

NEW! 25-YEAR LINEAR PERFORMANCE AND PRODUCT WARRANTY EXTENDED TO 5 YEARS\*

> Length 1675 mm Width 1001 mm Height 1) 31 mm Frame Aluminium Weight 22 kg

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

## **German Quality**

Using SolarWorld, you opt for brand-name products of the highest quality, manufactured according to German quality standards.

#### Award-winning products

SolarWorld modules were graded number one in two consecutive tests carried out by the Photon trade magazine in 2008 and 2009 with up to 12% more yield.

#### SolarWorld Plus Sorting

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

#### 25 year Linear Performance Guarantee\*

SolarWorld guarantees, over 25 years, that the modules' performance will not decrease by more than 0.7% p.a. – a distinct added value compared to the two-tiered guarantees usual in the industry. In addition, there is a product warranty extended to 5 years.

\*according to the Solar World service certificate valid at the time of purchase www.solarworld-global.com/service-certificate







We turn sunlight into power.

## Sunmodule SW 220/225/230/235 MONO BLACK

## 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>	37,2 V	37,3 V	37,4 V	37,5 V
Maximum power point voltage	U <sub>mpp</sub>	29,4 V	29,7 V	30,0 V	30,3 V
Short-circuit current	l sc	8,10 A	8,13 A	8,16 A	8,19 A
Maximum power point current	Impp	7,50 A	7,59 A	7,68 A	7,77 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>	159,0 Wp	162,9 Wp	166,9 Wp	170,9 Wp
Open circuit voltage	U <sub>oc</sub>	33,5 V	33,7 V	33,9 V	34,0 V
Maximum power point voltage	U <sub>mpp</sub>	26,5 V	26,8 V	27,2 V	27,5 V
Short-circuit current	sc	6,53 A	6,56 A	6,58 A	6,60 A
Maximum power point current	Impp	6,00 A	6,07 A	6,14 A	6,22 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	Mono crystalline
Cell dimensions	156 mm x 156 mm
Front	tempered glass (EN12150)

#### THERMAL CHARACTERISTICS

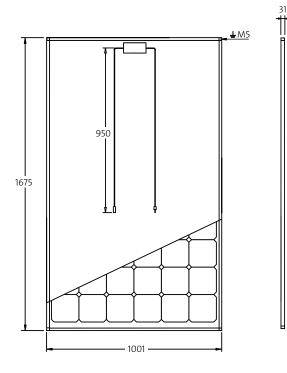
NOCT	47 °C
TC I <sub>sc</sub>	0,042 %/K
TC U <sub>oc</sub>	-0,33 %/K
TC Pmpp	-0,45 %/K

## 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

## ADDITIONAL DATA

Power tolerance	+/-3%
Junction box	, P65
Connector	MC4
SolarWorld Plus-Sorting 2)	$P_{\text{Flash}} \ge P_{\text{max}}$



 Safety tested, IEC 61730 iodic Inspection

SGS

 Qualified, IEC 61215 DE

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1) Temporarily, also modules with a frame height of 34mm can be supplied. Please inquire with your specialist dealer.

2) The output identified by SolarWorld ( $\mathrm{P}_{_{Flash}}$  ) is always higher than the

nominal output (P<sub>max</sub>) of the module. 3) depending on the market

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