

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

Quality and Safety

- Rigorous quality control exceeding the highest international standards
- Stringent raw material testing by a dedicated QC staff of over 700
- Fully automated facilities certifiable to ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System)
- IEC61646, IEC61730, conformity to CE, UL listings: UL1703, Class C fire rating
- Industry leading warranty term

Recommended Applications:

Best for On-grid utility and commercial systems



    certifications in progress



Suntech was named Frost and Sullivan's 2008 Solar Energy Development Company of the Year

Electrical Characteristics

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

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

Note: Initial powers are 15-20% higher than stabilized powers. Initial voltages are up to 10% higher than stabilized voltages. All voltages are relative to the negative power connector of the module.

Mechanical Characteristic

Cell type	a-Si
No. of Cells	106
Dimensions	1300×1100×7.5mm (without junction box)
Weight	25kg (55 lbs)
Front Glass	3.2mm (0.13inch) annealed glass
Back Glass	3.2mm (0.13inch) annealed glass
Frame	Frameless
Junction Box	IP67 rated
Output Cables	RADOX SMART cable 4.0mm ² (0.006inch ²), symmetrical lengths (-) 750mm (29.5inch) and (+) 750mm (29.5inch) Connector: PV-KBT4 and PV-KST4

Temperature coefficients

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.20 %/°C
Temperature Coefficient of Voc	-0.30 %/°C
Temperature Coefficient of Isc	+0.10 %/°C

Preliminary specification only, data is subject to change without further notice

