

STP090Ts - AC
STP086Ts - AC
STP082Ts - AC

86 Watt Stabilized Power

AMORPHOUS SILICON (a-Si) THIN FILM SOLAR PANEL

Features

- Industry leading panel production based on Six Sigma and LEAN manufacturing process, as well as patented technologies
- Withstands high wind-pressure and snow load, and extreme temperature variations
- High energy yields per rated Wp in high temperatures due to favorable temperature coefficients
- Outstanding performance under low light irradiance environment
- Optional customized design requirements on request

Quality and Safety

- Rigorous quality control exceeding the highest international standards
- Stringent raw material testing by a dedicated QC staff
- Fully automated facilities certifiable to ISO 9001:2008 (Quality Management System)
- IEC61646, IEC61730, UL1703 conformity to CE
- Industry leading warranty terms: 3 years material and workmanship warranty; 25 years power output warranty (12/90%, 25/80%)*

Recommended Applications:

On-grid utility systems

On-grid commercial systems

Note: * Please refer to Suntech Product Warranty for details

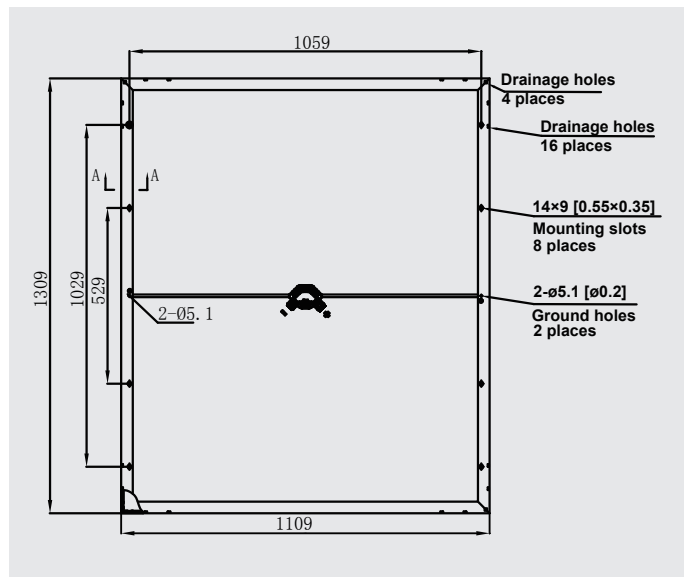


Please consult your local dealer for more information.

Electrical Characteristics

Model	STP090Ts-AC	STP086Ts-AC	STP082Ts-AC
	Stabilized values	Stabilized values	Stabilized values
Nominal Power(Pmax)	90 W	86 W	82 W
Open-Circuit Voltage(Voc)	93.8 V	93.2 V	92.6 V
Optimum Operating Voltage(Vmp)	73.2 V	72.3 V	71.3 V
Short-Circuit Current (Isc)	1.50 A	1.48 A	1.46 A
Optimum Operating Current (Imp)	1.23 A	1.19 A	1.15 A
Module Efficiency	6.3 %	6.0 %	5.7 %
Maximum Power at STC (Pmax)	90 W	86 W	82 W
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage (V)	1000 V DC	1000 V DC	1000 V DC
Maximum Series Fuse Rating (A)	3 A	3 A	3 A
Power Tolerance	+5 %	+5 %	+5 %

STC: Irradiance 1000 W/m², Module temperature 25°C, AM=1.5
 Note: Initial powers are 10-20% higher than stabilized powers.
 All voltages are relative to the negative power connector of the module.



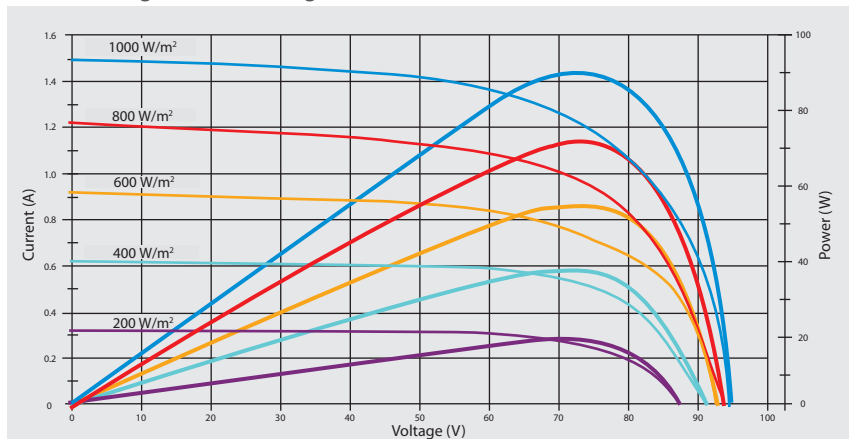
Mechanical Characteristic

Cell type	a-Si
No. of Cells	106
Dimensions	1309 × 1109 × 35 mm
Weight	27.5 kgs (incl. frame)
Front Glass	3.2 mm (0.13 inches) annealed glass
Back Glass	3.2 mm (0.13 inches) annealed glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Output Cables	RADOX SMART cable 4.0 mm ² (0.006 inches ²), symmetrical lengths (-) 750 mm (29.5 inches) and (+) 750 mm (29.5 inches) Connector: PV-KBT4 and PV-KST4

Temperature Characteristic

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.23 %/°C
Temperature Coefficient of Voc	-0.30 %/°C
Temperature Coefficient of Isc	+0.08 %/°C

Current-Voltage & Power-Voltage Curve (90 W)



Specifications are subjected to change without further notice

I-V Curve comparison between Stabilized and Initial (90 W)

