

# Company Profile

### **About Us**

Tracksun Solar Pvt. Ltd is an eminent manufacturer, supplier and exporter of Solar PV Modules, Solar power plants, Solar street lighting systems, Solar charge controller, Solar inverter, Solar fan, Solar LED lantern & many other solar products. Tracksun Solar Pvt. Ltd are also engaged in design, consultancy, integration, supply, installation, commissioning & maintenance off- grid and grid connected Solar Power Plants. This company has one of the largest sales /installation networks in India backed by an experienced team of design and integration experts. Our system are designed and integrated as per guidelines of Ministry of New and Renewable Energy (MNRE), Govt. of India and come with sufficient warranty and quality assurance. These products are designed to meet diversified needs ranging from rural areas to metro cities and require minimum maintenance. Further there are no recurring expenses. Our products are also approved under MNRE, which enables us to supply directly to the Government Departments. We take pride in being able to provide the best quality solar systems at the most affordable prices. This is possible because our technical breakthroughs and constant R&D have increased system efficiency and performance.

The cornerstone of Tracksun Solar Pvt Ltd. functioning is a belief that an efficient delivery of material and service is based on commercial vision and farsightness, effectively capitalizing the deep expertise and practical knowledge that specialization bring with it. The benefit that a client derives from Tracksun Solar Pvt. Ltd.'s involvement in each assignment comes from our-

- Strong business orientation and presence in all states of India market.
- Breadth and depth of our service suite.
- Commitment to finding solutions of complex solar requirements.
- Investing in people and relationships with strong process/ business skills.
- Working closely and collaboratively with clients in aligning analysis to their specific needs.
- In house professional skills and specialist skills.
- Assistance in identifying, managing and controlling any existing and future changes.
- Proactive rather than a monitoring approach.

### Vision

Everyone can use renewable solar energy for power generation conveniently, making the life

#### **Core Values**

Innovative valuable customer-oriented

### **Mission**

Focus on the application requirement for the solar energy in the world; take customer's requirement; Provide innovative and cost effective solar products and systems.

### **Quality & Integrity**

We are committed to excellence in the results we achieve and in how we achieve them. We do what is right or our clients, our people, our suppliers, our business partners, the community and ourselves. We live and act by impartibility and pride.

### **Our Core Business Area in Solar**

- Solar PV Modules, Monocrystalline / Multicrystalline (3 Wp to 300 Wp).
- Solar products.

















# Ondex

Page No.:	Table of contents:
4-9	Solar PV module
10-11	Solar power plants
12	Solar street light
13	Solar home lighting
14	Solar charge controller
15	Solar inverter
16	Solar lantern
17	Solar fan
18	Solar cooler
19	Solar water heater
20	Solar madhani
20	Solar water pumps
21	Solar garden lights
22	Solar road studs

















## Solar PV Module

### Reliable Quality

- Positive power tolerance: 0 ±5W
- High transparent tempered glass.
- Waterproof junction box.
- 100% double-inspection ensures modules are non defective product.
- Modules binned by current to improve system performance.
- Potential induced degradation (PID) free.

### Key features:

- Solar modules design for residential and utility applications, rooftop or ground mount.
- The latest module manufacturing technology, high power output and highest conversion efficiency.
- Anti reflective and self cleaning surface reduce power loss from dirt & dust.
- Outstanding performance in low light irradiance environments.
- Excellent mechanical load resistance.

### Superior Warranty

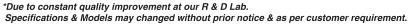
- 10 years limited warranty on 90% power output.
- Remaining 15 years limited warranty on 80% power output.

### Comprehensive Certificates

- MNRE Approved.
- ISO 9001 : 2008 : Quality management system
- ISO 14001: 2004: Environmental management system
- CE compliance certificate
- RoHS Compliance

























## Solar PV Module

At Tracksun solar, we produce high- quality and high-efficiency Multi-crystalline photovoltaic modules. The multi crystalline power series of solar modules range from 3Wp to 300Wp in power output. Our solar modules are clean, environmentally friendly and meet with our customers and end -users requirements. Adapting our products range to meet market demands allow us to provide our customers with a broader range of on-grid and off- grid solutions for residential, commercial, industrial and utility scale applications around the world.

Our PV modules are formed by interconnecting multiple PV cells and the desired electrical configurations through taping and stringing. The interconnected cells are laid out and laminated in a vacuum and then go through a curing or heating process . Through these processes our PV modules are sealed and become weatherproof and are able to withstand high levels of ultraviolet radiations and moisture. Assembled PV modules are packed in a protective screwless aluminium frame prior to testing.

Mono Crystalline & Multi Crystalline											
Technical Specifications Detail of Module											
Electrical characteristics	TS5W/6V	TS10W/12V	TS15W/12V	TS18W/12V	TS20W/12V	TS25W/12V	TS30W/12V	TS37W/12V	TS40W/12V	TS45W/12V	
Maximum power at STC(P Max)	5	10	15	18	20	25	30	37	40	45	
Voc (open circuit voltage) in volts	9.01	22.1	21.6	21.74	21.6	21.6	21.6	21.6	21.6	21.6	
Isc (Short-circuit current) in Amps	0.63	0.64	0.96	1.20	1.42	1.69	2.05	2.49	2.71	3.19	
Vmp (Maximum voltage) in volts	9.05	17.28	17.5	17.8	17	17	17	17	17	16	
Imp (current at maximum power)	0.59	0.59	0.86	1.10	1.31	1.58	1.90	2.34	2.51	3	
Maximum system voltage	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	600 VDC	
				Phy	sical Parameter	S					
Cells per module	18	36	36	36	36	36	36	36	36	36	
Dimensions (*W*L*T) in mm	195*285*22	245*285*22	345*400*26	345*525*26	345*560*26	345*665*35	345*760*35	345*890*35	665*540*35	665*650*35	
Weight approx. Kg.	1	1.6	2.1	2.1	2.8	3	3.6	4.3	4.3	4.9	
Front glass (thickness) in mm				3.2 mm	Tempered Lov	v Iron					
Frame			ıA.	nodized Alumir	nium Frame ( [	Oouble Walled)	)				
Junction box	2-Terminal	2-Terminal	2-Terminal	2-Terminal	2-Terminal	2-Terminal	2-Terminal	2-Terminal	3-Terminal	3-Terminal	
	Detail of Module										
Electrical characteristics	TS50W/12V	TS74W/12V	TS100W/12V	TS120W/12V	TS150W/12V	TS150W/24V	TS200W/12V	TS 200W/24V	TS 250W/12V	TS 250W/24V	TS 300W/24V
Maximum power at STC(P Max)	50	74	100	120	150	150	200	200	250	250	300
Voc (open circuit voltage) in volts	21.6	21.6	21.6	21.6	21.6	44.72	21.6	44.16	21.6	44.17	44.59
Isc (Short-circuit current) in Amps	3.39	4.66	6.60	8.22	8.63	4.3	12.64	6.40	14.96	7.76	9.14
Vmp (Maximum voltage) in volts	16.1	17.4	17.4	17.4	18.5	35	17.4	35	17.4	35.22	35.31
Imp (current at maximum power)	3.2	4.30	6.20	7.4	8.2	4.07	12	6	14.45	7.19	8.46
Maximum system voltage	1000VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC
				Phy	sical Parameter	S			_		
Cells per module	36	36	36	36	36	72	72	72	72	72	72
Dimensions( W*L*T*) in mm	665*650*35	665*936*35	665*1242*35	665*1270*35	990*1020*35	990*1020*35	990*1430*42	990*1430*42	990*1815*42	990*1815*42	990*2010*42
Weight approx Kg.	5.7	7.9	9.8	12.4	15.9	16	16.5	20	22	22	27
Front glass (thickness) in mm				3.2 mm	Tempered Lov	v Iron					
Frame Anodized Aluminium Frame ( Double Walled)											
Solar Cells				Poly crys	talline 156 X 1	56 mm					
Junction box	3-Terminal	3-Terminal	3-Terminal	3-Terminal	3-Terminal	4-Terminal	4-Terminal	4-Terminal	4-Terminal	4-Terminal	4-Terminal
	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated	IP-65 rated
Module Range	3 watt to 300 watt ( 6v, 12v, 18v, 20v,24v)										
Cell efficiency	15.6% to17.5%										
Encapsulation	Glass, EVA, Cell, Tedalar										

<sup>\*</sup>Due to constant quality improvement at our R & D Lab.

Specifications & Models may changed without prior notice & as per customer requirement.













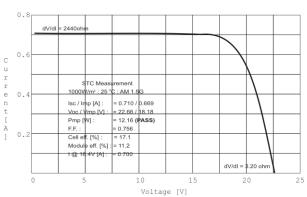




### TS-10W/12V • Multi Crystalline Silicon Solar Panel

Electrical Characteristics	
Related maximum power at STC	10W
Maximum power voltage (Vmp)	18.18V
Maximum power current (Imp)	0.669A
Open circuit voltage (Voc)	22.66V
Short circuit current (Isc)	0.710A
Cell efficiency	17.1%
Mechanical Characteristics	
Cell Area (sq. cm)	19.76
Module Area (sq. cm)	1090.20
Quantity of Cell (pcs)	36



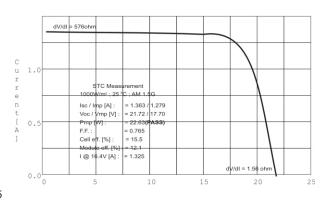




## TS-18W/12V • Multi Crystalline Silicon Sol

Electrical Characteristics	
Related maximum power at STC	18W
Maximum power voltage (Vmp)	17.7V
Maximum power current (Imp)	1.279A
Open circuit voltage (Voc)	21.72V
Short circuit current (Isc)	1.363A
Cell efficiency	15.5%
Mechanical Characteristics	
Cell Area (sq. cm)	40.56
Module Area (sq. cm)	1863.0
Quantity of Cell (pcs)	36

STC : Irradiance  $1000W/m^2$ , Module temperature  $25^{\circ}c$  AM = 1.5





<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.











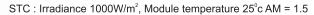


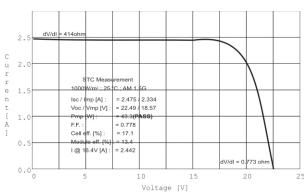




### TS-40W/12V • Multi Crystalline Silicon Solar Panel

Electrical Characteristics	
Related maximum power at STC	40W
Maximum power voltage (Vmp)	18.57V
Maximum power current (Imp)	2.334A
Open circuit voltage (Voc)	22.49V
Short circuit current (Isc)	2.475A
Cell efficiency	17.1%
Mechanical Characteristics	
Cell Area (sq. cm)	70.20
Module Area (sq. cm)	3000.18
Quantity of Cell (pcs)	36



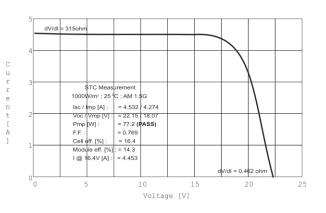




## TS-74W/12V • Multi Crystalline Silicon So

Electrical Characteristics	
Related maximum power at STC	74W
Maximum power voltage (Vmp)	18.07V
Maximum power current (Imp)	4.274A
Open circuit voltage (Voc)	22.15V
Short circuit current (Isc)	4.532A
Cell efficiency	16.4%
Mechanical Characteristics	
Cell Area (sq. cm)	131.04
Module Area (sq. cm)	5401.92
Quantity of Cell (pcs)	36

STC : Irradiance  $1000W/m^2$ , Module temperature  $25^{\circ}c$  AM = 1.5





<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.











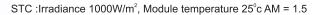


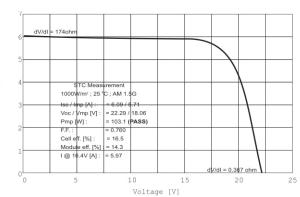




### TS-100W/12V • Multi Crystalline Silicon Solar Panel

Electrical Characteristics	
Related maximum power at STC	100W
Maximum power voltage (Vmp)	18.06V
Maximum power current (Imp)	5.71A
Open circuit voltage (Voc)	22.29V
Short circuit current (Isc)	6.09A
Cell efficiency	16.5%
<b>Mechanical Characteristics</b>	
Cell Area (sq. cm)	173.16
Module Area (sq. cm)	7233.60
Quantity of Cell (pcs)	36



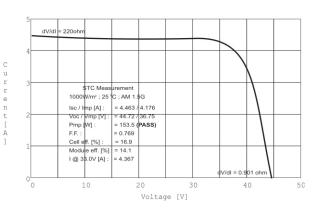




## TS-150W/24V • Multi Crystalline Silicon

Electrical Characteristics	
Related maximum power at STC	150W
Maximum power voltage (Vmp)	36.75V
Maximum power current (Imp)	4.176A
Open circuit voltage (Voc)	44.72V
Short circuit current (Isc)	4.463A
Cell efficiency	16.9%
Mechanical Characteristics	
Cell Area (sq. cm)	126.36
Module Area (sq. cm)	10860.92
Quantity of Cell (pcs)	72

STC : Irradiance 1000W/m², Module temperature 25°c AM = 1.5





<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.













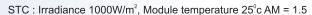


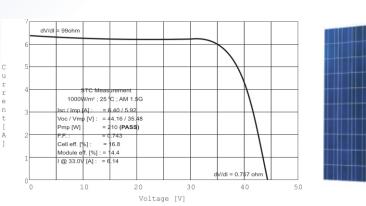
### TS-200W/24V • Multi Crystalline Silicon Solar Panel



MNRE	&	ISO	Certified	Cor	npany	,
			77		2777	

Electrical Characteristics	
Related maximum power at STC	200W
Maximum power voltage (Vmp)	35.48V
Maximum power current (Imp)	5.92A
Open circuit voltage (Voc)	44.16V
Short circuit current (Isc)	6.40A
Cell efficiency	16.8%
Mechanical Characteristics	•
Cell Area (sq. cm)	173.16
Module Area (sq. cm)	14612.16
Quantity of Cell (pcs)	72

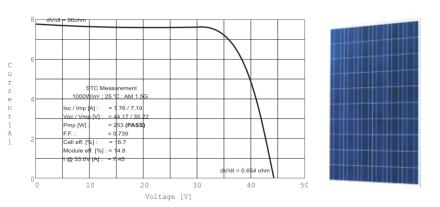




## TS-250W/24V • Multi Crystalline Silicon

Electrical Characteristics	
Related maximum power at STC	250W
Maximum power voltage (Vmp)	35.22V
Maximum power current (Imp)	7.19A
Open circuit voltage (Voc)	44.17V
Short circuit current (Isc)	7.76A
Cell efficiency	16.7%
Mechanical Characteristics	
Cell Area (sq. cm)	210.60
Module Area (sq. cm)	17175.36
Quantity of Cell (pcs)	72

STC : Irradiance 1000W/m², Module temperature 25°c AM = 1.5



# $TS\text{--}300W/24V \quad \bullet \text{ Multi Crystalline Silicon}$

Electrical Characteristics	
Related maximum power at STC	300W
Maximum power voltage (Vmp)	35.31V
Maximum power current (Imp)	8.46A
Open circuit voltage (Voc)	44.59V
Short circuit current (Isc)	9.14A
Cell efficiency	17.1%
Mechanical Characteristics	
Cell Area (sq. cm)	243.36
Module Area (sq. cm)	19217.74
Quantity of Cell (pcs)	72

STC: Irradiance 1000W/m<sup>2</sup>, Module temperature 25°c AM = 1.5

<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.















dV/dI = 76ohm Isc / Imp [A] : Voc / Vmp [V] : Pmp [W] : F.F. : = 9.14 / 8.46 = 44.59 / 35.31 = 299 (PASS) = 0.734 I@ 33.0V [A]: = 8.82



## **Solar Power Plant**

**Solar power plant** is based on the conversion of sunlight into electricity, either directly using photovoltaic(PV) and tracking systems to focus a large area of sunlight into a small beam. Photovoltaic converts light into electric current using the photoelectric effect. The term **off-grid** refers to not being connected to a grid, mainly used in terms of not being connected to the main or national electrical grid. In electricity, off-grid can be stand-alone systems (SHS) or mini-grids typically to provide a smaller community with electricity. Off-grid electrification is an approach to access electricity used in countries and areas with little access to electricity, due to scattered or distant population. In situations where grid parity has been reached, it becomes cheaper to generate one's own electricity rather than purchasing it from the grid. We have installed off-grid solar power generating systems ranging from 1KW to 150 KW. Tracksun Solar Pvt. Ltd. Off-grid Power Plants are not only green but also economical. It is the best outlay opposed to escalating fuel and grid charges.

#### 1 KILOWATT

ELECTRICAL LOAD	QNTY	POWER (IN WATTS)	TOTAL (IN WATTS)
Fan	4	100	400
Light	6	40	240
TV	1	100	100
Computer / Laptop	1	100	100
Water Purifier	1	40	40



ELECTRICAL LOAD	QNTY	POWER (IN WATTS)	TOTAL (IN WATTS)
Fan	4	100	400
Light	6	40	240
Refrigerator	1	250	250
Computer / Laptop	1	100	100
Water Purifier	1	40	40
Washing Machine	1	800	800



ELECTRICAL LOAD	QNTY	POWER (IN WATTS)	TOTAL (IN WATTS)
Fan	4	100	400
Light	6	40	240
Microwave oven	1	1800	1800
Mixer / Grinder	1	500	500
Refrigerator	1	250	250
Water Purifier	1	40	40

Note: Alternately you may use other small power equipments





<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.

















## **Solar Power Plant**

### Features:

- Single phase / three phase pure sine wave AC output
- Hybrid system for uninterrupted power supply
- Remote monitoring system
- Roof top / ground mountable

### **Application Areas:**

- Rural Hamlets
- Hospital
- Bungalows
- Educational Institutions
- Govt. Offices
- Commercial Establishments
- Petrol Pumps
- Construction Companies
- Workshops
- R & D Labs.
- Water pumps
- Community Centers

Power	PARAMETERS			SPE	CIFICATIO	NS		
Charge Controller  PWM / MPPT  24V DC  48V DC  96V DC  BATTERY Voltage Type of Battery  SMF / LEAD ACID / TUBULAR  OUTPUT Power Capacity Load Power Factor Voltage / Frequency Voltage / Frequency Voltage Distortion Grid Tracking  Voltage / Frequency Over Load Peak Efficiency  Voltage / Frequency Over Load Peak Efficiency  Voltage / Frequency Over Load Peak Efficiency  Operating Modes Environmental Operating Temp. Storage Temperature Final Agents Acoustics Noise  Voltage / Stand alone & Offline Final Agents Acoustics Noise  Voltage / Stand alone & Offline Final Agents Acoustics Noise  Voltage / Stand Alone & Offlin	Power	1 KW	2 KW	3 KW	4 KW	5 KW	7 KW	10 KW
24V DC 48V DC 96V DC  BATTERY Voltage Type of Battery  OUTPUT Power Capacity Load Power Factor Voltage / Frequency Voltage / Frequency Voltage Distortion Grid Tracking  Voltage / Frequency Over Load Peak Efficiency  Output Power Capacity 1KW 2KW 3KW 4KW 5KW 7KW 10KW  1KW 10KW 10KW 10KW 10KW 10KW 10KW 10KW 1	Inverter	1 KVA	2 KVA	3 KVA	4 KVA	5 KVA	7 KVA	10 KVA
BATTERY Voltage Type of Battery  SMF / LEAD ACID / TUBULAR  OUTPUT Power Capacity Load Power Factor  Voltage / Frequency Regulation  Voltage Distortion  Grid Tracking  Voltage / Frequency Over Load Peak Efficiency  Peak Efficiency  Operating Modes Environmental Operating Temp. Storage Temperature Relative Humidity Acoustics Noise  SMF / LEAD ACID / TUBULAR  SMF / LEAD ACID / TUBULAR  SKW	Charge Controller			P	WM / MPP	Ť		
Type of Battery  SMF / LEAD ACID / TUBULAR  OUTPUT Power Capacity  1KW  2KW  3KW  4KW  5KW  7KW  10KW  Load Power Factor  0.8 lag to unit  Voltage / Frequency  230V AC, single phase, 50 Hz  Regulation  +/- 3%  Voltage Distortion  < 5% at linear load  Grid Tracking  110V - 275V, 50Hz (+/- 3Hz)  Voltage / Frequency Over Load  Peak Efficiency  125% for 4minutes and 150% for 1 minutes  between 85% and 91%  Operating Modes  Stand alone & offline  Environmental Operating Temp.  0 degree to 40 degree Celsius  Storage Temperature  -10 degree to 55 degree Celsius  Relative Humidity  Acoustics Noise		24V DC			48V DC		96V	DC
OUTPUT Power Capacity Load Power Factor Voltage / Frequency Regulation Voltage Distortion Grid Tracking  Voltage / Frequency Over Load Peak Efficiency  Operating Modes Environmental Operating Temp. Storage Temperature Relative Humidity Acoustics Noise  1KW  2KW  3KW  4KW  5KW  7KW  10KW	_							
Load Power Factor  Voltage / Frequency  Regulation  Voltage Distortion  Grid Tracking  Voltage / Frequency Over Load  Peak Efficiency  Operating Modes  Environmental Operating Temp.  Storage Temperature  Regulation  O.8 lag to unit  230V AC, single phase, 50 Hz  +/- 3%  Voltage phase, 50 Hz  +/- 3%  Voltage / 5% at linear load  110V - 275V, 50Hz (+/- 3Hz)  125% for 4minutes and 150% for 1 minutes  between 85% and 91%  Stand alone & offline  Environmental Operating Temp.  O degree to 40 degree Celsius  -10 degree to 55 degree Celsius  Relative Humidity  Acoustics Noise  Voltage / Frequency  Acoustics Noise  One and the standard of	Type of Battery			SMF / LE	AD ACID / T	UBULAR		
Load Power Factor  Voltage / Frequency  Regulation  Voltage Distortion  Grid Tracking  Voltage / Frequency Over Load  Peak Efficiency  Operating Modes  Environmental Operating Temp.  Storage Temperature  Regulation  O.8 lag to unit  230V AC, single phase, 50 Hz  +/- 3%  Voltage phase, 50 Hz  +/- 3%  Voltage / 5% at linear load  110V - 275V, 50Hz (+/- 3Hz)  125% for 4minutes and 150% for 1 minutes  between 85% and 91%  Stand alone & offline  Environmental Operating Temp.  O degree to 40 degree Celsius  -10 degree to 55 degree Celsius  Relative Humidity  Acoustics Noise  Voltage / Frequency  Acoustics Noise  One and the standard of								
Load Power Factor  Voltage / Frequency  Regulation  Voltage Distortion  Grid Tracking  Voltage / Frequency Over Load  Peak Efficiency  Operating Modes  Environmental Operating Temp.  Storage Temperature  Regulation  O.8 lag to unit  230V AC, single phase, 50 Hz  +/- 3%  Voltage phase, 50 Hz  +/- 3%  Voltage / 5% at linear load  110V - 275V, 50Hz (+/- 3Hz)  125% for 4minutes and 150% for 1 minutes  between 85% and 91%  Stand alone & offline  Environmental Operating Temp.  O degree to 40 degree Celsius  -10 degree to 55 degree Celsius  Relative Humidity  Acoustics Noise  Voltage / Frequency  Acoustics Noise  One and the standard of								
Load Power Factor  Voltage / Frequency  Regulation  Voltage Distortion  Grid Tracking  Voltage / Frequency Over Load  Peak Efficiency  Operating Modes  Environmental Operating Temp.  Storage Temperature  Regulation  O.8 lag to unit  230V AC, single phase, 50 Hz  +/- 3%  Voltage phase, 50 Hz  +/- 3%  Voltage / 5% at linear load  110V - 275V, 50Hz (+/- 3Hz)  125% for 4minutes and 150% for 1 minutes  between 85% and 91%  Stand alone & offline  Environmental Operating Temp.  O degree to 40 degree Celsius  -10 degree to 55 degree Celsius  Relative Humidity  Acoustics Noise  Voltage / Frequency  Acoustics Noise  One and the standard of	OUTPUT D		01.001	21.024		<b>-</b> 1.011		101011
Voltage / Frequency Regulation +/- 3% Voltage Distortion < 5% at linear load Grid Tracking 110V - 275V, 50Hz (+/- 3Hz)  Voltage / Frequency Over Load Peak Efficiency 125% for 4minutes and 150% for 1 minutes between 85% and 91%  Operating Modes Environmental Operating Temp. O degree to 40 degree Celsius Storage Temperature Felative Humidity Acoustics Noise  230V AC, single phase, 50 Hz  +/- 3%  Storage Temperatore  230V AC, single phase, 50 Hz  40 degree load  25% at linear load  25% for 4 minutes and 150% for 1 minutes  25% and 91%		1KW	2KW		1		7KW	10KW
Regulation +/- 3%  Voltage Distortion < 5% at linear load  Grid Tracking 110V - 275V, 50Hz (+/- 3Hz)  Voltage / Frequency Over Load 125% for 4minutes and 150% for 1 minutes  Peak Efficiency between 85% and 91%  Operating Modes Stand alone & offline  Environmental Operating Temp. 0 degree to 40 degree Celsius  Storage Temperature -10 degree to 55 degree Celsius  Relative Humidity upto 95% RH Non-Condensing  Acoustics Noise <55 DB								
Voltage Distortion < 5% at linear load Grid Tracking 110V - 275V, 50Hz (+/- 3Hz)  Voltage / Frequency Over Load 125% for 4minutes and 150% for 1 minutes Peak Efficiency between 85% and 91%  Operating Modes Stand alone & offline Environmental Operating Temp. 0 degree to 40 degree Celsius Storage Temperature -10 degree to 55 degree Celsius Relative Humidity upto 95% RH Non-Condensing Acoustics Noise <55 DB				230V AC,		se, 50 Hz		
Grid Tracking  110V - 275V, 50Hz (+/- 3Hz)  Voltage / Frequency Over Load  Peak Efficiency  125% for 4minutes and 150% for 1 minutes between 85% and 91%  Operating Modes  Stand alone & offline Environmental Operating Temp.  O degree to 40 degree Celsius Storage Temperature  Relative Humidity  Acoustics Noise  110V - 275V, 50Hz (+/- 3Hz)  125% for 4minutes and 150% for 1 minutes between 85% and 91%  Operating Modes  Stand alone & offline O degree to 40 degree Celsius -10 degree to 55 degree Celsius  Acoustics Noise  <55 DB	_	+/- 3%						
Voltage / Frequency Over Load Peak Efficiency  Detween 85% and 91%  Stand alone & offline Environmental Operating Temp. Storage Temperature Relative Humidity Acoustics Noise  125% for 4minutes and 150% for 1 minutes between 85% and 91%  Stand alone & offline 0 degree to 40 degree Celsius -10 degree to 55 degree Celsius upto 95% RH Non-Condensing <55 DB	Voltage Distortion	< 5% at linear load						
Peak Efficiency  between 85% and 91%  Operating Modes  Environmental Operating Temp.  Storage Temperature  Relative Humidity  Acoustics Noise  between 85% and 91%  Stand alone & offline  0 degree to 40 degree Celsius  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB	Grid Tracking			110V - 2	75V, 50Hz (	(+/- 3Hz)		
Peak Efficiency  between 85% and 91%  Operating Modes  Environmental Operating Temp.  Storage Temperature  Relative Humidity  Acoustics Noise  between 85% and 91%  Stand alone & offline  0 degree to 40 degree Celsius  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB								
Operating Modes  Environmental Operating Temp.  Storage Temperature  Relative Humidity  Acoustics Noise  Stand alone & offline  0 degree to 40 degree Celsius  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB	. ,		125%	6 for 4minu	tes and 150	% for 1 mir	nutes	
Environmental Operating Temp.  Storage Temperature  Relative Humidity  Acoustics Noise  0 degree to 40 degree Celsius  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB	Peak Efficiency			betwe	en 85% and	91%		
Environmental Operating Temp.  Storage Temperature  Relative Humidity  Acoustics Noise  0 degree to 40 degree Celsius  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB								
Storage Temperature  Relative Humidity  Acoustics Noise  -10 degree to 55 degree Celsius  upto 95% RH Non-Condensing  <55 DB	Operating Modes			Stan	d alone & o	ffline		
Relative Humidity upto 95% RH Non-Condensing Acoustics Noise <55 DB	Environmental Operating Temp.	0 degree to 40 degree Celsius						
Acoustics Noise <55 DB	Storage Temperature	-10 degree to 55 degree Celsius						
	Relative Humidity	upto 95% RH Non-Condensing						
IP 20	Acoustics Noise				<55 DB			
	IP				IP 20			

<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.

















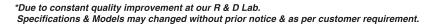
# **Solar LED Street Light**

# Light-up your world with Green energy



- Low power consumption
- Extremely long life LED's (>50,000hrs)
- Automatic dusk to dawn operation (D to D)
- No lamp blackening, no lamp replacement for several years
- Rugged body made up of aluminum

Model	9w 12w 15w 18w 24w			
Application	Dusk to Dawn			
Solar Module	20w 40w 50w 75w 100w			
Battery Compatibility	Lead Acid, Tubular plate VRLA (Sealed Maintenance Free)			
LED Used	High brightness Cool White			
Rated Working Voltage	12 VDC			
Lamp Life	> 50,000 burning hours			
Efficiency	> 85%			
Autonomy	2 Days			
Indicators	Battery Low warning, Battery Full Charged			
Load side protection	No load protection, Short Circuit protection, Reverse polarity protection			
Battery side protection	Reverse Polarity, Over Charging , Deep Discharging, Battery Temperature Compensation			
PV module side protection	Reverse polarity, Reverse current flow to PV Module during night			
IP Rating	IP 65			
Pole Height	≥ 4.5 Meters (approx.)			



















# Home Lighting Bright your home with Saving Energy

### Product features:

- High efficiency PWM charge controller.
- Robust & Elegant luminary.
- Safe & easy install.
- Free from noise, smoke & pollution.
- Available in different Configurations.
- Mobile charging option available.







#### **Benefits**

- Economical: Sun provides Energy free of cost, you enjoy 30% power saving on your electricity bill & a longer back up lighting system at zero running cost.
- Non polluting: Powered by the sun's renewable energy, the system is energy neutral & absolutely clean source of illumination.

	2111242		TO 111 O 100	TO 111 O 150	TO 1 11 O 222
Model T	S HLS 10 T	S HLS 40	TS HLS 100	TS HLS 150	TS HLS 200
Power	10 W	40 W	100 W	150 W	200 W
SPV module	10 Wp	40 Wp	100 Wp	125 Wp	200 Wp
Battery	7.2 Ah	40 Ah	100 Ah	120 Ah	150 Ah
Charge controller	AC / DC Charging	5 A	10 A	10 A	20 A
Lamp/Wattage	3 W	9 W	9 W	9 W	9 W
Fan Wattage	-	14 W	14 W	14 W	14 W
Operating voltage	12 VDC	12 VDC	12 VDC	12 VDC	12 VDC
Battery Box	Fibre	Fibre	Fibre	Fibre	Fibre
Indicators	Charging & Battery low				
Protections	Deep discharge, Revers	se current & Overlo	oad & underload		
Mobile charging	Provided				
Uses	2 Nos. of LED Bulb	2 Nos. of CFL	4 Nos. of CFL	6 Nos. of CFL	6 Nos. of CFL
		1 DC Pedestal	/ 1 DC Pedestal	/ 2 DC Pedestal	/ 3 DC Pedestal /
		Table Fan	Table Fan	Table Fan	Table Fan

#### Other structures

- Battery enclosure
- Cables
- Optional DC Fans (if required)



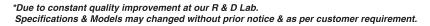














# **Solar Charge Controller**

- Installation with ease.
- High efficient series PWM / MPPT charging, increase battery life & increase the solar system performance.
- Used MOSFET as an electronic switch, without any mechanical switch.
- Reverse protection-Any combination of solar module and battery.
- Gel, sealed & flooded battery type solutions.







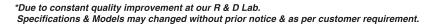








Technical Specification					
Model	12V/6A	12V/10A	12V/24V/20A	12V/24V/30A	24V /40A
Technology			MOSFET based		
Precise control			PWM / MPPT base	ed	
Voltage rating	12V	12V	12/24V	12/24V	12/24V
Charging current	6A	10A	20A	30A	40A
Bulk Voltage	(14.2V)	(14.2V)	(14.2V/28.4 V)	(14.2V/28.4 V)	(14.2V/28.4 V)
Float Voltage	13.6V	13.6V	13.6V/27.2V	13.6V/27.2V	13.6V/27.2V
Battery indication	11V	11V	11V	11V	11V
Battery indication reconnect	12.4V	12.4V	12.4V/24.8V	12.4V/24.8V	12.4V/24.8V
High battery charging cuttoff	15.5 V	15.5 V	15.5 V / 30 V	15.5 V / 30.8 V	15.5 V / 30.8 V
High Battery charging reconnect	13.1 V	13.1 V	13.1 V / 26 V	13.1 V / 26 V	13.1 V / 26 V
Operating temperature	$0^{\circ}$ C to $40^{\circ}$ C	$0^{\circ}$ C to $40^{\circ}$ C	$0^{\circ}$ C to $40^{\circ}$ C	0° C to 40 C	$0^{\circ}$ C to $40^{\circ}$ C
Protections	Over charge, PV	/ Battery reserve polar	ity, reverse current flow,	High temperature, over	erload, short circuit



















# Solar inverter (Hybrid & PCU) Boost up your home with Solar Inverter

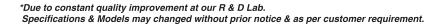
- DSP based design.
- Pure sine wave output with low harmonic distortion (TDH).
- High efficiency & high reliability
- Protection like overload & short circuit protection reverse & deep charge protection

  • High surge capability for starting heavy load.

- Noiseless in operation.
  User friendly display.
  PWM / MPPT solar charging (Boost/Float/Trickle)
  Battery temperature compensation
- Low idle power consumption



Model	100/200/300/400/ 600/800VA/12V	1000/1500VA/24V	2000VA/36V 5	2500/3000VA/48V KVA/72V, 6KVA/96V, 7.5KVA/96V
Input Voltage (UPS) -	180-260V	180-260V	180-260V	180-260V
Input Voltage (INV) -	90-280V	90-280V	90-280V	90-280V
Output Voltage on mains mode -	same as input	same as input	same as input	same as input
Output Voltage on Inverter Mode -	220+/-5%	220+/-5%	220+/-5%	220+/-5%
Output frequency on inverter mode -	50Hz +/-0.1 Hz	50Hz +/-0.1 Hz	50Hz +/-0.1 Hz	50Hz +/-0.1 Hz
Switching from mains to inverter and from inverter to mains	Automatic	Automatic	Automatic	Automatic
Switching from mains to UPS and from UPS to mains	Automatic	Automatic	Automatic	Automatic
Output waveform on mains mode -	same as input	same as input	same as input	same as input
Output waveform on inverter mode -	pure sine wave	pure sine wave	pure sine wave	pure sine wave
Efficiency -	>80%	>80%	>80%	>80%
Inverter Overload -	120%	120%	120%	120%
Inverter short circuit -	300%	300%	300%	300%
Technology -	DSP based design	DSP based design	DSP based design	DSP based design
Auto reset features -	yes	yes	yes	yes
PV Panel Max Voc -	23 V	45 V	9V/138V/184V	68 V
PV panel on load Output -	15.5 V	31 V	62V/93V/124V	46.5V
Output Current -	10A to 40 A	10A to 40 A	10A to 40 A	10A to 40 A
Battery full charge cutoff -	13.8 VDC	27.6VDC	55.2/82.8/110.4VDC	41.4VDC



















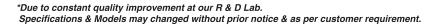
# Solar Lantern Roshan kare ghar apna



- Uniform 360 degree light coverage
- Fully digital operation
- Durable ABS plastic body
- Mobile charge facility
- Two days of autonomy
- Safety features like overcharge, deep discharge, reverse battery & short circuit protections
- Eco-friendly
- Easy to install, maintenance

- No fumes or No smoke
- Maximum light coverage
- User selectable high/low intensity
- Long lasting high power LED's
- Micro controller based high efficiency electronics
- Aesthetically designed portable light
- Available in different Models
- A.C. charging optional
- Mobile Charging

Technical Specification	ıs	Models	
Light Wattage	3W	5W	7W
AC/DC charger	9V	14.8V	14.8V
SPV Module	3 -5W	10W	10-20W
Mobile charging	Multipin	Multipin	Multipin
Battery (SMF)	6V/4.5Ah	12V/7.2Ah	12V/7.2Ah
Weight	1.3Kg	3Kgs	3Kgs
Operation hours	4-5 Hrs	10-12 Hrs	8-10 Hrs
Lighting Position	3 Steps	3 Steps	3 Steps
Solar Charge Controller	Inbuilt	Inbuilt	Inbuilt
Battery Type	SMF	SMF	SMF
Indicators	Low battery, I	Battery charging, Batter	y full charged



















# Solar Fan Hawa jo garmi me de Thand ka Ehsaas



- DC brushless motor fan
- Higher efficiency and reliability
- Longer lifetime (no brush and commutator erosion)
- No heating problem
- Low Power Consumption
- Blades replaceable in various sizes
- Speed controller
- Solar battery, rechargeable battery, car battery can be used on this fan.
- Maintenance free operation
- Excellent delivery with no noise.
- Operates on solar power- no running cost.
- Easy handling & installation.

Technical Specifications			
Type of Fan	Ceiling fan/BLDC	Table fan	Pedestal fan
Operating voltage	12VDC	12VDC	12VDC
Consumption	24W	12-15W	18W
Speed	Four	Three step	Three step
Switch type	speed controller	Step switch	Step switch
Weight	3.9kg	2.8kg	3.5kg
Current	1.5 - 2Amp.	1 - 1.2Amp.	1.5 - 1.8Amp.
Blades	3	3	3
Body	Metal	ABS plastic	Metal
Noise	27DB	27DB	27DB
Wind type	Soft & strong	Soft & strong	Soft & strong
Rotational speed	≤ 400 RPM	1200 - 1600 RPM	1600 RPM
Motor type	DC	DC	DC
Safety	Reverse	Reverse	Reverse

<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.

















# Solar Cooler Save Your Money & Be Cool Always



- Eco-user friendly. Easy to install & operate.
- Highly efficient
- Adequate protections on load & battery
- Solar powered dc cooler fan
- Designed for low power consumption and more air
- High speed for ensure more air
- Quality motor to ensure better life of fan.

- No fear of electric shock
- No fear of power cut
- Extra large water tank

Technical Specifications		
Operating voltage -	12 VDC	12 VDC
Current rating –	5 A	3 A
Power consumption –	60 W	48 W
Body –	ABS plastic body	ABS Plastic Body
Blades –	3 Blades	3 Blades
RPM –	1500 - 1800 RPM	1200-1500 RPM
Control switch –	2 Nos.	2 Nos.
Operating hours –	7-8 Hrs	7-8 Hrs
Battery –	75 Ah	48 Ah
SPV module -	100 W	75 W
Charge controller –	10 A	6A
Water tank capacity -	50-60 Ltrs.	40-50 Ltrs.
Fan Size –	16"	12"

<sup>\*</sup>Due to constant quality improvement at our R & D Lab.

Specifications & Models may changed without prior notice & as per customer requirement.

















# Solar Water Heater Be Hot In Cold Season With Solar Water Heater



- Superior Corrosion resistant stainless steel inner tank.
- Extra thick insulation for minimum heat loss.
- Long life corrosion proof MS protected outer body.
- Vacuum tube with superior coating to absorb maximum Solar radiation & for maximum heat radiation.
- Backup electric heating element for cold rainy days (optional).
- Power coated MS stand & Rust resistance.
- Highly efficient heat pipe technology :

- Heat pipe plus vacuum tube structure, no any water in tube, if tube broken, the water not lose.
- High pressure storage tank (Testing pressure = 11 bar), Inner tank material: enamel tank, 2.0mm or stainless steel 1.2mm
- No sealing rubber is needed & hence no leaking problem
- Easy plug-in installation, Anti-freeze
- Save upto 70% of electricity.

Technical Specifications	
Capacity -	100-500LPD
No. of vacuum tubes -	10 - 50
Safety devices -	Thermostat
Pipe connection -	¾" pipes
Backup electric heating –	2Kw heating elements
Daily usage -	Up to 4 - 8 persons
Inner tank material	High grade stainless steel
Outer tank Material	Stainless Steel
Temperature	65° C to 85° C
Tank Insulation	High quality PUF materials
Tank Volume	100Ltr to 500 Ltr
Frame Angle	45 Degree
Stand Frame	Galvanized Powder Coating
Type of circulation	Thermo Siphon
Type of Grommets	Silicon rubbers
Tube Material	Special grade Borosilicate Glass

<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.

















# Solar Madhani apki mehnat aur paise ki bachat

### Product features:

- Scratch-proof body structure
- Noiseless performance
- Reliable
- Withstands a wide range of voltage
- Stainless steel body
- Advanced technology
- Available in different colors, sizes, designs & patterns
- Low power Consumption.
- Easy to clean
- Handy in use



Technical Specification	S	
Model	Madhani1	Madhani2
Capacity	10Ltr	20Ltr
Power	36W	60W
Charge Controller	6A	10A
Battery	26Ah	40Ah
Solar Panel	40Wp	75Wp
Operation Voltage	12VDC	12VDC

# **Solar Water Pumps**





1

- No inverter Dc motor connects directly array
- Simple installation and maintenance
- Wide range of solutions : surface, open-well, dripped, sprinkler and others.
- No dependance on erratic grid power
- Advance safety features including dry run, reverse polarity, low voltage and lightening arrest.
- High reliability

Ø		Solar Panel (In Wp)			
	Motor	Depth upto	Depth upto	Depth upto	Depth upto
	Power	100 ft.	250 ft.	400 ft.	500 ft.
	1 hp	800 W	1000 W	1100 W	1200 W
	2 hp	1600 W	2000 W	2200 W	24010 W
	3 hp	2400 W	3000 W	3300 W	3600 W
	5 hp	4000 W	5000 W	5500 W	6000 W
	6 hp	4800 W	6000 W	6600 W	7200 W
	7.5 hp	6000 W	7500 W	8250 W	9000 W
	10 hp	8000 W	10000 W	11000 W	12000 W
	12.5 hp	10000 W	12500 W	13750 W	15000 W
	15 hp	12000 W	15000 W	16500 W	18000 W

Technical Specifications				
Model				
Power Rating	6-15 hp	1-5 hp	1-3 hp	1.5 hp
Input Voltage Voc	850-980 VDC	80-150 VDC	70-150 VDC	70-150 VDC
Input Voltage Vmp	700-880 VDC	70-130 VDC	65-130 VDC	65-130 VDC
Output Voltage	250-450VAC (3phase)	250-440VAC (3phase)	250-440VAC (3phase)	250-440VAC (3phase)
Frequency	0-80Hz	0-80Hz	0-80Hz	0-80Hz

<sup>\*</sup>Due to constant quality improvement at our R & D Lab. Specifications & Models may changed without prior notice & as per customer requirement.















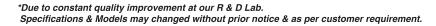


# Solar Garden Light Light up your Garden with Solar garden Light

- High illumination
- Easy to install
- No use of wires
- Automatic light sensor
- Super bright LEDs
- Resistance & durability
- Save money & Electricity
- Stainless steel body



Technical Specifications				
Solar panel:	1W	0.36W	3W	
Battery:	3.6V1200mAh	1.2V 1200mAh	6V 4.5Ah	
Type of Battery	AA, Ni-Mh	Ni-Mh	SMF	
Light source:	1 Nos. UHB LED	6 Nos. of White LED's	16 nos. of LED's	
Protections:	Short circuit, Re	ort circuit, Reverse Polarity, No Load protection		
Operating hours	6 Hrs	6-8Hrs	7Hrs	
Material used :	Stainless Steel / Powder Coated Mild Steel			
Color temperature of LED:	5500-6500K	5500-6500K	5500-6500K	
Technology:	Automatic dusk to dawn	Automatic dusk to dawn	Automatic dusk to dawn	
Pole height:	2.5 Feet	2.5 Feet	2.5 Feet	



















## Solar Road Stud



With the aid of our knowledgeable professionals, we are engaged in manufacturing and supplying **Solar Road Studs**. These road studs are free lighting devices which are used in road construction, in order to define the sidelines. Our offered studs are fitted with solar photovoltaic panels that allow the absorption of heat energy from sunlight and then transmits light in these during night. These studs provide safety on roads by making a defined line for driving vehicles at night. **Solar Road Studs** are engineered in different sizes and designs by us using high-grade raw components that are procured from the credible vendors of the market

#### Product Features :-

- Unmatched Performance
- Longer working life
- High visibility of LED's help ensure easy and safe night driving
- Ideal for highways, parking lots and roads.
- Easy installation and no maintenance required. Auto Switch On and Auto Switch Off.

#### Specifications:

- Construction: Aluminium alloy steel.
- 100% water proof design confirms to IP 67.
- Dimension: 140 mm x 128 mm x 82 mm; + 1 mm, Height of shank 54 mm; + 0.5 mm
- Diameter of Shank: 42.5 mm + 0.5 mm.
- Plastic: Unbreakable, Scratch Proof poly carbonate for maintenance free operation.
- Solar panel high efficiency mono crystalline 2.5 V/60 m A.
- Battery: one Ni-mh type (1.2 V/1200 m Ah) high temp.
- Compression Strength: 25 Tons.
- Autonomy: 60 hours when fully charged.
- Colour: Red, Amber, Blue, Green and White.
- Blinking: Typically 1HZ can be supplied in Non Blinking type or different cycle.
- Weight: 730 + 10gm.

















# **Company Qualifications**

































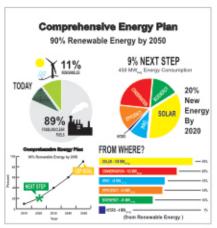












Comprehensive Energy Plan 2050



Home Solutions



**Business Solutions** 



Solar Solutions



MNRE & ISO Certified Company

ऊर्जा भरा कल

Corporate office:

303 Pragati Deep Tower,

Near Nirman Vihar Metro Station,

Laxmi Nagar District Centre, Delhi - 110092

Tel.: + 91-11-22043924, Fax: +91-11-22043924

Customer Care No. : +91-9266602587

E-mail: info@tracksunsolar.com Website: www.tracksunsolar.com













