

Sunmodule[®] Plus

SW 275 - 285 mono black



Data sheet



Produced in Germany,
the center for solar technology



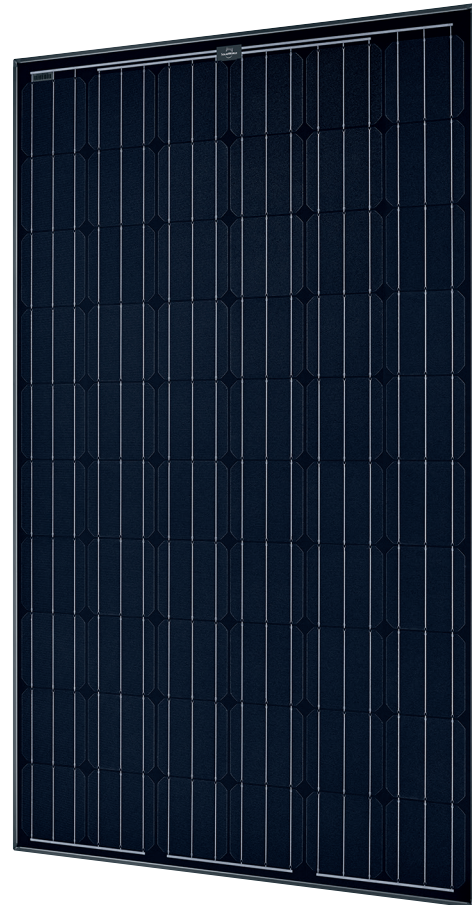
TUV Power controlled:
Lowest measuring tolerance in industry



Sunmodule Plus:
Positive performance tolerance



25 year linear performance warranty and
10 year product warranty



SolarWorld AG relies on Germany as its technology location, thereby ensuring sustainable product quality.

The TUV Rheinland Power controlled inspection mark guarantees that the nominal power indicated for solar modules is inspected at regular intervals and thus ensured. The deviation to TUV is maximum 2 percent.

The positive power tolerance guarantees utmost system efficiency. Only modules achieving or exceeding the designated nominal power in performance tests are dispatched. The power tolerance ranges between -0 Wp and +5 Wp.

With its linear performance warranty covering a period of 25 years, SolarWorld guarantees a maximum performance depression of 0.7% p.a., a significant added value compared to the two-phase warranties common in the industry. Therefore, the service certificate offers comprehensive protection for your investment in the long term.

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PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)*

		SW 275	SW 280	SW 285
Maximum power	P_{max}	275 Wp	280 Wp	285 Wp
Open circuit voltage	U_{oc}	39.4 V	39.5 V	39.7 V
Maximum power point voltage	U_{mpp}	31.0 V	31.2 V	31.3 V
Short circuit current	I_{sc}	9.58 A	9.71 A	9.84 A
Maximum power point current	I_{mpp}	8.94 A	9.07 A	9.2 A
Module efficiency	η_m	16.4 %	16.7 %	17.0 %

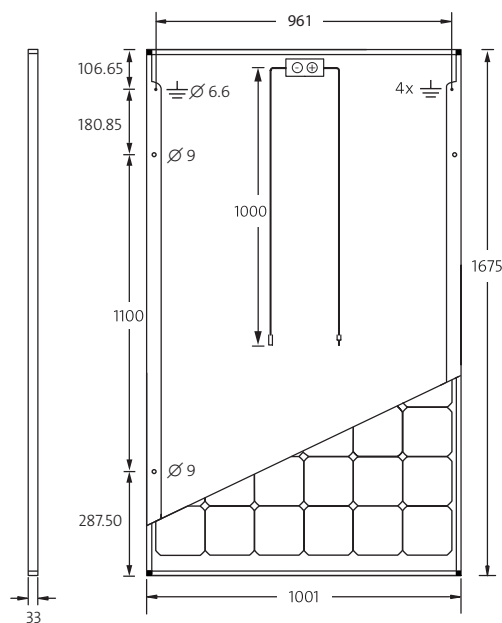
Measuring tolerance (P_{max}) traceable to TUV Rheinland: +/- 2% (TUV Power controlled)

*STC: 1000W/m², 25°C, AM 1.5

PERFORMANCE AT 800 W/m², NOCT, AM 1.5

		SW 275	SW 280	SW 285
Maximum power	P_{max}	203.1 Wp	207.2 Wp	211.1 Wp
Open circuit voltage	U_{oc}	35.7 V	35.8 V	36 V
Maximum power point voltage	U_{mpp}	28.1 V	28.3 V	28.4 V
Short circuit current	I_{sc}	7.75 A	7.85 A	7.96 A
Maximum power point current	I_{mpp}	7.22 A	7.33 A	7.43 A

Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m², 100% (+/-2%) of the STC efficiency (1000 W/m²) is achieved.



COMPONENT MATERIALS

Cells per module	60
Cell type	Mono crystalline
Cell dimensions	156 mm x 156 mm
Front	Tempered safety glass (EN 12150)
Back	Black film
Frame	black anodized aluminum
J-Box	IP65
Connector	H4

DIMENSIONS / WEIGHT

Length	1675 mm
Width	1001 mm
Height	33 mm
Weight	18.0 kg

THERMAL CHARACTERISTICS

NOCT	48 °C
TK I_{sc}	0.044 %/K
TK U_{oc}	-0.31 %/K
TK P_{mpp}	-0.43 %/K

PARAMETERS FOR OPTIMAL SYSTEM INTEGRATION

Power sorting	-0 Wp / +5 Wp
Maximum system voltage SC II	1000 V
Maximum reverse current	25 A
Load / dynamic load	5.4 / 2.4 kN/m ²
Number of bypass diodes	3
Operating range	-40°C bis +85°C

ORDERING INFORMATION

Order number	Description
82000046	Sunmodule Plus SW 275 mono black
82000048	Sunmodule Plus SW 280 mono black
82000050	Sunmodule Plus SW 285 mono black

