

# Sunmodule<sup>®</sup> Plus

## SW 280 mono black



### Data Sheet



Produced in Germany,  
the center for solar technology



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ID 0000039351

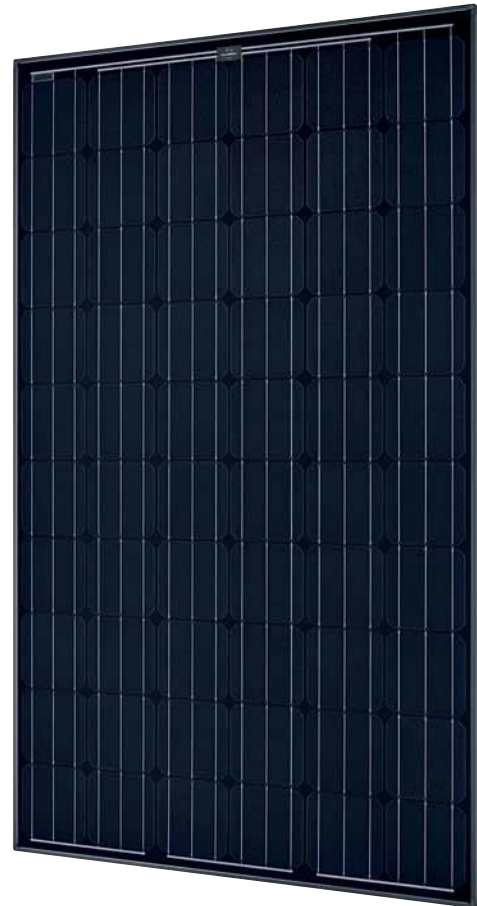
TUV Power controlled:  
Lowest measuring tolerance in industry



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 degradation 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 280
Maximum power	$P_{max}$	280 Wp
Open circuit voltage	$U_{oc}$	39.5 V
Maximum power point voltage	$U_{mpp}$	31.2 V
Short circuit current	$I_{sc}$	9.71 A
Maximum power point current	$I_{mpp}$	9.07 A

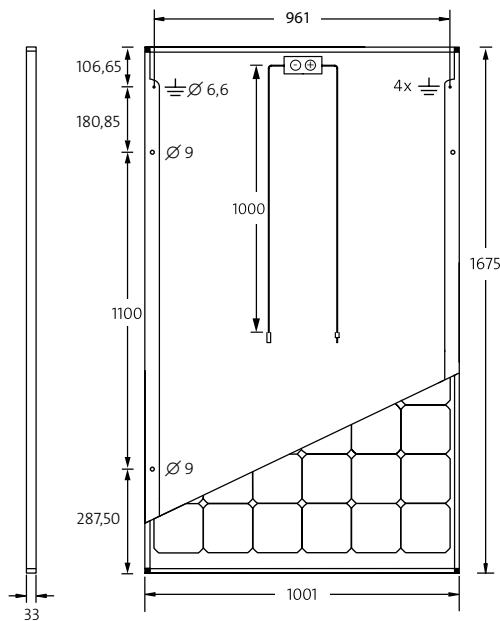
Measuring tolerance ( $P_{max}$ ) traceable to TUV Rheinland: +/- 2% (TUV Power controlled)

\*STC: 1000W/m<sup>2</sup>, 25°C, AM 1.5

### PERFORMANCE AT 800 W/m<sup>2</sup>, NOCT, AM 1.5

		SW 280
Maximum power	$P_{max}$	207.2 Wp
Open circuit voltage	$U_{oc}$	35.8 V
Maximum power point voltage	$U_{mpp}$	28.3 V
Short circuit current	$I_{sc}$	7.85 A
Maximum power point current	$I_{mpp}$	7.33 A

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



#### DIMENSIONS

Length	1675 mm
Width	1001 mm
Height	33 mm
Frame	Black anodized aluminum
Weight	18.0 kg

#### COMPONENT MATERIALS

Cells per module	60
Cell type	Mono crystalline
Cell dimensions	156 mm x 156 mm
Front	tempered glass (EN 12150)

#### THERMAL CHARACTERISTICS

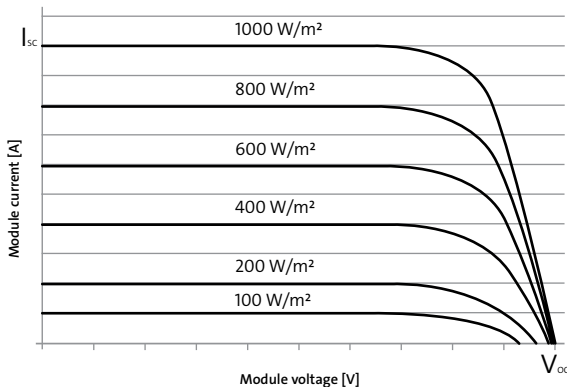
NOCT	48 °C
TC $I_{sc}$	0.044 %/K
TC $U_{oc}$	-0.31 %/K
TC $P_{mpp}$	-0.43 %/K

#### ADDITIONAL DATA

Power sorting	-0 Wp / +5 Wp
J-Box	IP65
Connector	H4

#### PARAMETERS FOR OPTIMAL SYSTEM INTEGRATION

Maximum system voltage SC II	1000 V
Maximum reverse current	25 A
Load / dynamic load	5.4 / 2.4 kN/m <sup>2</sup>
Number of bypass diodes	3
Operating range	-40 °C to +85 °C



SolarWorld AG reserves the right to make specification changes without notice. This data sheet complies with the requirements of EN 50380.