

STP280 - VRM - 1
STP275 - VRM - 1

280 Watt

RELIATHON 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



Suntech's TruPower™
 Suntech's TruPower™ process neutralizes the initial LID effect



Self-Aligning frame
 Free of vertical stabilizer, interlocking frames align new, stronger modules with trackers or fixed-tilt mounting structures



Integrated grounding
 Built-in grounding plates automatically ground frames to the mounting structure, saving both time and money



Fast-Installing U bolts
 U bolts fasten each module to the frame, using less small parts and fasteners, and reducing installation time



Withstand high wind loads
 Module certified to withstand high wind loads (2400 Pascal)



Certifications and standards:



Trust Suntech to Deliver Reliable Performance Over Time

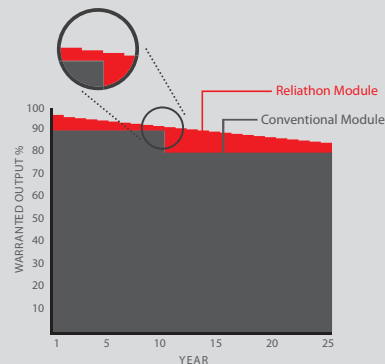
- World's No.1 manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards : ISO 9001: 2008 and ISO 14001: 2004



Industry-Leading Partners

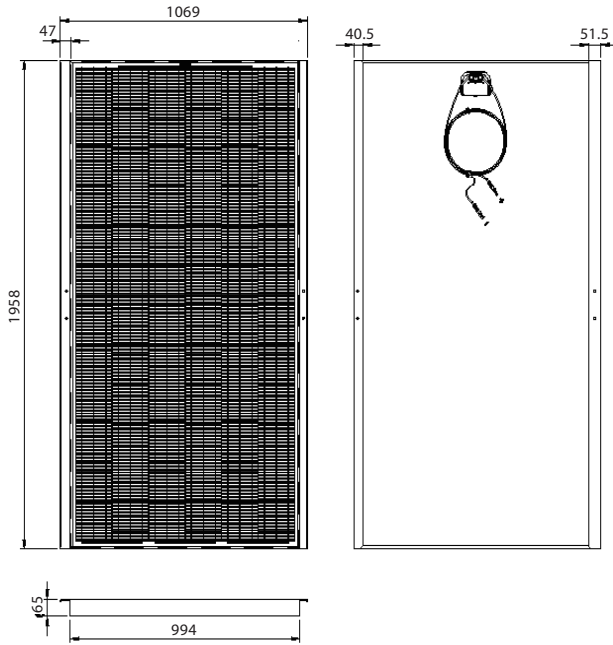
Suntech has carefully selected best-in-class partners to supply utility-grade inverters and tracking systems for Reliathon systems

Reliathon Utility-Grade Warranty



12.3% Better Power Warranty

In an industry first, the Reliathon 25-year utility-grade warranty includes an annual step-down feature that warrants module output at yearly intervals for more precise power output expectations

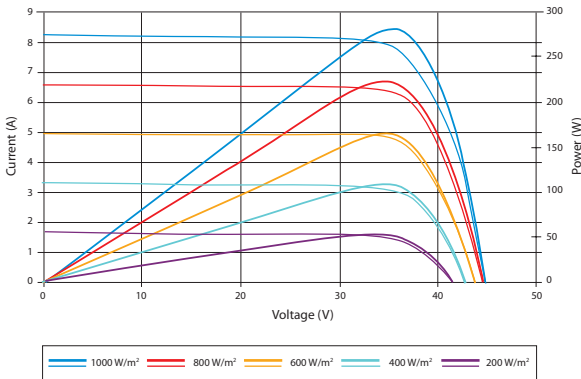


Electrical Characteristics

STC	STP 280 - VRM - 1	STP 275 - VRM - 1
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%	14.1%
Operating 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;
 Power measurement tolerance: ± 3%

Current-Voltage & Power-Voltage Curve (STP 280 - VRM - 1)



Excellent performance under weak light conditions: at an irradiation 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

NOCT	STP 280 - VRM - 1	STP 275 - VRM - 1
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

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s;
 Power measurement tolerance: ± 3%

Mechanical Characteristics

Solar Cell	Polycrystalline 156 × 156 mm (6 inches)
No. of Cells	72 (6 × 12)
Dimensions	1069 × 1958 × 65 mm (42.1 × 77.0 × 2.5 inches)
Weight	29 kgs (64 lbs.)
Front Glass	4.0 mm (0.16 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Wind Loads	2400 Pascal certified
Output Cables	(-) 570 mm (22.4 inches) and (+) 270 mm (10.6 inches), H4 connectors (MC4 compatible)

Dealer information

Specifications are subject to change without further notification