

# STP275 - 24/Vd STP280 - 24/Vd

CSF-LC/JM-2a

**SUNTECH**

Solar powering a green future™

## 280 Watt

### POLYCRYSTALLINE SOLAR MODULE

#### Features



**High module conversion efficiency**  
(up to 14.4%), through superior cell technology and leading manufacturing capability



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



**Self-cleaning & anti-reflective**  
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)



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



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



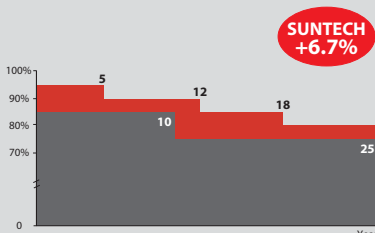
Certification and standards:  
UL1703, IEC 61215, IEC 61730, conformity to CE



#### Trust Suntech to Deliver Reliable Performance Over Time

- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivalled manufacturing capacity and world-class technology
- Committed to local manufacturing with our state-of-the-art module production factory located in Goodyear, Arizona
- Bankable brand; respected by global financial institutions

#### Industry-leading warranty based on Pnom



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



Modules made in Suntech's Arizona factory fully meet the requirements of the American Recovery and Reinvestment Act (ARRA) and Buy American Act (BAA), and are Trade Agreement Act (TAA) compliant.

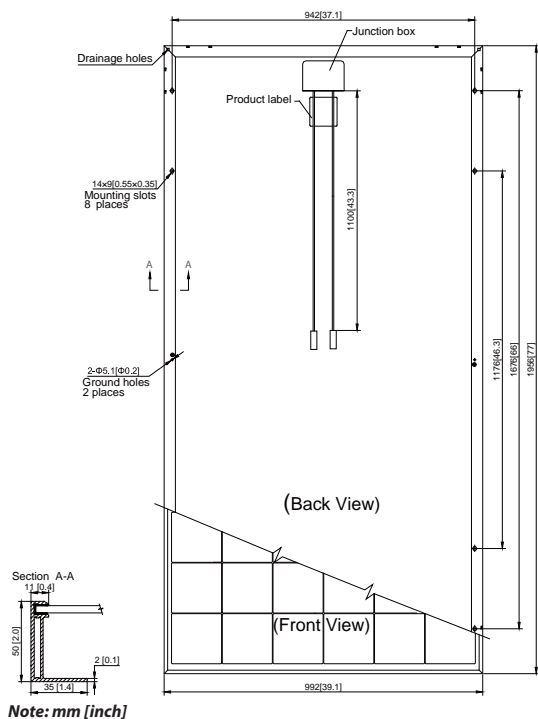


Strict production guidelines staffed by highly-trained manufacturing experts and rigorous quality control ensures we deliver only the highest quality products to our customers.

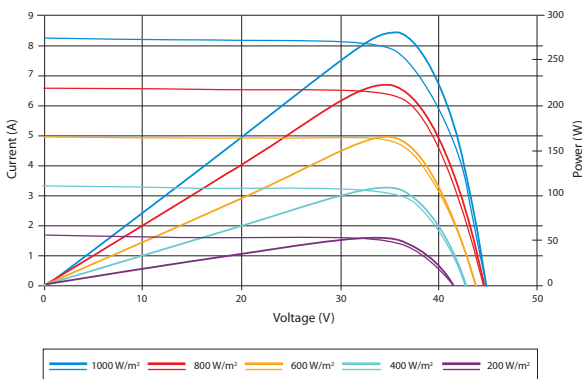
\* Please refer to Suntech Standard Module Installation Manual for details.  
\*\* Please refer to Suntech Product Warranty for details.

# STP275 - 24/Vd

# STP280 - 24/Vd



## Current-Voltage & Power-Voltage Curve (280-24)



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

## 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

## Dealer information

## Electrical Characteristics

STC	STP275-24/Vd	STP280-24/Vd
Optimum Operating Voltage (Vmp)	35.1 V	35.2 V
Optimum Operating Current (Imp)	7.84 A	7.95 A
Open - Circuit Voltage (Voc)	44.7 V	44.8 V
Short - Circuit Current (Isc)	8.26 A	8.33 A
Maximum Power at STC (Pmax)	275 W	280 W
Module Efficiency	14.2%	14.4%
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/m<sup>2</sup>, module temperature 25 °C, AM=1.5;

Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

NOCT	STP275-24/Vd	STP280-24/Vd
Maximum Power (W)	201 W	204 W
Maximum Power Voltage (V)	31.9 V	32.0 V
Maximum Power Current (A)	6.29 A	6.39 A
Open Circuit Voltage (Voc)	40.7 V	40.8 V
Short Circuit Current (Isc)	6.68 A	6.74 A

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, 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 <sup>2</sup> (0.006 inches <sup>2</sup> ), 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