



**NEW ! 25 YEAR LINEAR  
PERFORMANCE WARRANTY AND  
A PRODUCT WORKMANSHIP  
WARRANTY OF 5 YEARS\***

Length	1675 mm
Width	1001 mm
Height	31 mm <sup>1)</sup>
Frame	Aluminum
Weight	21,2 kg



# Sunmodule<sup>+</sup>

## SW 220/225/230/235/240 poly

### German quality standards

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.

### Outstanding products

SolarWorld modules have received top marks in numerous independent performance tests:

In Photon test laboratory's endurance test, SolarWorld's modules occupied first place in 2008 and in 2009 and were assessed by the ÖKO-TEST consumer magazine as "very good".

### SolarWorld Plus sorting

Plus-sorting guarantees the highest system efficiency. Only modules that achieve the designated nominal performance or greater in performance tests are dispatched.

### 25 years linear performance guarantee\*

SolarWorld guarantees a maximum degeneration in performance of 0.7% p.a. for more than 25 years - a clear additional benefit compared with the conventional two-stage industry guarantees. In addition there is a product workmanship warranty that covers 5 years.

\*in accordance with the applicable SolarWorld service certificate at purchase  
[www.solarworld.com/service-certificate](http://www.solarworld.com/service-certificate)



# Sunmodule<sup>+</sup>

## SW 220/225/230/235/240 poly

### PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)\*

		SW 220	SW 225	SW 230	SW 235	SW 240
Maximum power	$P_{max}$	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp
Open circuit voltage	$U_{oc}$	36,6 V	36,8 V	36,9 V	37,0 V	37,2 V
Maximum power point voltage	$U_{mpp}$	29,2 V	29,5 V	29,8 V	30,0 V	30,2 V
Short circuit current	$I_{sc}$	8,08 A	8,17 A	8,25 A	8,35 A	8,44 A
Maximum power point current	$I_{mpp}$	7,54 A	7,63 A	7,72 A	7,85 A	7,96 A

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

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

		SW 220	SW 225	SW 230	SW 235	SW 240
Maximum power	$P_{max}$	157,3 Wp	160,9 Wp	164,4 Wp	170,4 Wp	174,2 Wp
Open circuit voltage	$U_{oc}$	33,1 V	33,3 V	33,4 V	33,5 V	33,7 V
Maximum power point voltage	$U_{mpp}$	26,2 V	26,5 V	26,7 V	27,1 V	27,4 V
Short circuit current	$I_{sc}$	6,68 A	6,75 A	6,82 A	6,73 A	6,80 A
Maximum power point current	$I_{mpp}$	6,01 A	6,08 A	6,15 A	6,28 A	6,37 A

Minor reduction in efficiency under partial load conditions at 25°C: at 200W/m<sup>2</sup>, 95% (+/-3%) of the STC efficiency (1000 W/m<sup>2</sup>) is achieved.

### COMPONENT MATERIALS

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

### SYSTEM INTEGRATION PARAMETERS

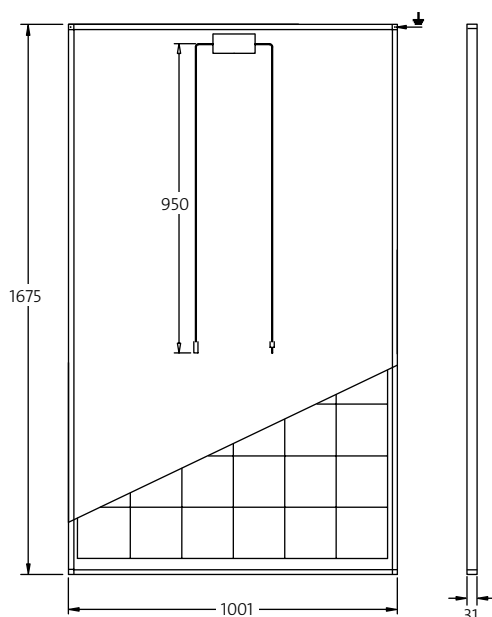
Maximum system voltage SC II	1000 V
Maximum reverse current	16 A
Increased snowload acc. to IEC 61215	5,4 kN/m <sup>2</sup>
Number of bypass diodes	3

### THERMAL CHARACTERISTICS

NOCT	46 °C
TC $I_{sc}$	0,034 %/K
TC $U_{oc}$	-0,34 %/K
TC $P_{mpp}$	-0,48 %/K

### ADDITIONAL DATA

Measuring tolerance	+/- 3 %
Junction box	IP65
Connector	MC4
SolarWorld Plus-Sorting <sup>2)</sup>	$P_{Flash} \geq P_{max}$



- Qualified, IEC 61215
- Safety tested, IEC 61730
- Periodic Inspection



- 1) Temporarily, also modules with a frame height of 34 mm can be supplied. Please inquire with your dealer.
- 2) The output identified by SolarWorld ( $P_{Flash}$ ) is always higher than the nominal output ( $P_{max}$ ) of the module.
- 3) Depending on the market. SolarWorld AG reserves the right to make specification changes without notice. This data sheet complies with the requirements of EN 50380.