

## 290 Watt POLYCRYSTALLINE SOLAR MODULE



### Features



#### High module conversion efficiency

Module efficiency up to 14.9% achieved through advanced cell technology and manufacturing capabilities



#### Self-cleaning & anti-reflective

Higher module efficiency from anti-reflective, hydrophobic layer with higher light absorption and minimal surface dust



#### Positive tolerance

Guaranteed positive tolerance of up to 5% delivers higher outputs



#### Excellent weak light performance

Excellent performance under low light conditions



#### Extended wind and snow load tests

Module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) \*



#### Suntech current sorting process

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage

Certifications and standards:  
UL1703, IEC 61215, IEC 61730, conformity to CE



### Trust Suntech to Deliver Reliable Performance Over Time

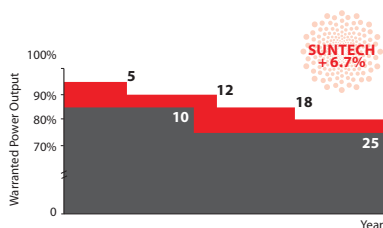
- World's no.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivalled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008 and ISO 14001: 2004
- Tested for harsh environments (salt mist and ammonia corrosion testing: IEC 61701, DIN 50916:1985 T2)\*\*



### New, Improved Frame Design

Suntech's new rigid and reliable hollow chamber frame provides additional grounding options for increased design flexibility and easier installation. Anti-counterfeit mark assures product authenticity.

### Industry-leading Warranty Based on Nominal Power



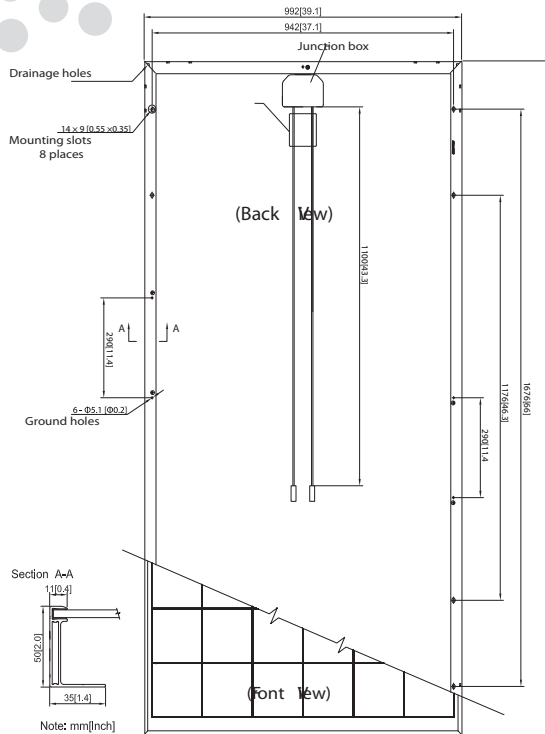
- Based on nominal power (P<sub>nom</sub>)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80% \*\*\*
- Warrants 6.7% more than the market standard over 25 years
- 10-year material and workmanship warranty



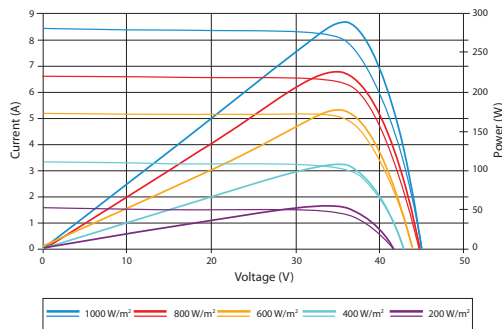
### Durable IP67 Rated Junction Box

Supports installations in multiple orientations. High performance, low resistance connectors ensure maximum output for the highest energy production.

\* Please refer to Suntech Standard Module Installation Manual for details. \*\* Please refer to Suntech Product Near-coast Installation Manual for details.  
\*\*\* Please refer to Suntech Product Warranty for details.

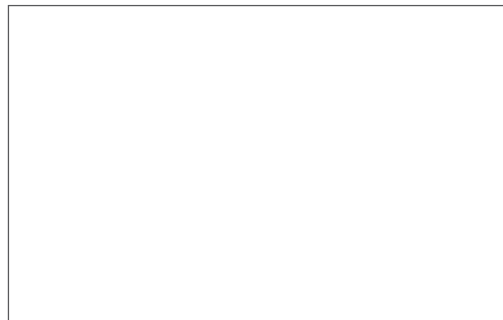


Current-Voltage & Power-Voltage Curve (290-24)



Excellent performance under weak light conditions: at an irradiance intensity of 200 W/m<sup>2</sup> (AM 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m<sup>2</sup>) is achieved

## Dealer information



Specifications are subject to change without further notification

## Electrical Characteristics

STC	STP290-24/Vd
Optimum Operating Voltage (V <sub>mp</sub> )	35.6 V
Optimum Operating Current (I <sub>mp</sub> )	8.15 A
Open Circuit Voltage (V <sub>oc</sub> )	45.0 V
Short Circuit Current (I <sub>sc</sub> )	8.42 A
Maximum Power at STC (P <sub>max</sub> )	290 W
Module Efficiency	14.9%
Operating Module Temperature	-40 °C to +85 °C
Maximum System Voltage	1000 V DC (IEC) / 600 V DC (UL)
Maximum Series Fuse Rating	20 A
Power Tolerance	0/+5 %

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5;  
Sun simulation measure tolerance(class AAA Flasher): +/- 3%

NOCT	STP290-24/Vd
Maximum Power at NOCT (P <sub>max</sub> )	211 W
Optimum Operating Voltage (V <sub>mp</sub> )	32.2 V
Optimum Operating Current (I <sub>mp</sub> )	6.56 A
Open Circuit Voltage (V <sub>oc</sub> )	41.2 V
Short Circuit Current (I <sub>sc</sub> )	6.80 A

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;  
Sun simulation measure tolerance(class AAA Flasher): +/- 3%

## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of P <sub>max</sub>	-0.44 %/°C
Temperature Coefficient of V <sub>oc</sub>	-0.33 %/°C
Temperature Coefficient of I <sub>sc</sub>	0.055 %/°C

## Mechanical Characteristics

Solar Cell	Polycrystalline silicon 156 × 156 mm (6 inches)
No. of Cells	72 (6 × 12)
Dimensions	1956 × 992 × 50mm (77.0 × 39.1 × 2.0 inches)
Weight	27.0 kgs (59.5 lbs.)
Front Glass	4.0 mm (0.16 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated (3 bypass diodes)
Output Cables	TUV (2Pfg1169:2007), UL 4703, UL44 4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths (-) 1100mm (43.3 inches) and (+) 1100 mm (43.3 inches)
Connectors	H4 connectors(MC4 connectable)

## Packing Configuration

Container	20' GP	40' GP	40' HC
Pieces per pallet	21	21	21
Pallets per container	5	12	24
Pieces per container	105	252	504