

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

Length1675 mmWidth1001 mmHeight31 mm<sup>1)</sup>FrameAluminumWeight21,2 kg





### 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".

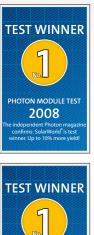
### SolarWorld Plus sorting

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-global.com/service-certificate



PHOTON MODULE TEST

2009



We turn sunlight into power.

# Sunmodule<sup>\*</sup> SW 220/225/230/235 poly

# PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)\*

		SW 220	SW 225	SW 230	SW 235
Maximum power	P <sub>max</sub>	220 Wp	225 Wp	230 Wp	235 Wp
Open circuit voltage	U <sub>oc</sub>	36,6 V	36,8 V	36,9 V	37,0 V
Maximum power point voltage	U <sub>mpp</sub>	29,2 V	29,5 V	29,8 V	30,0 V
Short circuit current	l <sub>sc</sub>	8,08 A	8,17 A	8,25 A	8,35 A
Maximum power point current	Impp	7,54 A	7,63 A	7,72 A	7,85 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
Maximum power	P <sub>max</sub>	157,3 Wp	160,9 Wp	164,4 Wp	170,4 Wp
Open circuit voltage	U <sub>oc</sub>	33,1 V	33,3 V	33,4 V	33,5 V
Maximum power point voltage	U <sub>mpp</sub>	26,2 V	26,5 V	26,7 V	27,1 V
Short circuit current	l <sub>sc</sub>	6,68 A	6,75 A	6,82 A	6,73 A
Maximum power point current	Impp	6,01 A	6,08 A	6,15 A	6,28 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)

## THERMAL CHARACTERISTICS

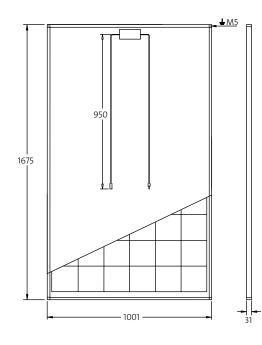
NOCT	46 °C
TC I <sub>sc</sub>	0,034 %/K
TC U <sub>oc</sub>	-0,34 %/K
TC P <sub>mpp</sub>	-0,48 %/K

## SYSTEM INTEGRATION PARAMETERS

Maximum system voltage SC II	1000 V
Maximum reverse current	16 A
Increased snowload acc. to IEC 61215	5,4 kN/m²
Number of bypass diodes	3

## ADDITIONAL DATA

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





**US LISTED** 

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<sub>Flash</sub>) is always higher than the nominal output
- (P<sub>max</sub>) 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.