.

Find the DAILY VOLUME you require. For more water look further down the column, ... or to the right side for tracked systems.

Use the PEAK FLOW RATE for pipe sizing.

Type	PEAK FLOW RATE for pipe sizing		Type	PEAK FLOW RATE for pipe sizing	
	LPM	US GPM		LPM	US GPM
HR-03H	8	2,1	HR-14	43	11,4
HR-04H	13	3,4	HR-20	58	15,3
HR-07	19	5,0	C-BF-04	115	30,4
HR-10	31	8,2	C-DF-03	170	44,9



“The World’s Most Economical Solar Pump”

Watt	Pump Type		Fixed Array		Tracked	
	m ³ /day	USG/day	m ³ /day	USG/day	m ³ /day	USG/day
5m / 16ft						
350	C-BF-04	42	11.100	61	16.120	
480	C-BF-04	52	13.740	75	19.820	
700	C-DF-03	68	17.970	95	25.100	
880	C-DF-03	80	21.140	115	30.380	
1000	C-DF-03	85	22.460	125	33.030	
1200	C-DF-03	95	25.100	135	35.670	
10m / 33ft						
	HR-14	27	7.130	33	8.720	4mm ² max. 60m #10 max 250ft
	HR-20	31	8.190	38	10.040	
	C-BF-04	50	13.210	70	18.490	
	C-BF-04	58	15.320	84	22.190	
	C-DF-03	72	19.020	105	27.740	
	C-DF-03	80	21.140	125	33.030	
15m / 49ft						
350	HR-14	22,5	5.940	29	7.660	4mm ² max. 60m #10 max 250ft
480	HR-20	27	7.130	39	10.300	
700	C-BF-04	33	8.720	49	12.950	
880	C-BF-04	43	11.360	62	16.380	
1000	C-BF-04	48	12.680	70	18.490	
1200	C-BF-04	53	14.000	77	20.340	
20m / 65ft						
	HR-14	18	4.760	26	6.870	4mm ² max. 60m #10 max 250ft
	HR-14	22	5.810	31	8.190	
	HR-20	28	7.400	40	10.570	
	HR-20	32	8.450	45	11.890	
	C-BF-04	42	11.100	60	15.850	
	C-BF-04	47	12.420	66	17.440	
30m / 100ft						
350	HR-14	14	3.700	20	5.280	4mm ² max. 60m #10 max 250ft
480	HR-14	18	4.760	26	6.870	
700	HR-20	24	6.340	35	9.250	
880	HR-20	29	7.660	38	10.040	
1000	HR-20	31	8.190	40	10.570	
1200	HR-20	33	8.720	42	11.100	
40m / 133ft						
	HR-04	6,9	1.820	10	2.640	4mm ² max. 60m #10 max 250ft
	HR-14	14	3.700	20	5.280	
	HR-14	19	5.020	28	7.400	
	HR-14	22	5.810	30	7.930	
	HR-20	25	6.610	36	9.510	
	HR-20	27	7.130	38	10.040	
50m / 166ft						
350	HR-04	5	1.320	7,4	1.960	4mm ² max. 70m #10 max 250ft
480	HR-07	11	2.910	15	3.960	
700	HR-14	17	4.490	24,5	6.470	
880	HR-14	19	5.020	28	7.400	
1000	HR-14	21	5.550	29	7.660	
1200	HR-14	22	5.810	30	7.930	
60m / 200ft						
	HR-04	5,6	1.480	8,1	2.140	4mm ² max. 70m #10 max 250ft
	HR-07	8,6	2.270	12,5	3.300	
	HR-07	10,5	2.770	14	3.700	
	HR-10	15	3.960	20	5.280	
	HR-14	17	4.490	25	6.610	
	HR-14	18	4.760	26	6.870	
70m / 233ft						
350	HR-04	4,7	1.240	6,8	1.800	4mm ² max. 80m #10 max 300ft
480	HR-07	6	1.590	8,7	2.300	
700	HR-07	10	2.640	14	3.700	
880	HR-07	10,5	2.770	15	3.960	
1000	HR-10	14	3.700	20	5.280	
1200	HR-10	15	3.960	21	5.550	
1500	HR-14	17	4.490	24	6.340	
80m / 266ft						
	HR-03	3,8	1.000	5	1.320	4mm ² max. 80m #10 max 300ft
	HR-04H	5,7	1.510	8,2	2.170	
	HR-07	9	2.380	12,5	3.300	
	HR-07	9,5	2.510	13	3.430	
	HR-10	13	3.430	18	4.760	
	HR-10	14	3.700	20	5.280	
	HR-10	16	4.230	21	5.550	
90m / 300ft						
350	HR-03	3,5	920	5	1.320	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
480	HR-04H	5,5	1.450	8	2.110	
700	HR-07	8	2.110	12	3.170	
880	HR-07	9	2.380	12,5	3.300	
1000	HR-07	9,5	2.510	13	3.430	
100m / 333ft						
	HR-03	3,2	850	4,7	1.240	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
	HR-04H	5	1.320	7	1.850	
	HR-04H	6	1.590	8,7	2.300	
	HR-07	8,5	2.250	12	3.170	
	HR-07	9	2.380	12,5	3.300	
120m / 400ft						
350	HR-03	3	790	4,3	1.140	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
480	HR-04H	4,5	1.190	6,5	1.720	
700	HR-04H	5,7	1.510	8,2	2.170	
880	HR-07	7,5	1.980	10,5	2.770	
1000	HR-07	8,5	2.250	12	3.170	
140m / 466ft						
	HR-03	2,7	710	4	1.060	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
	HR-03	3,3	870	4,5	1.190	
	HR-04H	5,3	1.400	7	1.850	
	HR-04H	6	1.590	7,5	1.980	
160m / 533ft						
480	HR-03H	2,8	740	4	1.060	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
700	HR-03H	3,8	1.000	4,5	1.190	
180m / 595ft						
	HR-03H	2,3	610	3	790	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
	HR-03H	3,5	920	4,4	1.160	
200m / 650ft						
480	HR-03H	1,9	500	2,7	710	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
700	HR-03H	3,2	850	4,2	1.110	
230m / 750ft						
	HR-03H	1,6	420	2,3	610	4mm ² max. 800ft HR-03H and HR-04H: 6mm ² max. 200m / #8 max. 800ft HR-07: 6mm ² max. 120m / #8 max. 500ft
	HR-03H	3	790	4	1.060	

Calculations are based on Uni-Solar US64 panels. Flow rates may vary plus / minus 10 %. All systems are selected for optimum performance. Each system can handle an additional 15 % in case of unexpected draw-down in bore.
Use ETATRACK solar trackers to reduce your system cost or increase daily flow.

For battery-powered pumping systems 72 to 96V is available for PS1200.

48V systems use PS600 and 24 to 48V use the PS200 system

For other lifts and voltages consider **PS600** or **PS200** system

Specifications are subject to change. Please use newest versions