

SOLAR PUMP

RELIABLE & ENERGY EFFICIENT

KEY FEATURES

- HIGHLY ENERGY EFFICIENT SUBMERSIBLE SOLAR WATER PUMP WITH ENERGY-EFFICIENT INVERTER DUTY MOTOR.
- ROBUST DESIGN GALVANIZED STEEL MOUNTING STRUCTURE FOR LONG LIFE.
- HIGH TECHNOLOGY AUTOMATIC CONTROLLER WITH DYNAMIC MPPT CONTROL.
- THE CONTROLLER OFFERS COMPLETE PROTECTION AGAINST U/V, O/V AND DRY-RUN FOR THE PUMP.
- HIGHLY EFFICIENT CONTROLLER WITH A CONVERSION EFFICIENCY OF 98%.



PUMP

1 HP to 50 HP

INTRODUCTION

The SKYSAIL INNOVATION solar pumping system serves to provide water in remote applications where electrical grid power is either unreliable or unavailable. The controller can convert DC from the PV array to AC, and drive kinds of pumps. In sunny days, the solar pumping system can continuously pump the water. The system without batteries and other energy storage devices, it is recommended to take water pumped to a reservoir for later use and water sources are those natural or special such as river, lake, well or waterway, etc. A float switch can be installed in the water tower to control the pump operation. Figure 1 shows a typical diagram of a SKYSAIL INNOVATION solar pumping system. The major parts and components in the system are listed below.

THE SKYSAIL INNOVATION SERIES SOLAR PUMPING SYSTEM IS DESIGNED WHICH CONSISTS OF:

- A. Solar Array
- B. DC Breaker or Disconnect Switch
- C. SKYSAIL INNOVATION series solar pump controller
- D. Pump and Motor
- E. Water level switches (optional)

SUBMERSIBLE PUMP		SUBMERSIBLE MOTOR	
Pump Shaft	SS 410	Rpm	2800
Suction Bracket	Cast Iron	Motor Shaft	SS 410
Pump Hardware	SS 304	Motor Bearing Bush	Ltb 5 Grade
Impeller	Noryl / SS	Thrust Bearing	SS 410
Impeller Type	Radial	Lower & Upper Housing	Cast Iron/SS
Stage Casting	Noryl / SS	Stator Shell	SS
Pump Jacket	SS	Winding Wire	3 Ø Copper
Pump Bearing Bush	Leaded Bronze	Motor Hardware	SS 304

Model No.	HP	KW	Voltage	Head In(m)	LPM	LPD	Delivery Size
SSI SP 01HP	1	0.75 KW	160 V	30	30	10800	1"
SSI SP 02HP	2	1.5 KW	160 V	50	90	32400	1.5"
SSI SP 03HP	3	2.2 KW	230 V	50	145	52200	1.5"
SSI SP 05HP	5	3.75 KW	380 V	70	180	645000	2"
SSI SP 07.5HP	7.5	5.5 KW	300 V	70	310	112000	2.5"
SSI SP 10HP	10	7.5 KW	380 V	70	480	150800	3"
SSI SP 15HP	15	11 KW	380 V	100	320	115200	3"

Model No.	MOTOR HP	Voltage	CURRENT	PANEL REQ	PANEL SETUP
SSI SP 01HP	1	160 V	8.0 A	335 W * 3 NOS (72 CELL)	3 PANEL IN SERIES
SSI SP 02HP	2	160 V	8.0 A	335 W * 6 NOS (72 CELL)	6 PANEL IN SERIES
SSI SP 03HP	3	230 V	8.0 A	335 W * 9 NOS (72 CELL)	9 PANEL IN SERIES
SSI SP 05HP	5	380 V	8.0 A	335 W * 16 NOS (72 CELL)	16 PANEL IN SERIES
SSI SP 07.5HP	7.5	300 V	15.0 A	335 W * 24 NOS (72 CELL)	(12 PANEL IN SERIES)*2
SSI SP 10HP	10	380 V	17.0 A	335 W * 32 NOS (72 CELL)	(16 PANEL IN SERIES)*2
SSI SP 15HP	15	380 V	22 A	335 W * 48 NOS (72 CELL)	(16 PANEL IN SERIES)*3