

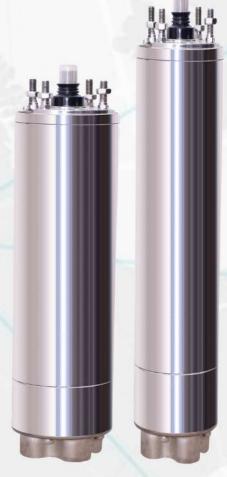
# WORLD OF SOLAR PUMP SETS





### **SOLARTIVE HIGHLY EFFICIENT AC & DC MOTORS:**

SUBMERSIBLE MOTOR DETAILS							
MOTOR TYPE	COOLING TYPE	MOTOR RATING	VOLTAGE RATING	THRUST CAPACITY IN KN			
AC-V4	O/F	1110	65				
DC-V4	O/F	1HP	65				
DC-V4		1HP	72				
DC-V4	W/F	2HP	135	1			
DC-V4		ЗНР	220	8.2			
DC-V4	. "1	5HP	350				
		2HP	130				
AC - V4	W/F	3НР	205				
	L.	5HP	340				
		5HP	340				
		7.5HP	300				
AC - V6	W/F	10HP	340				
		15HP	380	15			
		7.5HP	300				
DC - V6	W/F	10HP	340	]			
		15HP	380				





MAKE	HP	D	N	Р	С	М	Н	Α	E	Х	TL	В
	1	96.5	87.2	40	10	15.75	38.1	42.8	52.8	238	247	87.75
D.C	2	96.5	87.2	40	10	15.75	38.1	42.8	52.8	268	277	87.75
DC	3	96.5	87.2	40	10	15.75	38.1	42.8	52.8	298	307	87.75
	5	96.5	87.2	40	10	15.75	38.1	42.8	52.8	358	367	87.75
	2	96.5	87.2	40	10	15.75	38.1	42.8	52.8	440	449	87.75
AC	3	96.5	87.2	40	10	15.75	38.1	42.8	52.8	515	524	87.75
	5	96.5	87.2	40	10	15.75	38.1	42.8	52.8	640	649	87.75

MAKE	HP	D	N	Р	С	М	Н	Α	Е	Х	TL	В
	5	143	76.2	51	10	25	72.8	80.8	90.8	379	391	115.4
4.0	7.5	143	76.2	51	10	25	72.8	80.8	90.8	429	441	115.4
AC	10	143	76.2	51	10	25	72.8	80.8	90.8	464	476	115.4
	15	143	76.2	51	10	25	72.8	80.8	90.8	539	551	115.4
	7.5	143	76.2	51	10	25	72.8	80.8	90.8	300	312	115.4
DC	10	143	76.2	51	10	25	72.8	80.8	90.8	320	332	115.4
	15	143	76.2	51	10	25	72.8	80.8	90.8	350	362	115.4



### **SOLARTIVE SUBMERSIBLE SOLAR PUMP FAMILY**

SC	SOLARTIVE SUBMERSIBLE DC SOLAR PUMP FAMILY							
S. NO	MODEL NUMBER	HEAD IN 'M"	POWER IN HP	DISHARGE IN "LPD"				
1	1 S DC S 30	30	1	45600				
2	2 S DC S 30	30	2	68400				
3	3 S DC S 30	30	3	114000				
4	3 S DC S 50	50	3	69000				
5	3 S DC S 70	70	3	45000				
6	5 S DC S 50	50	5	110400				
7	5 S DC S 70	70	5	72000				
8	5 S DC S 100	100	5	50400				
9	7.5 S DC S 50	50	7.5	155250				
10	7.5 S DC S 70	70	7.5	101250				
11	7.5 S DC S 100	100	7.5	70875				
12	10 S DC S 50	50	10	207000				
13	10 S DC S 70	70	10	135000				
14	10 S DC S 100	100	10	94500				

sc	SOLARTIVE SUBMERSIBLE AC SOLAR PUMP FAMILY						
S. NO	MODEL NUMBER	HEAD IN 'M"	POWER IN HP	DISHARGE IN "LPD"			
1	1 S AC S 30	30	1	42000			
2	2 S AC S 30	30	2	63000			
3	3 S AC S 30	30	3	105000			
4	3 S AC S 50	50	3	63000			
5	3 S AC S 70	70	3	42000			
6	5 S AC S 50	50	5	100800			
7	5 S AC S 70	70	5	67200			
8	5 S AC S 100	100	5	43200			
9	7.5 S AC S 50	50	7.5	141750			
10	7.5 S AC S 70	70	7.5	94500			
11	7.5 S AC S 100	100	7.5	60750			
12	10 S AC S 50	50	10	189000			
13	10 S AC S 70	70	10	126000			
14	10 S AC S 100	100	10	81000			

### **SOLAR SUBMERSIBLE PUMPING SYSTEM**

******	CONSTRUCTION TYPE			
COMPONENT	STANDARD WATER WELL			
Castings	304 SS Over Iron			
Stator Shell	304 SS			
Shaft Extension	304 SS			
Fasteners	304 SS or 302 SS			
Seal Cover	304 SS			
Seal	Nitrile Rubber Lip			
Diaphragm	NBR			
Slinger	NBR			
Lead Wire (or Cable)	XLPE			
Lead Potting	Ероху			
Lead Jam Nut	304SS			





### **SOLARTIVE SURFACE SOLAR PUMP FAMILY**

ì	SOLARTIVE DC SURFACE SOLAR PUMP FAMILY						
S. NO	MODEL NUMBER	HEAD IN 'M"	POWER IN HP	DISHARGE IN "LPD"			
1	1 S DC M 10	10	1	99000			
2	2 S DC M 10	10	2	198000			
3	3 S DC M 10	10	3	297000			
4	3 S DC M 20	20	3	148500			
5	3 S DC M 10	10	5	528000			
6	5 S DC M 20	20	5	264000			
7	5 S DC M 30	30	5	182400			
8	5 S DC M 10	10	7.5	742500			
9	7.5 S DC M 20	20	7.5	371250			
10	7.5 S DC M 30	30	7.5	256500			
11	7.5 S DC M 10	10	10	990000			
12	10 S DC M 20	20	10	495000			
13	10 S DC M 30	30	10	342000			

	SOLARTIVE AC SURFACE SOLAR PUMP FAMILY							
S. NO	MODEL NUMBER	HEAD IN 'M"	POWER IN HP	DISHARGE IN "LPD"				
1	1 S AC M 10	10	1	89100				
2	2 S AC M 10	10	2	178200				
3	3 S AC M 10	10	3	267300				
4	3 S AC M 20	20	3	132300				
5	3 S AC M 10	10	5	475200				
6	5 S AC M 20	20	5	235200				
7	5 S AC M 30	30	5	168000				
8	7.5 S AC M 10	10	7.5	641025				
9	7.5 S AC M 20	20	7.5	330750				
10	7.5 S AC M 30	30	7.5	236250				
11	10 S AC M 10	10	10	890000				
12	10 S AC M 20	20	10	441000				
13	10 S AC M 30	30	10	324000				





### **SOLARTIVE SOLAR PUMP DRIVES**

#### **FEATURES**

- ► High-cost performance, pump more water with less cost.
- ▶ Perfect drive synchronous, asynchronous, BLDC, single phase.
- Small and exquisite, palm-sized, saving installation space, and transportation costs.
- ➤ Simple and stylish Aesthetic appearance, integrating technology and art.
- ➤ Intelligent IOT, which integrates online, offline, and WIFI functions.
- ►MPPT, real-time output maximum power.
- Simple operation, easy wiring, no trouble.
- ➤ Multiple protection functions escort the water pump.

### POWERFUL SOFTWARE FUNCTION TO ESCORT THE WATER PUMP

- ► MPPT>99%: Adjust the output frequency according to the sunlight intensity, and get the maximum point in real time.
- ➤ Special protection functions for the photovoltaic pumps: sleep, low frequency, dry, overcurrent, minimum power, etc. to ensure safe and reliable operation of the pump.

#### **SMART IOT, SMART IRRIGATION**

- ► It integrates online, offline, and WIFI functions and WIFI self-organizing networks can be used in areas without network.
- It supports a wide range of frequency bands and can be used in any area of the world.
- ▶ A powerful Internet management platform can control water and fertilizer requirements anytime and anywhere.



#### CONTROLLER TECHNICAL SPECIFICATION

ITEMS		SPECIFICATION				
		1HP: 100 TO 180 VDC; 50/60 HZ				
NPUT POWER SUPPLY		2HP : 160 TO 280 VDC ; 50/60 HZ				
	VOLTAGE, FREQUENCY	3HP: 250 TO 450 VDC; 50/60 HZ				
		SHP: 450 TO 750 VDC; 50/60 HZ				
		1HP:100 VDC TO 180 VDC				
SOPPLI	TOTAL VOC RANGE OF	2HP:160VDC TO 280 VDC				
	RECOMMENDED PANEL	3HP; 230 VDC TO 450VDC				
		SHP: 480 VDC TO 750VDC				
	VFD EFFICIENCY	1HP- 96% , 2 HP- 97%, 3HP-97% & 5HP-97%				
	MPPT EFFICIENCY	99%				
	DETT STEEDS	1HP: 0 - 100 V				
		2HP: 0 - 160 V				
	OUTPUT VOLTAGE RANGE	3HP: 0 - 250 V				
ОИТРИТ						
		5HP: 0 - 450 V				
	OUTPUT FREQUENCY RANGE	0 TO 200 HZ ( DC )				
		0 TO 60 HZ (AC)				
	OVER LOAD CAPACITY	150% OF RATED CURRENT FOR 1 MINUTE, 180% OF RATE CURRENT FOR 10SECONDS , 200% OF RATED CURRENT FOR 0.5 SECONDS				
	SOLAR PUMP PROTECTION	DRY RUN, LOW FREQUENCY, LOW POWER, WATER FULL, LOW CURRENT, TEMPERATURE PROTECTION, DORMANCY FUNCTION				
	IOT FUCTION	SUPPORT PLUG AND PLAY IOT MODULE				
	TH/TL	FULL WATER DETECTION ALARM & FULL WATER DETECTION RESET				
	AUXILLARY POWER	12-24 VDC; MAXIMUM OUTPUT CURRENT - 0.2 TO 0.8 AMP				
	WATER PUMP TYPE	3 PHASE AC PUMP, 3 PHASE DC PMSM PUMP, BLDC (AC/DC)				
BASIC FUNCTION	BASIC PROTECTION	OVERVOLTAGE, UNDER VOLTAGE, OVERLOAD, OVER HEAT, SHORT CIRCUIT GROUNDING, OUTPUT PHASE LOSS				
	MOTOR GROUNDING SHORT CIRCUIT DETECTION	AUTOMATICALLY DETECT WHETHER THE MOTOR IS SHORT- CIRCUITED TO GROUND, AUTO DETECTION WHILE ELECTRIFY				
	COMMUNCATION NETWORK	SUPPORT 485				
	REMOTE AND MONITRING UNCTION	SUPPORT REMOTE PROGRAM UPGRADE, REMOTR MONITREING & REMOTE ON/OFF FUNCTION, CAN BE CONNECTED TO SOLARTIVE GPRS MODULE				
	INSTALLATION SITE	INDOOR, OUTDOOR AND DIRECT SUNLIGHT				
	TEMPERATURE, HUMIDITY	0 TO 50 DEGREE , 20% TO 95% RH				
ENVIRONMENT	INSTALLATION MODE	HANGING MACHINE				
	INGRESS MODE	IP 65				
	COOLING METHOD	NATURAL COOLING (HEAT SINK)				



		ILCI	MEAL	SPECI	FICATION	, I	
	Pum	1P					
Solar Pump Inverter Power (KW)	Rated Powe (KW)	Rated Voltage (V)	Maximum Input Power of Solar panel (KW)	Maximum Input DC	Total Voc range of Recommended Panels(V)	Rated Output Current(A)	Output Frequency Range(Hz)
ST22-F	III Series-α-β	-γ, DC60V-4	00V input, 3P	hase 220-240\	VAC Output, Suita	ble for 220VA	C Pumps
0.745	/1.5/2.2	220	2.86	400	360-430	10A	0-320
ST30	-F V Series-δ	Input 300-8	300VDC, 3 Pha	se230-460VA	C Output, Suitabl	e for AC380V	Pumps
4	4	380	5	800	620-750	10A	0-320
ST23-	F V Series-ε-ζ	-η Input 250	- 780VDC 3 PI	nase230-460V	AC Output Suitab	le for AC380V	/ Pumps
5.5/7.5	5.5/7.5	380	10	780	620-750	17A	0-600
11	11	380	14.3	780	620-750	25A	0-600



1	TEMS	SPECIFICATION
T		ST22 F III:TYPE:60-400VDC/3*240VAC 50/60HZ
	VOLTAGE, FREQUENCY	ST23 F V:TYPE:250-750VDC/3*380VAC 50/60HZ
		ST30 F V:TYPE:300-800VDC/3*380VAC 50/60HZ
		VOLTACE IMBALANCE RATE<3%
POWER SUPPLY INPUT	ALLOWABLE FLUCTUATIONS	FREQUENCY FLUCTUATION +5%
Marcar	1333/3/3/3/3	DISTORTION RATE: CONFIRM TO IEC 61800-2
	VFD EFFICIENCY	ST22 F III ≥96%, ST23 F V ≥96%, ST30 F V ≥97%
1	VINCENS IN ACCOUNT OF THE TA	ST22 F III TYPE 130-430VDC
1	TOTAL VOC RANGE (V) OF RECOMMENDED PANELS	ST23 F V TYPE 620-750VDC
		ST30 F V TYPE 620-750VDC
	MPPT EFFICIENCY	UP TO 99.9%
		ST22 F III TYPE 0-320HZ
OUTPUT	OUTPUT FREQUENCY RANGE	ST23 F V TYPE 0-600HZ
	RANGE	ST30 F V TYPE 0-320HZ
	OVERLOAD CAPACITY	150% OF RATED CURRENT FOR 1 MINUTE; 180% OF RATED CURRENT FOR 10 SECONDS: 200% OF RATED CURRENT FOR 0.5 SECONDS
	SOLAR PUMP PROTECTION FUNCTION	DRY RUN, LOW FREQUENCY LOW POWER, DORMANCY WATER FULL, PUMP OVER CURRENT PROTECTION
	PROTECTION	BUS OVERVOLTAGE UNDER VOLTAGE. INVERTER OVER CURRENT MODULE FAULT, INVERTER OVERLOAD MOTOR OVERLOAD CURRENT DETECTION ZERO DRIFT FAULT, HALL FAULT, EZRCM FAULT, MOTOR GROUNDING SHORT CIRCUIT FAULT INPUT PHASE LOSS, OUTPUT PHASE LOSS, INVERTER OVERHEAT COMMUNICATION FAULT MOTOR PARAMETER SELF-TUNING FAULT
	IOT FUNCTION	SUPPORT SOLARTIVE CLOUD SERVICE SCAN CODE TO CONNECT APP KEYBOARD
PROTECTION FUNCTION	WATER PUMP TYPE	THREE-PHASE AC AM PUMP, THREE-PHASE AC PMSM PUMP, BLDC SINGLE-PHASE WATER PUMP
	MULTI FUNCTION INPUT	SUPPORTS 4 WAY X INPUT
	ANALOG INPUT	SUPPORT 2 ANALOG ALL INPUT CAN CHOOSE 0-10V/0-20MA
	MOTOR GROUNDING SHORT-CIRCUIT DETECTION	AUTOMATICALLY DETECT WHETHER THE MOTOR IS SHORT-CIRCUIT TO GROUND. AUTO DETECTION WHILE ELECTRIFY
	SERVO CONTROL	ST23 F V TYPE SUPPORT SYNCHRONOUS AND ASYNCHRONOUS SERVO CONTROL PERFORM PULSE TRACKING ZERO SERVO, INDEXING POSITIONING AND OTHE BASIC SERVO FUNCTIONS, AND SUPPORT THE ORTHOGONAL PULSE GIVEN
	COMMUNICATION NETWORK	SUPPORT 485 / MODBUS PROTOCOL CANOPEN PROTOCOL AND PROFIBUS-DP PROTOCOL; SUPPORT MODBUS FREE PROTOCOL AND CAN CUSTOMIZE PROTOCOL AND REALIZE THE NETWORK LINKAGE CONTROL AMONG SOLARTIVE INVERTERS;
	REMOTE AND MONITORING FUNCTIONS	SUPPORT REMOTE PROGRAM UPGRADE REMOTE MONITORING AND REMOTE LOCK FUNCTION CAN BE CONNECTED TO SOLARTIVE GPRS MODULE SUPPORT SOLARTIVE VIRTUAL OSCILLOSCOPE MONITORING AND DEBUGGING
	INSTALLATION SITE	INDOOR. ALTITUDE LESS THAN 1000M, FREE CORROSIVE GASES AND DIRECT SUNLIGHT
	TEMPERATURE HUMIDITY	(-10 TO ~ 60°C) , 20% TO 95% RH (NO CONDENSATION)
	VIBRATION	LESS THAN 0.5C WHEN FREQUENCY LESS THAN 20HZ
	STORAGE TEMPERATURE	-20-60°C
ENVIRONMENT	INSTALLATION MODE	HANGING MACHINE
	INGRESS PROTECTION	ST22 F III TYPE: IP55; ST23 F V TYPE: IP55; ST30 F V TYPE: IP65
	COOLING METHOD	NATURAL COOLING/FORCED AIR COOLING
	COOLING METHOD	NATURAL COOLING/FORCED AIR COOLING
INTERNATIONAL	CE	



#### RMS TECHNICAL SPECIFICATION

➤ Usage/Application: Solar Pump.

➤ Brand: Solartive.

➤Origin: Made in India.

▶Input Voltage: 10 to 30V DC.

► Technology: 2G (900/1800MHz)/ 4G GSM module, LTE category 4 module optimized for M2M and IoT applications, Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage.

►GNSS: GPS Supported.

➤ SIM Type and GNSS: 3V and 1.8V- Micro SIM-Card and GPS Supported.

► Antenna: High dBi Flexible Sticker Antenna LTE + High dBi Flexible Sticker Antenna for GPS.

➤ Communication Channel: RS-485 with Transient Voltage Protection.

➤ Communication Type: Modbus-Master- RTU

▶Bluetooth: BLE 5.0 Supported.

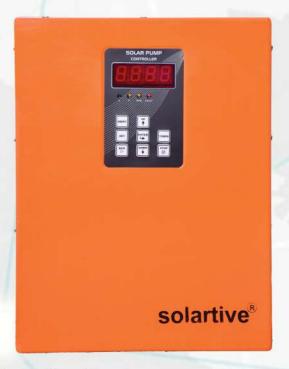
➤ Digital Input: 2 Channel Potential Inputs.

➤ Analog Input: 2 Channel - Current: 2 to 20mA.

▶ Display: 16 2 Alpha Numeric Display.

▶ Applications: Web-Portal and Android Application for monitoring and handling the pump.

► Memory: Internal memory for Offline Storage in the RMS that can be retrieve through the SD card.



## SOLARTIVE RMS APPLICATION



Customers choose Solartive Solar Pumps because of the advanced system features that are available via Solartive Web and Android applications.

All our partners and customers can now benefit from our Web Portal and Android Applications that can easily download from Google Play Store.

Our Solar Water Pumps are integrated with Remote Monitoring System, due to which they are easy to configure, provide rich information to technicians and customers plus they can be managed remotely.

Solartive has in-house Solar Pump RMS solution (Web and Android Applications) with 2G and 4G communication as per MNRE (Ministry of New and Renewable Energy) guidelines and all features covered as per EESL (Energy Efficiency Services Limited) which allows users and Government to monitor all data regarding Solar power generation, consumption, pump run time, pump water supply in LPM and if any fault occurs, it will instantly give alert through SMS / Call and give data on the cloud of any analysis. This gateway can enhance your pump-drive to monitor remotely. Interactive web portal represents previous and aggregated data, comparative analytical diagnosis and a guided root cause for fault analysis. All data are logged and can be securely reviewed and analyzed at any time from any location of the pump. User can also switch ON/OFF and schedule its timing if there is a limited water requirement on a specific location so that wastage can be avoided.



#### **About Us**

We Solartive Techno Industries, to be known for expertise manufacturing of the Solar pump sets, which includes – Submersible/ mono block pumps, with broad range of highly efficient DC Surface & Submersible motors, and Solar Drives. Everything we do is about you from the designers who created new pumping design to the manufacturing team who knew your requirement – We prioritize what you need to get you on your way. We strive to keep you at your best, and we remain loyal to you, your requirement and time, that's what India runs on. Bridging the Pumping requirement of the Farmers (Customers) and the free available energy, we bring out the best application of the Sun's energy for the fruitful outcomes for the society. We believe business can grow with the conscience and succeeded with a soul \_ that can do it with inbound. We are Research based Organization hence, we can provide customize solutions to your pumping Requirements.

Our story started with the Establishment as a proprietorship firm in 2007, later **Our Directors founded** "Solartive Techno Industries Pvt Ltd". In his Strategical Direction & observation sooner, our Company Merges with proprietorship firm and to be Known as "Solartive Techno Industries Pvt Ltd".

#### **Our Capacity**

Solartive Techno Industries Pvt Ltd have manufacturing capacity of around 5000 pumps /Month of different kinds with the overall manufacturing area of over 18000 sq. ft at Greater Noida as the center of reach to all directions of the country .The organization equipped with the world class testing facility for the testing of the solar pump sets . With the highly skilled & Qualified strength of 150+ Employees the organization is determined to produce Highly



#### **ADDRESS:**

Solartive Techno Industries Pvt. Ltd.

MANUFACTURING PLANT: K 312, SITE 5, KASNA INDUSTRIAL AREA GREATER NOIDA,(INDIA)- 201310

FABRICATION PLANT: PLOT NO. 758, KHATA NO. 189 SAPAROM NAGRI, RANCHI-825303