




STP280 - 24/Vd STP275 - 24/Vd


280 Watt POLYCRYSTALLINE SOLAR MODULE


Features


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High module conversion efficiency (up to 14.4%), through superior manufacturing technology
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Guaranteed 0-5W positive power output tolerance ensures high reliability
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Three bus-bar design enhances cell reliability and reduces series resistance for large fill factor
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Excellent performance under low light environments (mornings, evenings and cloudy days)
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Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal) *
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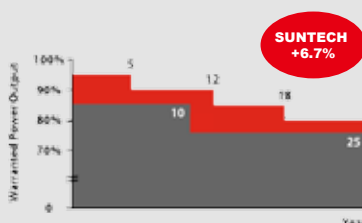
4.0mm thick tempered glass improves module durability



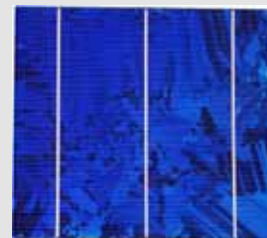
Trust Suntech to Deliver Reliable Performance Over Time

- World's leading manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards : ISO 9001: 2008 and ISO 14001: 2004
- Certification and standards: IEC 61215, IEC 61730, conformity to CE

Industry-leading warranty



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

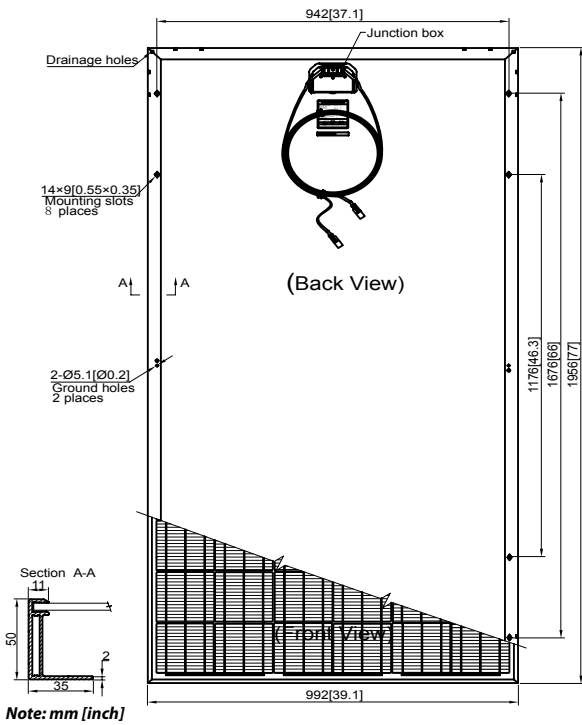


Textured surface and silicon nitride anti-reflection coating improves light absorption for more current production

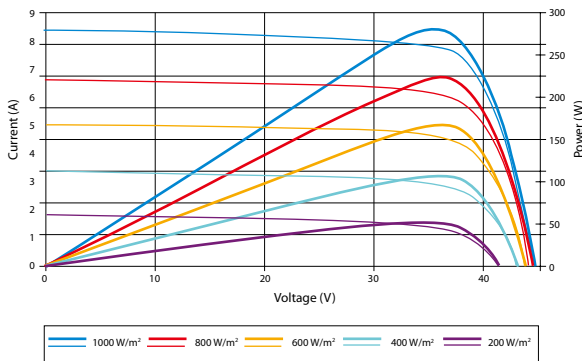


Suntech's reputation is founded on more than 1.5 gigawatts of high-performing solar modules installed around the world

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



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



Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.47 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.045 %/°C



Electrical Characteristics

STC	STP280-24/Vd	STP275-24/Vd
Optimum Operating Voltage (Vmp)	35.2 V	35.1 V
Optimum Operating Current (Imp)	7.95 A	7.84 A
Open - Circuit Voltage (Voc)	44.8 V	44.7 V
Short - Circuit Current (Isc)	8.33 A	8.26 A
Maximum Power at STC (Pmax)	280 W	275 W
Module Efficiency	14.4%	14.2%
Operating Temperature	-40 °C to +85 °C	-40°C to +85°C
Maximum System Voltage	600 V DC	600 V DC
Maximum Series Fuse Rating	20 A	20 A
Power Tolerance	0/+5 W	0/+5 W

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

NOCT	STP280-24/Vd	STP275-24/Vd
Maximum Power (W)	204 W	201 W
Maximum Power Voltage (V)	32.0 V	31.9 V
Maximum Power Current (A)	6.39 A	6.29 A
Open Circuit Voltage (Voc)	40.8 V	40.7 V
Short Circuit Current (Isc)	6.74 A	6.68 A
Efficiency Reduction (from 1000 W/m² to 200 W/m²)	<4.5%	<4.5%

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s

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 kgs (59.5 lbs.)
Front Glass	4.0 mm (0.16 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Output Cables	H+S RADOX® SMART cable 4.0 mm² (0.006 inches²), symmetrical lengths (-) 1100 mm (43.3 inches) and (+) 1100 mm (43.3 inches), H4 connectors (MC4 compatible)

Packing Configuration

Container	20' GP	40' GP	40' HC
Pieces per pallet	21	21	21
Pallets per container	6	12	24
Pieces per container	126	252	504

Specifications are subject to change without further notification