







STP280 - 24/Vd STP275 - 24/Vd

280 Watt POLYCRYSTALLINE SOLAR MODULE

Features

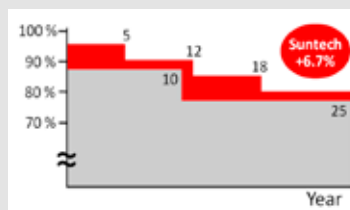
- **14.4%**
High module conversion efficiency (up to 14.4%), through superior manufacturing technology
- **0-5W**
Guaranteed 0-5W positive power output tolerance ensures high reliability
- **Self-clean**
Anti-reflective, hydrophobic coating improves light absorption and reduces surface dust
- **Weak light**
Excellent performance under low light environments (mornings, evenings and cloudy days)
- **2400Pa
5400Pa**
Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal) *
- **4.0 mm**
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, UL 1703, 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

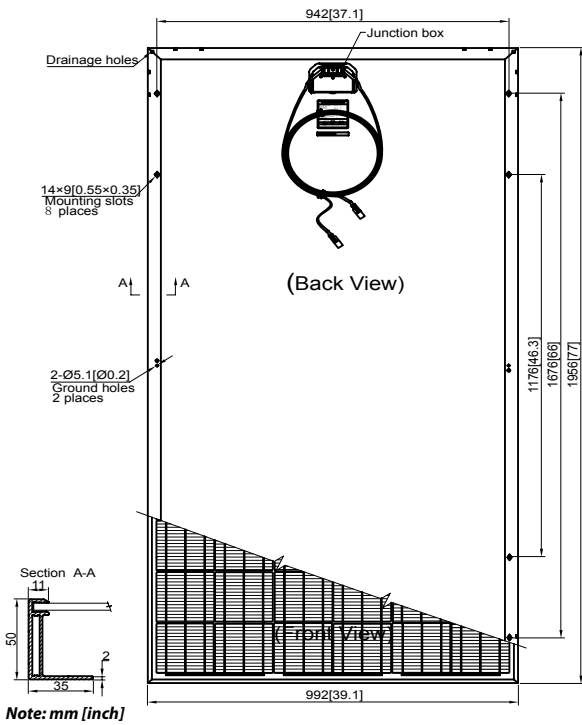


Suntech's reputation is founded on more than 1.5 gigawatts of high-performing solar modules installed around the world

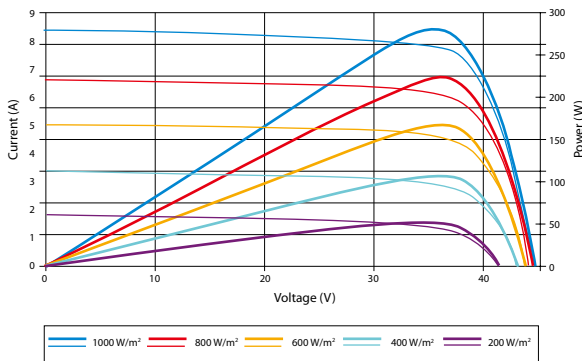


Latest IP67 rated junction box improves module performance stability with enhanced thermal isolation.

* 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 Wp | 275 Wp |
| Module Efficiency | 14.4% | 14.2% |
| Operating Temperature | -40 °C to +85 °C | -40 °C to +85 °C |
| Maximum System Voltage | 1000 V DC | 1000 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/m ² to 200 W/m ²) | <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 mm ² (0.006 inches ²), symmetrical lengths (-) 1100 mm (43.3 inches) and (+) 1100 mm (43.3 inches), RADOX® SOLAR integrated twist locking connectors |

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