STP185Ts - CA STP180Ts - CA STP175Ts - CA STP170Ts - CA



185 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 enviroment
- Specially designed bonded rail helps installation quickly and easily to save BOS costs
- Optional customized design requirements on request

Quality and Safety

- Rigorous quality control exceeding the highest international standards
- Stringent raw material testing by a delicated QC staff
- Fully automated facilities certifiable to ISO 9001:2008 (Quality Management System)
- 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	STP185Ts-CA	STP180Ts-CA	STP175Ts-CA	STP170Ts-CA
	Stabilized values	Stabilized values	Stabilized values	Stabilized values
Nominal Power(Pmax)	185 W	180 W	175 W	170 W
Open-Circuit Voltage(Voc)	94.8 V	93.8 V	92.8 V	91.8 V
Optimum Operating Voltage(Vmp)	73.7 V	73.2 V	72.6 V	72.0 V
Short-Circuit Current (Isc)	3.03 A	3.00 A	2.98 A	2.95 A
Optimum Operating Current (Imp)	2.51 A	2.46 A	2.41 A	2.36 A
Module Efficiency	6.5 %	6.3 %	6.1 %	5.9 %
Maximum Power at STC (Pmax)	185 W	180 W	175 W	170 W
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40° C to $+85^{\circ}$ C
Maximum System Voltage (V)	1000 V DC	1000 V DC	1000 V DC	1000 V DC
Maximum Series Fuse Rating (A)	5 A	5 A	5 A	5 A
Power Tolerance	+5 %	+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.



Current-Voltage & Power-Voltage Curve (180 W)



Specifications are subjected to change without further notice

Mechanical Characteristic

Cell type	a-Si	
No. of Cells	106	
Dimensions	1100 x 2600 x 35mm (incl. junction box and back bar)	
Weight	60.4 kgs (incl. back bar)	
Front Glass	3.2 mm (0.13 inches) annealed glass	
Back Glass	3.2 mm (0.13 inches) annealed glass	
Mounting	With back rail (Zn-PTD Steel)	
Junction Box	IP67 rated	
Output Cables	RADOX SMART cable 4.0 mm ² (0.006 inches ²), symmetrical lengths (-) 1500 mm (59 inches) and (+) 1500 mm (59 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

I-V Curve comparison between Stabilized and Initial (180 W)

