



SolarWorld controls the creation of every solar product from beginning to end in their state-of-the-art facility in Hillsboro, Oregon.

SW 300 Mono

Positive Power Tolerance, PID free, Optimized Surface Structure

Each module machine tested to perform at greater than or equal to nameplate rated power. SolarWorld Sunmodules have been certified free of potential induced degradation (PID), resulting in a smaller-than-average overall power output performance decrease throughout the lifespan of the system. Surface coatings and granulated texture result in both reduction of reflection of light, and also loss of energy capacity between cells.

Inspection guaranty result of independent test provider certification of specified power ratings, averaging an impressively low 2% measure tolerance.

Internal module tested three times to guaranty U.S. and international standards.

*Information from SolarWorld Americas website: www.solarworld-usa.com

Sunmodule[®] Plus

SW 285-300 MONO (33mm frame, 5 busbar)



TUV Power controlled:
Lowest measuring tolerance in industry



Every component is tested to meet
3 times IEC requirements



Designed to withstand heavy
accumulations of snow and ice



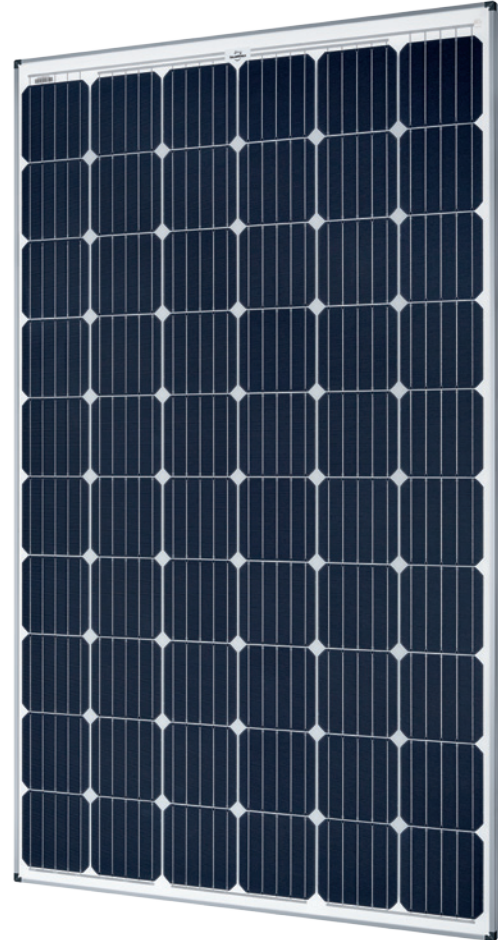
Sunmodule Plus:
Positive performance tolerance



25-year linear performance warranty
and 10-year product warranty



Glass with anti-reflective coating



World-class quality

Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

SolarWorld Plus-Sorting

Plus-Sorting guarantees highest system efficiency. SolarWorld only delivers modules that have greater than or equal to the nameplate rated power.

25-year linear performance guarantee and extension of product warranty to 10 years

SolarWorld guarantees a maximum performance digression of 0.7% p.a. in the course of 25 years, a significant added value compared to the two-phase warranties common in the industry, along with our industry-first 10-year product warranty.*

*in accordance with the applicable SolarWorld Limited Warranty at purchase.
www.solarworld.com/warranty



- Qualified, IEC 61215
- Safety tested, IEC 61730
- Blowing sand resistance, IEC 60068-2-68
- Ammonia resistance, IEC 62716
- Salt mist corrosion, IEC 61701
- Periodic inspection



- Periodic inspection
- Power controlled



Sunmodule[®] Plus

SW 285-300 MONO (33mm frame, 5 busbar)



PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)*

		SW 285	SW 290	SW 295	SW 300
Maximum power	P_{max}	285 Wp	290 Wp	295 Wp	300 Wp
Open circuit voltage	V_{oc}	39.7 V	39.9 V	40.0 V	40.1 V
Maximum power point voltage	V_{mpp}	31.3 V	31.4 V	31.5 V	31.6 V
Short circuit current	I_{sc}	9.84 A	9.97 A	10.10 A	10.23 A
Maximum power point current	I_{mpp}	9.20 A	9.33 A	9.45 A	9.57 A
Module efficiency	η_m	17.00 %	17.30 %	17.59 %	17.89 %

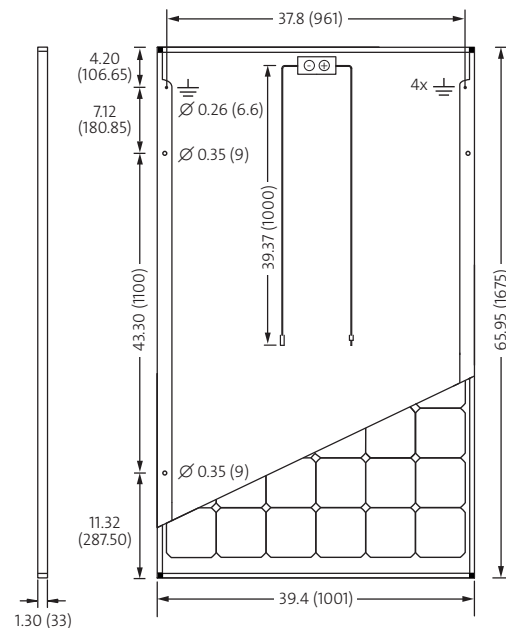
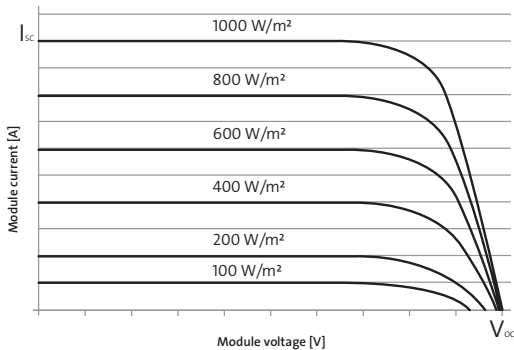
*STC: 1000W/m², 25°C, AM 1.5

PERFORMANCE AT 800 W/M², NOCT, AM 1.5

		SW 285	SW 290	SW 295	SW 300*
Maximum power	P_{max}	213.1 Wp	217.1 Wp	220.5 Wp	224.1 Wp
Open circuit voltage	V_{oc}	36.4 V	36.6 V	36.7 V	36.9 V
Maximum power point voltage	V_{mpp}	28.7 V	28.8 V	28.9 V	31.1 V
Short circuit current	I_{sc}	7.96 A	8.06 A	8.17 A	8.27 A
Maximum power point current	I_{mpp}	7.43 A	7.54 A	7.64 A	7.75 A

Minor reduction in efficiency under partial load conditions at 25° C: at 200 W/m², 100% of the STC efficiency (1000 W/m²) is achieved.

*Preliminary values, subject to change.



All units provided are imperial. SI units provided in parentheses.
SolarWorld AG reserves the right to make specification changes without notice.

COMPONENT MATERIALS

Cells per module	60	Front	Low-iron tempered glass with ARC (EN 12150)
Cell type	Mono crystalline 5 bus bar	Frame	Clear anodized aluminum
Cell dimensions	6.17 in x 6.17 in (156.75 x 156.75 mm)	Weight	39.7 lbs (18.0 kg)

THERMAL CHARACTERISTICS

NOCT	46°C
TCI_{sc}	0.04 %/K
TCV_{oc}	-0.30 %/K
TCP_{mpp}	-0.41 %/K
Operating temp	-40° C to +85° C

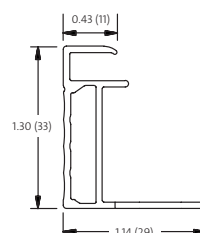
ADDITIONAL DATA

Power sorting	-0 Wp/+5 Wp
J-Box	IP65
Connector	PV wire per UL4703 with H4 connectors
Module fire performance	(UL 1703) Type 1

PARAMETERS FOR OPTIMAL SYSTEM INTEGRATION

Maximum system voltage SC II / NEC	1000 V	
Maximum reverse current	25 A	
Number of bypass diodes	3	
Design loads*	Two rail system	113 psf downward, 64 psf upward
Design loads*	Three rail system	178 psf downward, 64 psf upward
Design loads*	Edge mounting	178 psf downward, 41 psf upward

* Please refer to the Sunmodule installation instructions for the details associated with these load cases.



- Compatible with both "Top-Down" and "Bottom" mounting methods
- \perp Grounding Locations:
 - 4 locations along the length of the module in the extended flange.