

STP290 - 24/Vd
STP285 - 24/Vd

SUNTECH
Solar powering a green future™

290 Watt

POLYCRYSTALLINE SOLAR MODULE



Features



High module conversion efficiency
 (up to 14.9%), through superior cell technology and leading manufacturing capability



Positive tolerance
 Guaranteed positive tolerance 0/+5% ensures power output reliability



Extended wind load and snow load tests
 Entire module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) *



Self clean effect
 Anti-reflective, hydrophobic layer improves light absorption and reduces surface dust



Excellent weak light performance
 Excellent performance under low light environments (mornings, evenings, and cloudy days)



Suntech current sorting process
 All Suntech modules sorted and packaged by amperage, maximizing system output by reducing mismatch losses by up to 2%

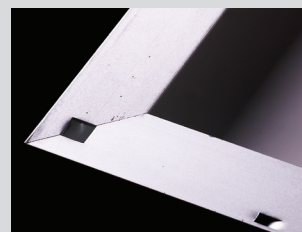
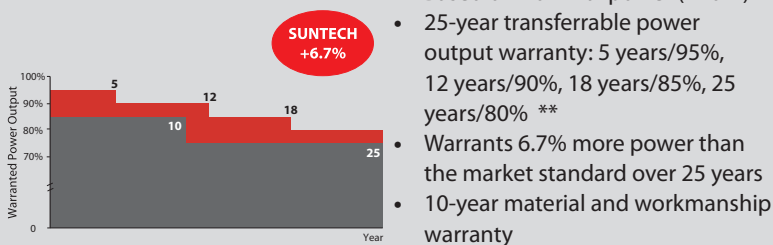
Certification and standards:
 UL1703, IEC 61215, IEC 61730, conformity to CE



Trust Suntech to Deliver Reliable Performance Over Time

- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards : ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005

Industry-leading Warranty based on Pnom



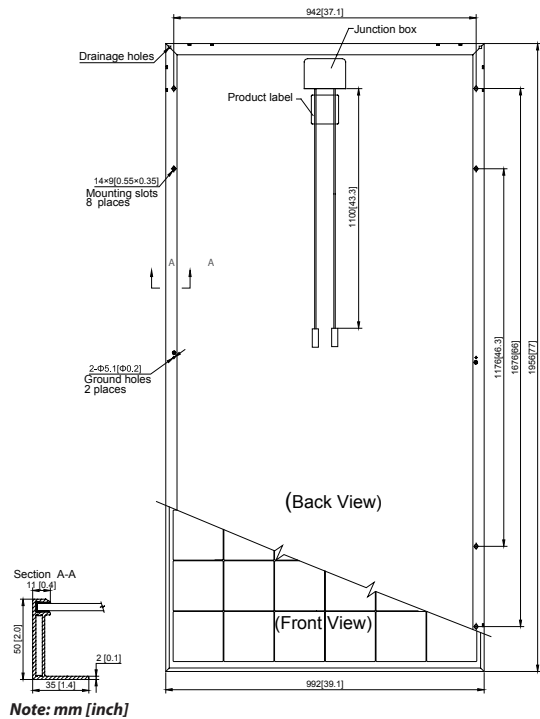
Superior Frame Design
 Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.



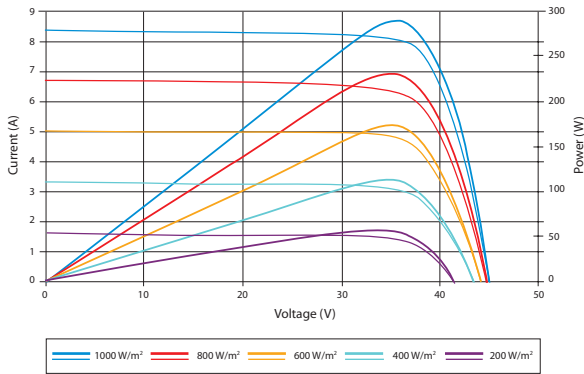
Most Modern IP67 Rated Junction Box
 Supports any orientation installation. High performance low resistance connectors ensure maximum module power output for highest energy production.

* Please refer to Suntech Standard Module Installation Manual for details.
 ** Please refer to Suntech Product Warranty for details.

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



Excellent performance under weak light conditions: at an irradiance intensity of 200 W/m² (AM 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m²) is achieved

Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.44 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.055 %/°C

Electrical Characteristics

STC	STP290-24/Vd	STP285-24/Vd
Optimum Operating Voltage (Vmp)	35.6 V	35.4 V
Optimum Operating Current (Imp)	8.15 A	8.06 A
Open Circuit Voltage (Voc)	45.0 V	44.9 V
Short Circuit Current (Isc)	8.42 A	8.37 A
Maximum Power at STC (Pmax)	290 W	285 W
Module Efficiency	14.9%	14.7%
Operating Module Temperature	-40 °C to +85 °C	
Maximum System Voltage	600 V DC (UL)/ 1000 V DC (IEC)	
Maximum Series Fuse Rating	20 A	
Power Tolerance	0/+5 %	

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
 Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

NOCT	STP290-24/Vd	STP285-24/Vd
Maximum Power at NOCT (Pmax)	211 W	208 W
Optimum Operating Voltage (Vmp)	32.2 V	32.1 V
Optimum Operating Current (Imp)	6.56 A	6.48 A
Open Circuit Voltage (Voc)	41.2 V	41.0 V
Short Circuit Current (Isc)	6.80 A	6.77 A

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;
 Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

Mechanical Characteristics

Solar Cell	Polycrystalline 156 × 156 mm (6 inches)
No. of Cells	72 (6 × 12)
Dimensions	1956 × 992 × 50 mm (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 UL 4703, TUV (2Pfg1169: 2007)
Output Cables	4.0 mm ² (0.006 inches ²), symmetrical lengths (-) 1100 mm (43.3 inches) and (+) 1100 mm (43.3 inches)
Connectors	H4 connectors (MC4 compatible)

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

Dealer information

Specifications are subject to change without further notification