

NESSA SOLAR WATER PUMPING SYSTEM



NESSA has been foremost in the photovoltaic system technology with Power plant design, **Solar Power Pack, LED based Solar Streetlight, Solar water pump, Solar module** for all types of applications. We have excellent team of technical person to overcome the entire photovoltaic problem. We are therefore positioned to support your daily business worldwide adequately and effectively. Through our production in India and the tight interconnection of the entire delivery chain.

We are in the position the react to every requirement quickly and extremely flexibly. Short delivery times, highest quality standards in all our products.

Your question or queries will be highly appreciated.

You're sincerely

For, NESSA ILLUMINATION TECHNOLOGIES PVT LTD



WHO WE ARE

NESSA is one of the renowned names of the industry engaged in manufacturing and supplying a supreme quality range of Solar Street Lights, Solar module, Solar power pack, Solar System, Solar roof top off grid etc.

The products offered by us are widely admired for their longer functional life, reliable performance and easy installation. Moreover, we provide customized products to the clients that are designed as per the exact details provided by the clients.

CORE VALUES

NESSA has established a culture with a set of core values that help define how the company does business and pursues its mission. The NESSA team applies these values everyday and they serve as the foundation for interactions with customers, suppliers and business partners. NESSA embraces these core values as essential in achieving the long term goal of becoming one of the leading vertically integrated companies in the water treatment industry.

Integrity: At the core of NESSA values is integrity. The company firmly maintains the highest standards of integrity in all of its business relationships and works with international business partners who share this view.

Quality: NESSA adheres to international quality standards and institutes stringent quality control processes in its operations. The company strives to consistently deliver high quality products to the market.

Accountability: NESSA team embodies a strong sense of professionalism and accountability. The company seeks to build strong relationships with partners who share a commitment to growing the solar industry.

Innovation: NESSA seeks to collaborate with long-term partners who can help to develop and invest in evolving technologies and bring these innovations to the market.

Teamwork: Teamwork is a key component of NESSA success. The company has built a team of highly qualified individuals who share this philosophy of teamwork. This notion of teamwork extends from the management team down to each NESSA employee and also extends to our customers, suppliers, partners and investors who seek to strengthen the solar industry as a whole.

Passion: The success of NESSA is driven by employees who are enthusiastic about our business model and our mission. The team seeks to translate such energy into stronger relationships with customers, suppliers and partners. Passion and enthusiasm will continue to fuel the development of NESSA.

SOLAR MOUNTING STRUCTURE FIXED OR MOVABLE



SOLAR PANEL



SOLAR SUBMERSIBLE, SURFACE & OPENWELL PUMPS



TECHNICAL OVERVIEW

Sr. No.	Technical parameter	Value	Unit
1.	Size of Solar pump	1 HP To 10 HP	HP
2.	Type of power plant	ON Grid (without battery backup)	
3.	Plant Load Factor / Capacity Utilization Factor	23%	
4.	Unit generation per year	1,500/per HP	Units/year
5.	Technology of Solar Panel	Polycrystalline	
6.	Power Generation Capacity of single panel	50 W : 1 HP 250 W : 2 HP 250 W : 3 HP 250 W : 5 HP 120 W : 7.5 HP 250 W : 10 HP	Watt peak to peak
7.	Total Panels Required	1.0 KW : 1 HP 2.0 KW : 2 HP 3.0 KW : 3 HP 5.0 KW : 5 HP 8.1 KW : 7.5 HP 10.0 KW : 10 HP	KW



8.	Controller type	<p>Model -1 to 10 HP MPPT – Inbuilt Display – Inbuilt Phase – 3 phase Output Voltage AC – 415 V Input Voltage DC – 800 V Max Voltage DC vmp – 580 V Output Amp – 1.7 A per HP GSM GPRS- If required Box- Powder coated.</p> <p>Protection features :</p> <ul style="list-style-type: none"> • Dry Run Protection • Over Voltage, low voltage, phase loss • Over Load, short circuit, open circuit • Reverse Polarity Protection 	
9.	Controller Protection scheme	Inbuilt	
10.	Support Structure	<ul style="list-style-type: none"> • Galvanized Iron with flexible 360 degree Movable structure • GI Fixed mounting structure. 	
11.	Angle with Horizontal	17 to 23 degree	

TECHNICAL OVERVIEW OF SOLAR PUMPS

Sr. No.	1 (1 HP)		
Make	NESSA		
Model	1 HP SURFACE & V4 SUBMERSIBLE /8 TO 15 STAGE/OIL FILLED		
HP/KW	1 HP/ 0.75 KW		
Stage	10 to 15 stage		
Voltage	230 V & 380 V		
Discharge outlet	32 mm to 75 mm		
Head (in meters)	6 to 10 meter (1 HP surface pump)	15 to 45 meter (1 HP submersible pump /10 stage)	15 to 45 meter (1 HP submersible pump /15 stage)
Discharge in LPM	600 to 200 LPM	100 to 35 LPM	100 to 20 LPM
Shut Off Head	60 meter		
Overall efficiency	54.90%		
Maximum AMP	2.7 A & 1.7 A		
Size of cable	1*3 *1.5 SQ.MM		
RPM	2850 RPM		

Sr. No.	2 (2 HP)		
Make	NESSA		
Model	2 HP SURFACE & V4 SUBMERSIBLE /10 TO 20 STAGE/OIL FILLED		
HP/KW	2 HP/ 1.5 KW		
Stage	8 to 20 stage		
Voltage	230 V & 380 V		
Discharge outlet	32 mm to 100 mm		
Head (in meters)	6 to 18 meter (2 HP surface pump)	15 to 45 meter (2 HP submersible pump /10 stage)	15 to 120 meter (2 HP submersible pump /20 stage)
Discharge in LPS	1000 to 200 LPM	150 to 85 LPM	150 to 20 LPM
Shut Off Head	125 meter		
Overall efficiency	54.90%		
Maximum AMP	5.5 A & 3.5 A		
Size of cable	1*3 *1.5 SQ.MM		
RPM	2850 RPM		

Sr. No.	3 (3 HP)		
Make	NESSA		
Model	3 HP OPENWELL & V4 ,V6,V7 SUBMERSIBLE /10 TO 25 STAGE/OIL & WATER FILLED		
HP/KW	3 HP/ 2.2 KW		
Stage	1		
Voltage	230 v & 380 V		
Discharge outlet	32 mm To 100 mm		
Head (in meters)	6 to 25 meter (3 HP open well pump)	15 to 45 meter (3 HP submersible pump /10 stage)	15 to 130 meter (3 HP submersible pump /25 stage)
Discharge in LPS	1200 to 200 LPM	170 to 100 LPM	150 to 20 LPM
Shut Off Head	135 meter		
Overall efficiency	54.90%		
Maximum AMP	9.0 A & 5.3 A		
Size of cable	1*3 *2.5 SQ.MM		
RPM	2850 RPM		

Sr. No.	4 (5 HP)		
Make	NESSA		
Model	5 HP OPENWELL & V4 , V6 SS , V7 SUBMERSIBLE /10 TO 25 STAGE/OIL & WATER FILLED		
HP/KW	5 HP/ 3.7 KW		
Stage	1 to 30 stage		
Voltage	380 V		
Discharge outlet	50 mm to 100 mm		
Head (in meters)	6 to 35 meter (5 HP open well pump)	10 to 120 meter (5 HP/ V6 submersible pump /2 to16 stage)	6 to 21 meter (5 HP/V7 submersible pump /2 stage)
Discharge in LPS	1500 to 200 LPM	800 to 90 LPM	1500 to 500 LPM
Shut Off Head	130 meter		
Overall efficiency	54.90%		
Maximum AMP	8.5 A		
Size of cable	1*3 *2.5 SQ.MM		
RPM	2850 RPM		

Sr. No.	5 (7.5 HP)		
Make	NESSA		
Model	7.5 HP OPENWELL , V6 SS , V7 SUBMERSIBLE /10 TO 23 STAGE/WATER FILLED		
HP/KW	7.5 HP/ 5.5 KW		
Stage	1 to 23 stage		
Voltage	380 V		
Discharge outlet	50 mm to 100 mm		
Head (in meters)	6 to 50 meter (7.5 open well pump)	10 to 190 meter (7.5 HP/ V6 submersible pump /2 to 23 stage)	6 to 21 meter (7.5 HP/V7 submersible pump /3 stage)
Discharge in LPS	2800 to 200 LPM	1000 to 60 LPM	1900 to 500 LPM
Shut Off Head	130 meter		
Overall efficiency	54.90%		
Maximum AMP	13.5 A		
Size of cable	1*3 *4.0 SQ.MM		
RPM	2850 RPM		



Sr. No.	6 (10 HP)		
Make	NESSA		
Model	10 HP OPENWELL , V6 SS , V7 SUBMERSIBLE /10 TO 32 STAGE/ WATER FILLED		
HP/KW	10 HP/ 7.5 KW		
Stage	2 to 32 stage		
Voltage	380 V		
Discharge outlet	50 mm to 125 mm		
Head (in meters)	6 to 55 meter (10 HP open well pump)	10 to 260 meter (10 HP/ V6 submersible pump /2 to 32 stage)	6 to 28 meter (10 HP/V7 submersible pump /4 stage)
Discharge in LPS	3200 to 300 LPM	1200 to 50 LPM	1900 to 500 LPM
Shut Off Head	270 meter		
Overall efficiency	54.90%		
Maximum AMP	17 A		
Size of cable	1*3 *6.0 SQ.MM		
RPM	2850 RPM		

FINANCIAL OVERVIEW

Sr. No.	Financial Parameters	Value	Unit
1.	Plant Cost 1. Solar Panels 2. MPPT pump controller 3. Mounting Structure (GI) 4. Cables 5. Misc. BOS	1 HP :1,20,000/- 2 HP :1,95,000/- 3 HP :2,37,500/- 5 HP :3,32,250 /- 7.5 HP :5,93,750/-	INR
2.	Total saving up to 5 years (Diesel cost/electric cost for 12 hrs.)	Diesel-2,50,000 /- PER HP	INR
3.	Maintenance of inverter after 4 years	1% of your actual plant cost	
4.	Life of solar power plant	25 years	
5.	<u>WARRANTY</u> 1. Solar panel 2. Solar pump 3. Solar pump controller	25 years (output 80%) 1 years 1 years	

TERMS AND CONDITION,

PAYMENT – 50 % ADVANCED AND 50 % AGAINST DELIVERY
GST – 5% EXTRA
TRANSPORT – EXTRA AT ACTUAL

PUMP DISCHARGE PIPE AND CABLE NOT INCLUDED IN PRICING