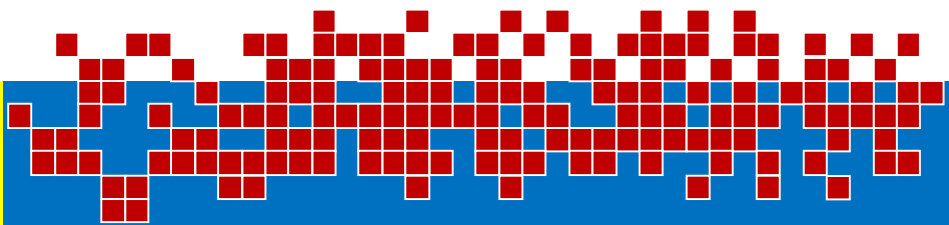
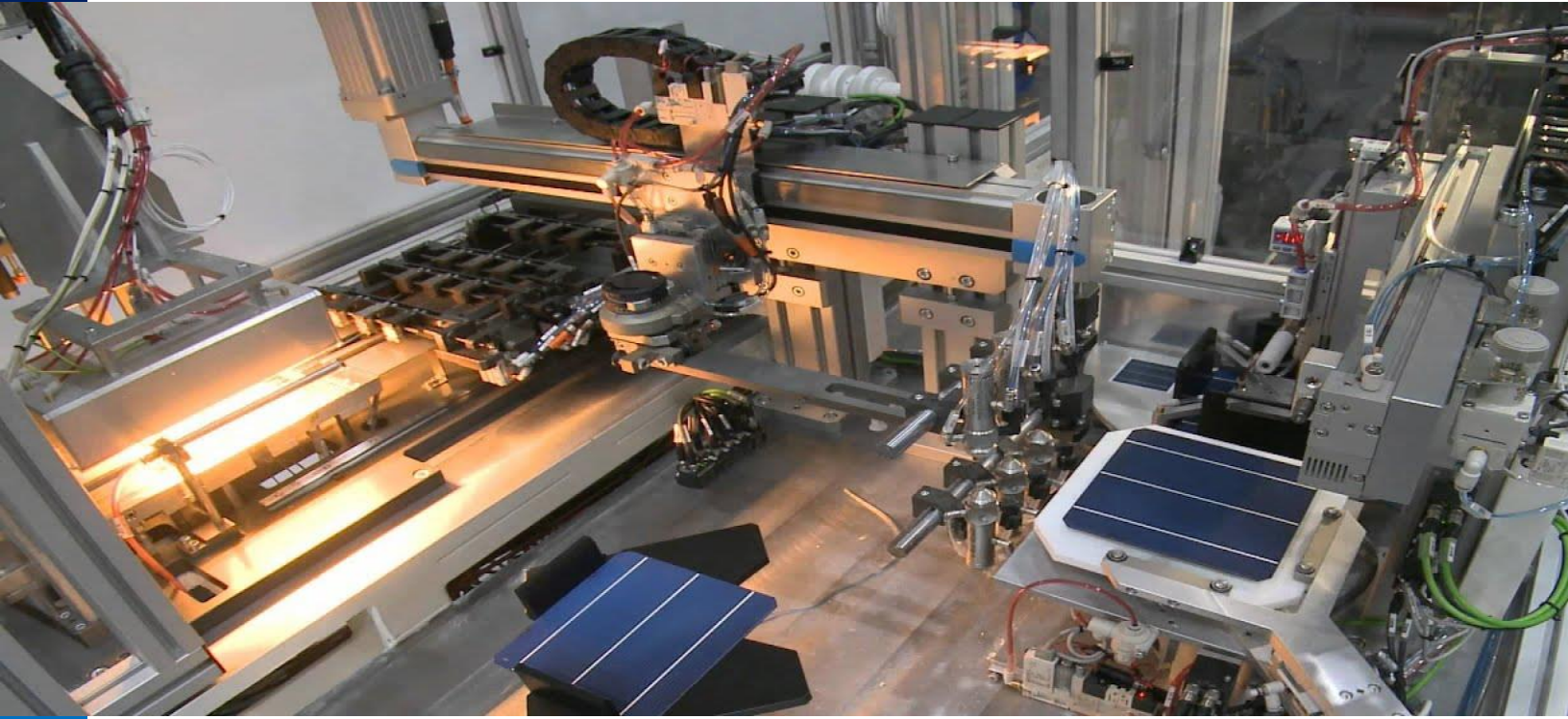




SERVICEABLE SOLAR PANELS



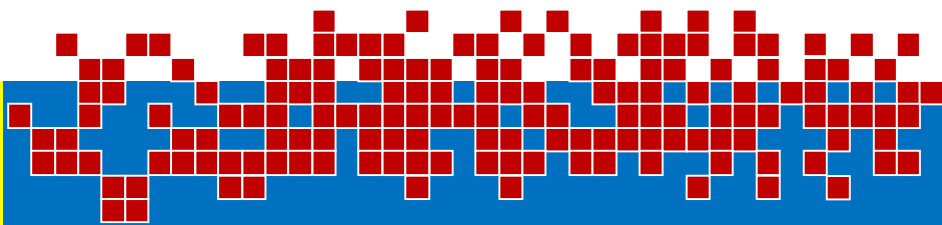




## About us

Poola Energy (SPS) is an innovative renewable energy company and EPC service provider for solar photovoltaic power systems. We believe in innovating and delivering the technically advanced solar power systems to empower you in this endeavor. SPS is the only manufacturer in the world to provide cell to cell serviceable solar panels that meets quality standards and international norms. With our patented panel technology, we promise our clientele in providing comprehensive solar power solutions with versatility and durability. SPS is equipped with the state-of-the-art machinery capable of producing 100MW solar modules per annum. SPS R&D team indigenously developed the machinery to manufacture serviceable solar panels. Our core competencies stand in our ability to offer unparalleled customer service, continued technological advancement and economic viability. Our no pressure sales approach, industry leading warranties and service guarantee makes your investment with us risk free. Below are the reasons to choose us

- Life time service guarantee
- Stringent / extensive design
- Low maintenance and service cost
- Dedicated R&D department
- Highly trained staff
- High returns from our solar installations



Standard series



Arc Prime series



## Designed for High Performance

SPS manufactures Topcon PV modules ranging from 40-650W. Bifacial modules are manufactured on order basis. Our panels are CE & BIS certified as per IS/IEC standards and are suitable for a wide range of applications.

linear power warranty for 25 years with  
2.5% for first year degradation and 0.82%  
from 2 to 25 years

Excellent low light performance  
Build with A grade materials

10 Years Product Warranty for  
manufacturing defects

Topcon module conversion efficiency  
is 23.5%

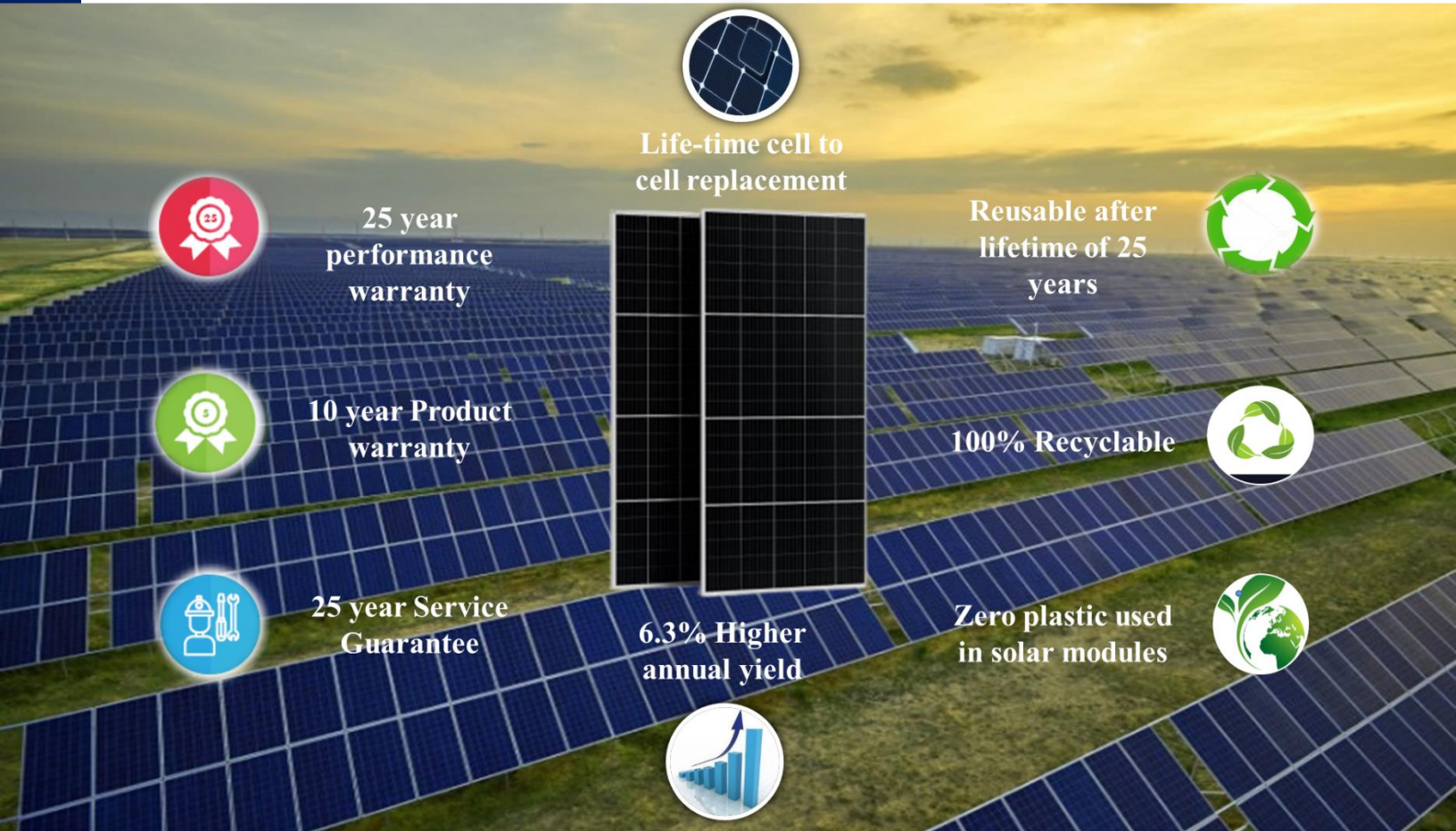
world's first serviceable solar panels

Module servicing technology is  
indigenously developed by SPS

Delivers 6.3% higher annual yield  
compared to conventional

PID Resistance With long term  
reliability



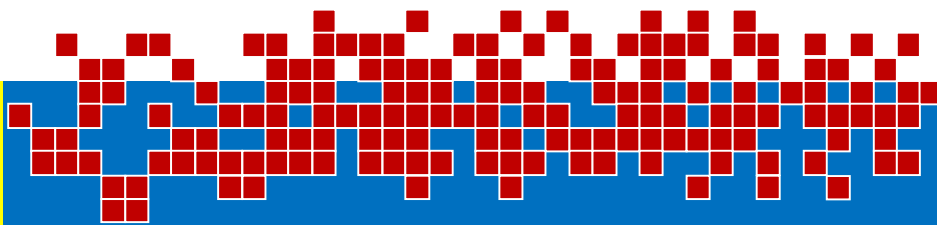


## Models of Solar panels manufactured

- Mono PERC solar modules with 10BB cell technology 550W
- Topcon solar modules with 10BB cell technology 590W

## Features of Solar Modules

- High annual yield  
High efficient material usage with unique production methodology ensures higher annual yield up to 6.3% and stable operation
- IP67 rated solar panel
- Service (applicable to Glass-Glass modules only)  
Solar panels are serviceable throughout the life time of 25 years  
Promise cell to cell replacement  
Depreciation price on solar module is given to users after life time of 25 years
- PID free
- Excellent performance with weak lights
- Withstand Wind load up to 2400 pa and snow load up to 5400pa
- 0 - 5W positive power tolerance
- AR coated high transmission glass
- Anodized aluminum frame
- 100% reusable



# SPECIFICATION 156 CELL TOPCON HALFCUT 10BB

Electrical data at 1000 W/m<sup>2</sup>, 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

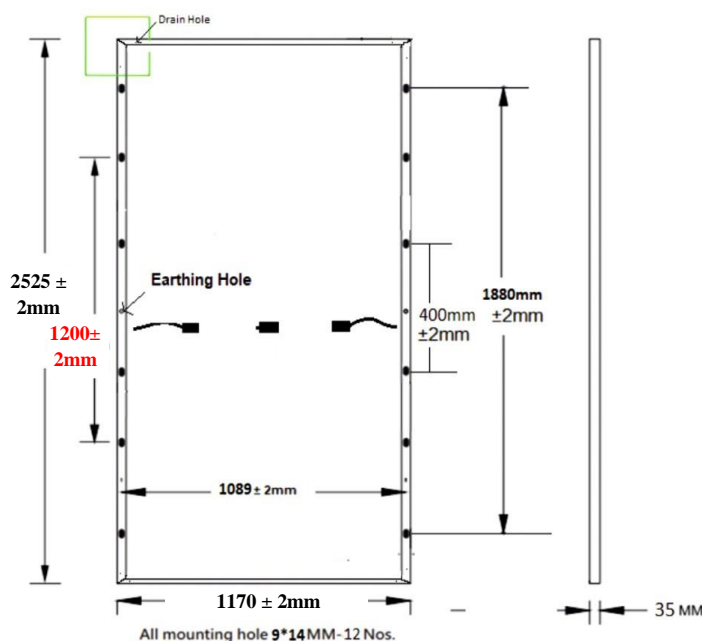
MODEL NAME	SPS 156 GG 600	SPS 156 GG 610	SPS 156 GG 620	SPS 156 GG 630	SPS 156 GG 640	SPS 156 GG 650
Rated power at STC	600 Wp	610 Wp	525 Wp	630 Wp	640 Wp	650 Wp
Module efficiency at STC	21.46 %	21.81 %	20.3 %	22.53%	22.89%	23.24%
Open circuit voltage (Voc)	54.81 V	55.11 V	55.41 V	55.71 V	56.70 V	57.00 V
Short circuit current (Isc)	13.95 A	14.09 A	14.23 A	14.37 A	14.69 A	14.83 A
Max power voltage (Vpm)	45.36 V	45.56 V	45.76 V	45.96 V	45.89 V	46.09 V
Max power current (Ipm)	13.23 A	13.39 A	13.55 A	13.71 A	13.95 A	14.11 A
Output Tolerance	0 – 2 %	0 – 2 %	0 – 2 %	0 – 2 %	0 – 2 %	0 – 2 %
Series Fuse Rating	25A	25A	25A	25A	25A	25A

## Mechanical data

Number of cells & cell	Half cut Topcon, MBB (91*182 mm)
Cell Matrix	156 (12x13)
Type dimensions (L X W X T)	2525 mm x 1170mm x 35 mm
Weight	38.5 Kg
Double glass	2 mm high transmission AR coated tempered glass
Junction box and panel	IP67
Cables	4 mm <sup>2</sup> solar cables, length 400 mm
Connectors	MC4 compatible
Operating temperature range	-40°C TO 85°C
Max. System voltage	1500 VDC
Max. Reverse current	30 A
Max. Surface load capacity	5400 Pa/2400 Pa
Application Class	Class A
Electrical safety	Class II
Fire safety	Class C (Type 1)

## Thermal data

Temperature coefficient open circuit voltage	-0.28% / °C
Temperature coefficient short circuit current	+0.048% / °C
Temperature coefficient rated power	-0.35% / °C
NOCT (normal operating cell temperature)	45°C ± 2°C



# SPECIFICATION 144 CELL TOPCON HALFCUT 10BB

Electrical data at 1000 W/m<sup>2</sup>, 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)

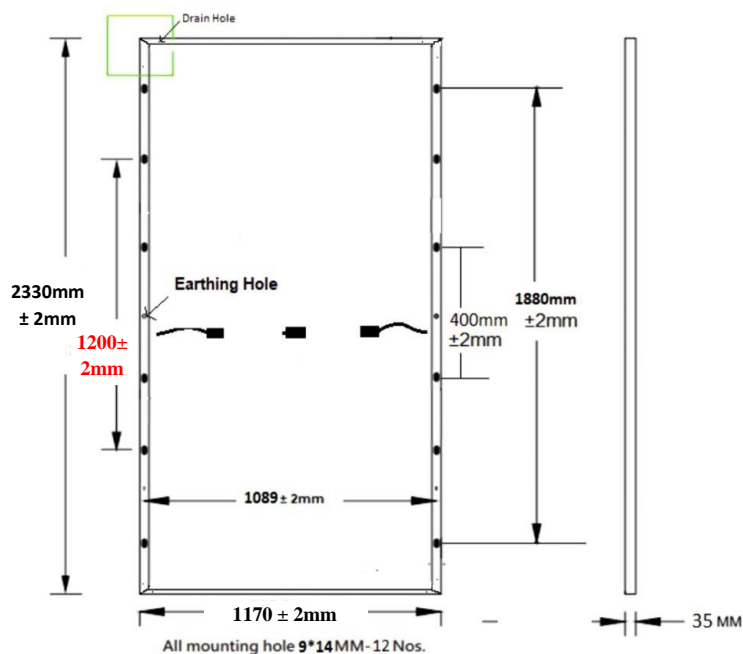
MODEL NAME	SPS144 GG 575	SPS 144 GG 580	SPS 144 GG 585	SPS 144 GG 590
Rated power at STC	575 Wp	580 Wp	585 Wp	590 Wp
Module efficiency at STC	20.24 %	22.44%	22.63%	22.84%
Open circuit voltage (Voc)	51.3 V	51.34 V	51.38 V	51.44 V
Short circuit current (Isc)	13.71 A	13.83 A	13.93 A	14.04 A
Max power voltage (Vpm)	44.03 V	44.07 V	44.12 V	44.16 V
Max power current (Ipm)	13.06 A	13.17 A	13.27 A	13.37 A

## Mechanical data

Number of cells & cell	Half cut Topcon, MBB (91*182 mm)
Cell Matrix	144 (12x12)
Type dimensions (L X W X T)	2330 mm x 1170mm x 35 mm
Weight	35 Kg
Double glass	2 mm high transmission AR coated tempered glass
Junction box and panel	IP67
Cables	4 mm <sup>2</sup> solar cables, length 400 mm
Connectors	MC4 compatible
Operating temperature range	-40°C TO 85°C
Max. System voltage	1500 VDC
Max. Reverse current	30 A
Max. Surface load capacity	5400 Pa/2400 Pa
Application Class	Class A
Electrical safety	Class II
Fire safety	Class C (Type 1)

## Thermal data

Temperature coefficient open circuit voltage	-0.28% / °C
Temperature coefficient short circuit current	+0.048% / °C
Temperature coefficient rated power	-0.35% / °C
NOCT (normal operating cell temperature)	45°C ± 2°C

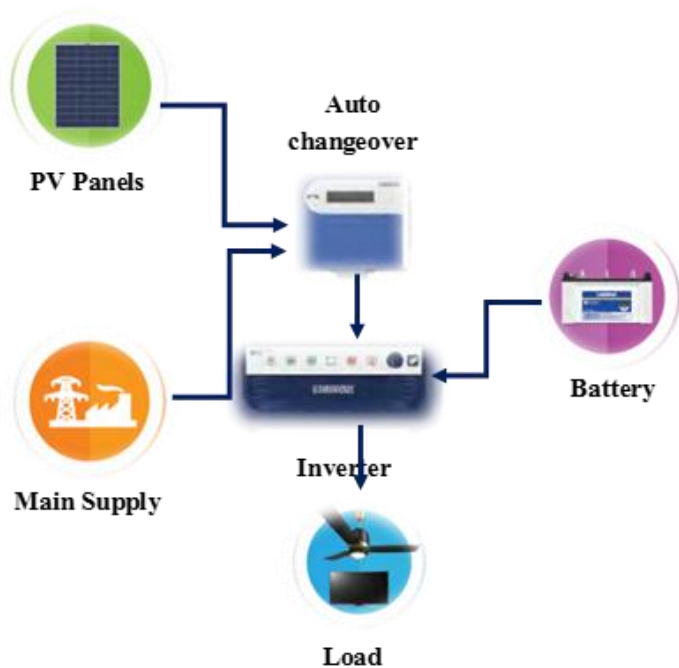






## SPS Solar Power Packs

SPS manufactures a wide range of solar power packs which are best in class in terms of quality, durability and serviceability. The below solar power packs manufactured by SPS reduces the electricity bill by a minimum of 60%.



**SPS@300**

SPS provides a solar panel with 300W capacity along with mounting structure

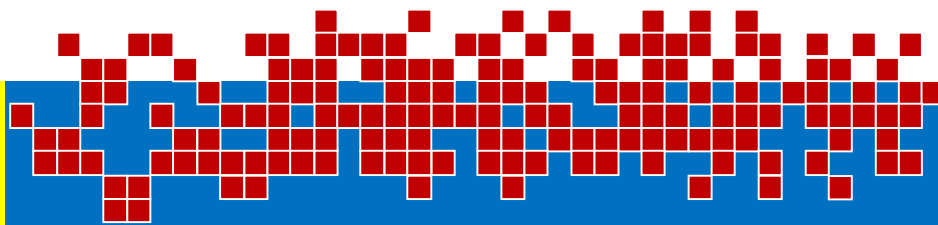
A powerful inverter with charge controller of 1150W

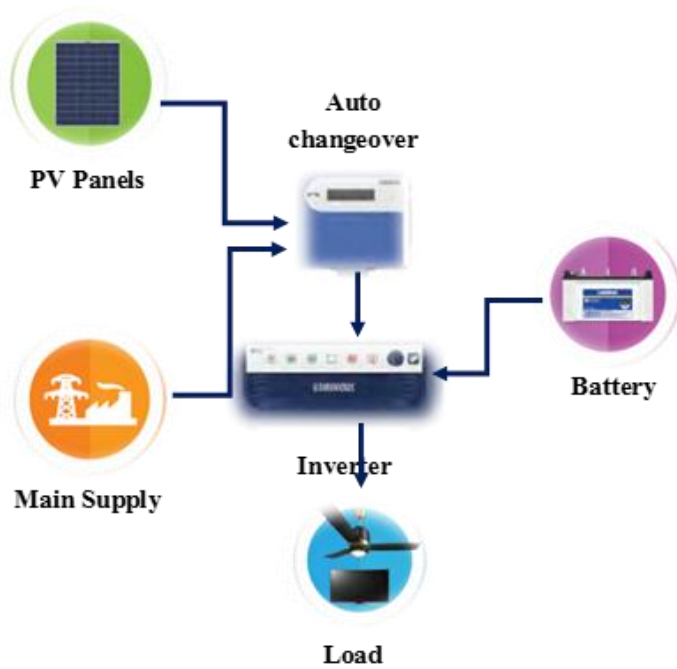
Provided with a battery of 150Ah @12V to support 14 hours of operation per day

SPS provide 10-year product warranty on solar panels and 1 year on other items

Capable of running 5 lights, 5 fans, 1 fridge and 1 TV

25-year service guarantee for the solar panels





**SPS@600**

SPS provides a solar panel with 600W capacity along with mounting structure

A powerful inverter with charge controller of 1150W

Provided with a battery of 300Ah @12V to support 17 hours of operation per day

SPS provide 10-year product warranty on solar panels and 1 year on other items

Capable of running 5 lights, 5 fans, 1 fridge and 1 TV

25-year service guarantee for the solar panels

## SPS RETROFIT for existing UPS users

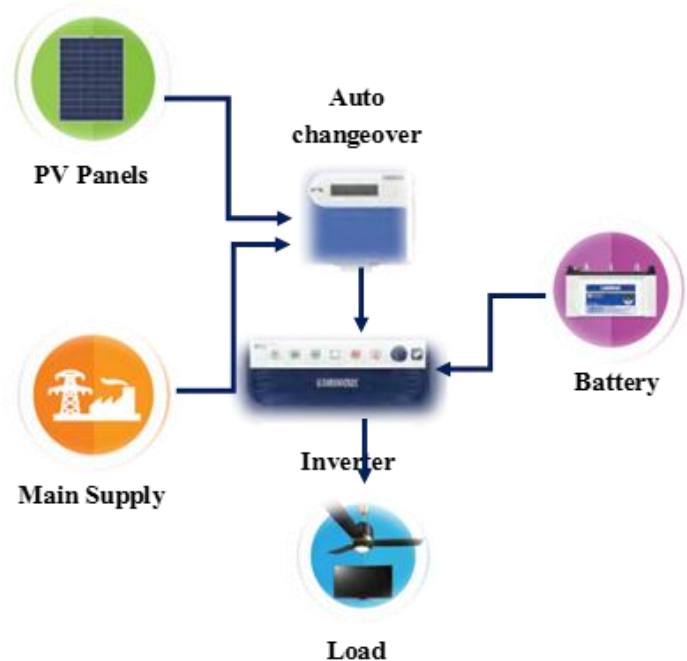
SPS provides a solar panel with 300W capacity along with mounting structure

A powerful controller suitable for charging battery bank of 12V or 24V

Feasible for 200 / 300Ah @ 12 / 24V battery to support 14 to 15 hours of operation per day

SPS provide 10-year product warranty on solar panels and 1 year on other items

25-year service guarantee for the solar



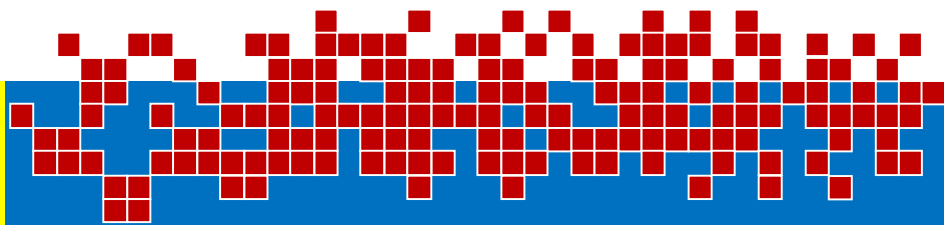
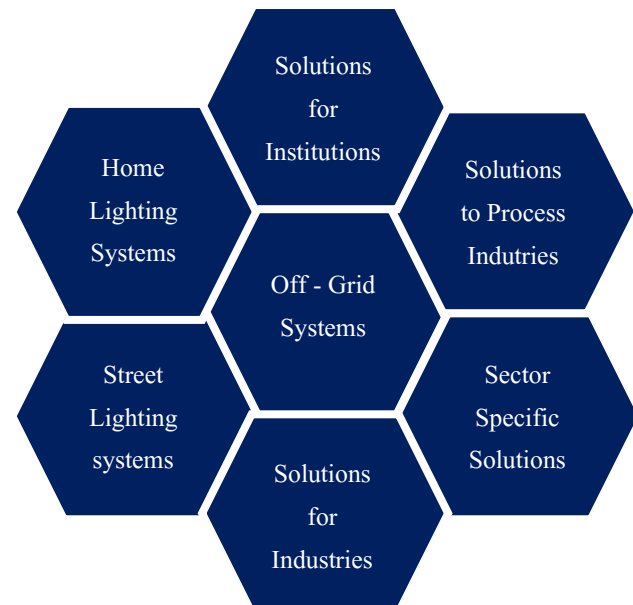
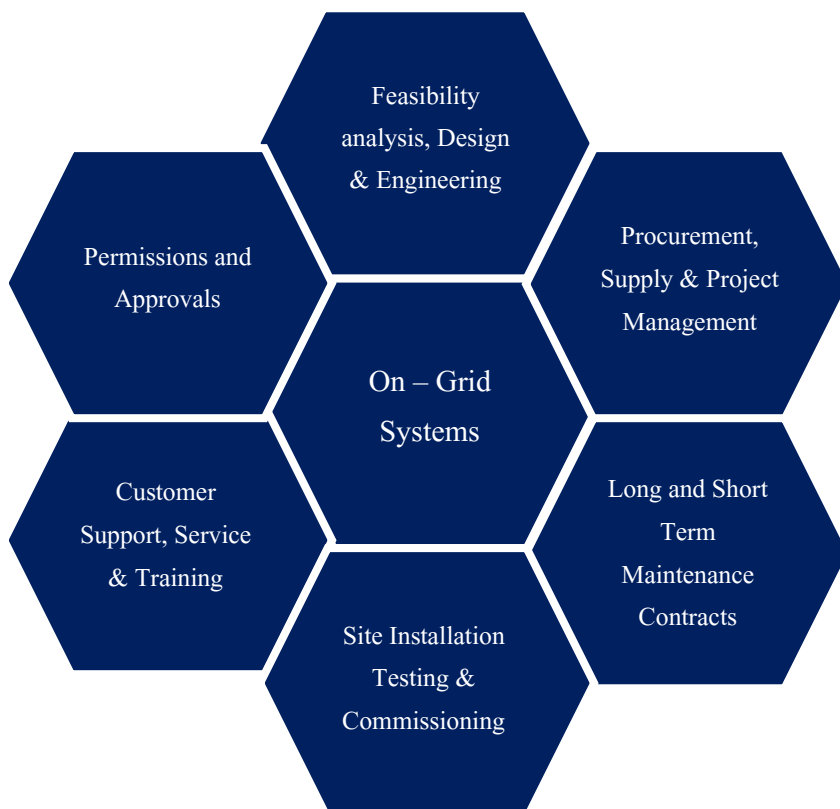
**SPS RETROFIT**





## EPC services offered by SPS

SPS guarantees the setting up of any solar power plant ranging from 1 kW to 1 GW a hassle free and a rewarding experience for any project developer by offering an end-end customized solution. SPS offers EPC services for both On - Grid and Off - Grid solar projects.





SERVICEABLE SOLAR PANELS

## **POOLA ENERGY PVT., LTD.**

*Let the Sun Energize Your Abode*

**Plot No. 1/523/1, Allwin Building, Anantapur Road,  
Penukonda - 515110, Andhra Pradesh, India**

**Call / WhatsApp: +91-70105 38841**

**email: [enquiry@spsolarpanels.com](mailto:enquiry@spsolarpanels.com),**

**Visit: [www.spsolarpanels.com](http://www.spsolarpanels.com)**

**ISO 9001:2015**

