

SOLAR (SPV) WATER PUMPING SOLUTIONS



USL Solar is an experienced solution provider for Solar pumping systems. Pumping water is in great demand by farmers or in remote



areas where there is no power grid systems. It is one of the sensible and effective uses of solar electric power. With our engineering expertise, USL Solar is ready to take on your water pumping needs, with the use of green energy and affordable cost.

Solar PV pumping systems are widely used in remote areas and islands for water supply, agriculture irrigation, they can also be used in industry, aquaculture industry, and water treatment works.

The PV pumping system consists of solar panel array, an inverter PCU and submersible pump. And solar pumping inverter PCU is the controlling center.

We offer the following models for your requirements:-

MODEL	3-phase AC PUMP RATING		PUMP PCU	Solar Array			System Performance	
	Rated Power	Rated Voltage	Rated Power	Pmpp Rated @ STC	Solar Module Type & Qty	Minimum Area Required	Head	Capacity*
	HP	V	HP	kW	***	Sq.m	m	Liters /day
SWP1800-20	1.5	220	3	1.8	KL180-10nos	15	20	63,000
SWP1800-50	1.5	220	3	1.8	KL180-10nos	15	50	25,200
SWP1800-75	1.5	220	3	1.8	KL180-10nos	15	75	16,800
SWP1800-100	1.5	220	3	1.8	KL180-10nos	15	100	12,600
SWP2200-20	2	220	3	2.2	KL220-10nos	17	20	77,000
SWP2200-50	2	220	3	2.2	KL220-10nos	17	50	30,800
SWP2200-75	2	220	3	2.2	KL220-10nos	17	75	20,533
SWP2200-100	2	220	3	2.2	KL220-10nos	17	100	15,400

**This parameter is indicative values & subject to change based on your site conditions. Solar Irradiation of 5.5kwh /sq.m/day @ 25degC, AM 1.5 Sun Spectrum.*

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MODEL	3-phase AC PUMP RATING		PUMP PCU	Solar Array			System Performance	
	Rated Power	Rated Voltage	Rated Power	Pmpp Rated @ STC	Solar Module Type & Qty	Minimum Area Required	Head	Capacity *
	HP	V	HP	kW	-	Sq.m	m	Liters /day
SWP3780-20	3	220	3	3.78	KL240-12nos+ KL090-10nos	27	20	1,32,300
SWP3780-50	3	220	3	3.78	KL240-12nos+ KL090-10nos	27	50	52,920
SWP3780-75	3	220	3	3.78	KL240-12nos+ KL090-10nos	27	75	35,280
SWP3780-100	3	220	3	3.78	KL240-12nos+ KL090-10nos	27	100	26,460
SWP5920-20**	5	380	5	5.92	KL230-20nos+ KL120-11nos	35	20	2,07,200
SWP5920-50**	5	380	5	5.92	KL230-20nos+ KL120-11nos	35	50	82,880
SWP5920-75**	5	380	5	5.92	KL230-20nos+ KL120-11nos	35	75	55,253
SWP5920-100**	5	380	5	5.92	KL230-20nos+ KL120-11nos	35	100	41,440
SWP9200-100**	7.5	380	7.5	9.20	KL230-40nos	70	100	64,400
SWP12600-100**	10	380	10	12.60	KL210-60nos	90	100	88,200

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**Your Existing Pump set.

How it Works?

PV arrays absorb sunlight radiation energy, convert it into electricity. Pumping inverter control and regulate the operation of the system. It transforms DC power generated by PV arrays into 3-phase AC power, and then drives the submersible pump. In accordance with changes of real-time solar radiation intensity, the inverter can adjust the output frequency, to achieve the Maximum Power Point Tracking function (MPPT).

