

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



280 Watt

RELIATHON SOLAR MODULE

Designed from the ground up for Ground Mount solar



High Efficiency Cells

High conversion efficiency and patented surface texturing increase cell sunlight absorption.



Self-Aligning Frame

Interlocking frames align new, stronger modules with trackers or fixed-tilt mounting structures. No vertical stabilizers are required.



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, reducing the number of small parts and fasteners—and reducing installation time.



Withstands High Wind Loads

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



Backed by Suntech and the Reliathon Utility-Grade Warranty



Gigawatt Manufacturing

Industry-leading manufacturing capacity, technology leadership, and financial strength make Suntech an ideal long-term partner for large-scale solar power plants.



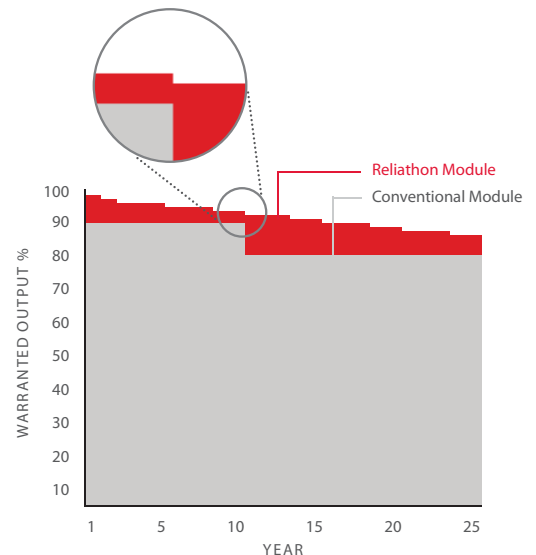
Over >2.2 GW Shipped

Suntech modules power the world's largest solar power plants. Reliathon was designed with insight gained from >2.2 GW of solar module installations.



Industry-Leading Partners

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



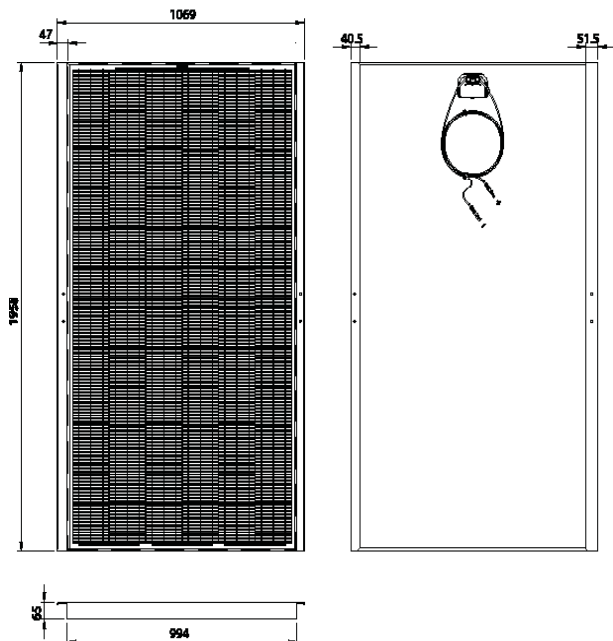
12.3% Better Power Warranty

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.

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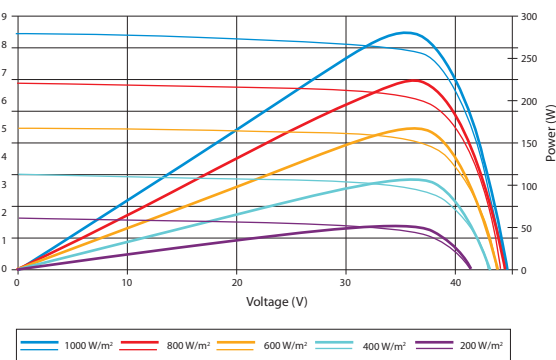
SUNTECH

Solar powering a green future™



Note: mm

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



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	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	14.3%	14.1%
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	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
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	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), MC Type IV Connectors

Specifications are subject to change without further notification