

National Institute of Solar Energy

PV WATER PUMPING SYSTEM

(Testing Model: AC DEEP WELL Model IV)

SPV Pump System Submitted By: M/s Maharishi Solar Technology (P) Ltd.

C-146, 147, Hosiery Complex, Phase-II, Noida,
Distt. Gautam Budh Nagar, Uttar Pradesh-201305, India

3 HP Submersible Pump

S.No.	Test Description	Requirements as per JNNSM, MNRE Specifications 2015-16	Observations	Remarks
4	Testing of complete SPV pump			
4.1	Output of water per day/per watt at Irradiation of 7.15 Kwh/sq.m. at a total head of 50 meters.	Not less than 19 liters	21 ± 2 liters	
4.2	Average Output of water per day at Irradiation of 7.15 Kwh/sq.m. at a total head of 50 meters	Not less than 57,000 liters	65,350 liters	
4.3	Max. total dynamic head	70 meters	70 meters	
5	Tracking system	Continuous, Manual, Passive or Electronic tracking are permitted.	Manual 3 times a day	
6	Protections (Controller)			
6.1	Against dry running	Required	Provided	
6.2	Against open circuit and short-circuit	Required	Provided	
6.3	Against reverse polarity	Required	Provided	
7	Others			
7.1	Design of PV array	Should be modular for easy replacement.	Modular	
7.2	DC/AC switch	Required	Provided	
7.3	Connection cable	Required	Provided	

Comments: The Water pumping System sample was tested at NISE with total head of 50 meters, the radiation data was measured on the array surface from dawn to dusk, and was extrapolated for 7.15 KWh/sq.m. **SPV Water pumping system meets the requirements as per MNRE specifications for 2015-16.**

Tested by:

Randeep

Prepared by:

Kenu

Approved by:

Prakash Kumar

Prakash Kumar
07/01/2017

Issued by:

Prakash Kumar
8/2/2017

Test Report No.	Date of Issue	Total No. of pages	Page No.
144/2016/WP/NISE	05/01/2017	4	3

