

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



3 bus bar

Three bus-bar design enhances cell reliability and reduces series resistance for large fill factor



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

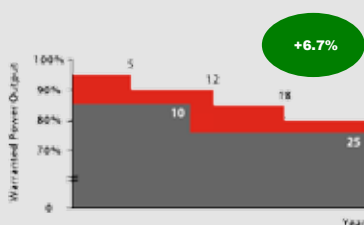


CE

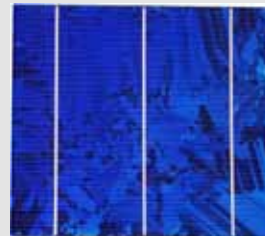
Trust Sunny to Deliver Reliable Performance Over Time

- 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

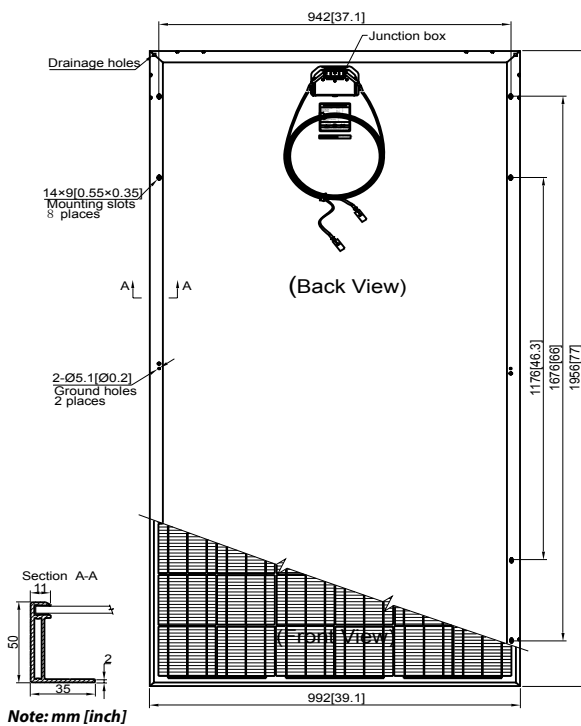


Textured surface and silicon nitride anti-reflection coating improves light absorption for more current production

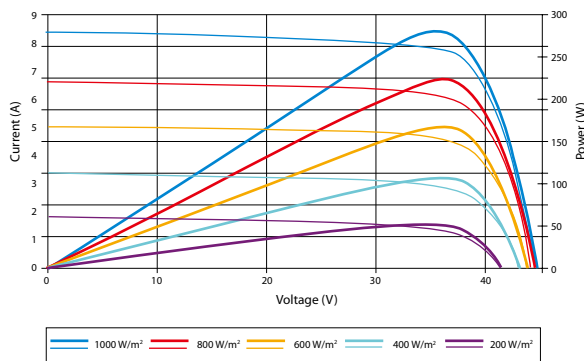


Sunny's reputation is founded on more than 1.5 gigawatts of high-performing solar modules installed around the world

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



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



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

Dealer information box

Specifications are subject to change without further notification

Electrical Characteristics

STC	SM280D	SM275D
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	SM280D	SM275D
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), 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