

NEW! 25 YEAR LINEAR
PERFORMANCE WARRANTY AND
A PRODUCT WORKMANSHIP
WARRANTY OF 10 YEARS\*

Length 1675 mm Width 1001 mm Height 31 mm Frame Aluminum Weight 21,2 kg





# Sunmodule

SW 225/230/235/240/245 poly

#### German quality standards

TOP QUALITY

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.

#### TUV "Power controlled"

With the new TUV Rheinland test "Power controlled" it is guaranteed that the performance indicated for a Sunmodule Plus® solar panel is being met and that it is regularly monitored by the independent test service provider, TUV Rheinland. This additional security for investors and consumers is a further testament of SolarWorld's commitment to comprehensive quality assurance.

#### 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 and extension of product warranty to 10 years

SolarWorld guarantees a maximum performance degression of 0.7% p.a. in the course of 25 years, a significant added value compared to the two-phase warranties common in the industry. In addition, SolarWorld is offering a product warranty, which has been extended to 10 years.\*

 $^{\star}$  in accordance with the applicable SolarWorld Limited Warranty at purchase. www.solarworld.com/warranty



## SW 225/230/235/240/245 poly

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

|                             |                  | SW 225 | SW 230 | SW 235 | SW 240 | SW 245 |
|-----------------------------|------------------|--------|--------|--------|--------|--------|
| Maximum power               | $P_{max}$        | 225 Wp | 230 Wp | 235 Wp | 240 Wp | 245 Wp |
| Open circuit voltage        | U <sub>oc</sub>  | 36,8 V | 36,9 V | 37,0 V | 37,2 V | 37,5 V |
| Maximum power point voltage | U <sub>mpp</sub> | 29,5 V | 29,8 V | 30,0 V | 30,2 V | 30,8 V |
| Short circuit current       | l<br>sc          | 8,17 A | 8,25 A | 8,35 A | 8,44 A | 8,49 A |
| Maximum power point current | Impp             | 7,63 A | 7,72 A | 7,85 A | 7,96 A | 7,96 A |

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

#### PERFORMANCE AT 800 W/m², NOCT, AM 1.5

|                             |                  | SW 225   | SW 230   | SW 235   | SW 240   | SW 245   |
|-----------------------------|------------------|----------|----------|----------|----------|----------|
| Maximum power               | P <sub>max</sub> | 160,9 Wp | 164,4 Wp | 170,4 Wp | 174,2 Wp | 176,4 Wp |
| Open circuit voltage        | U <sub>oc</sub>  | 33,3 V   | 33,4 V   | 33,5 V   | 33,7 V   | 33,7 V   |
| Maximum power point voltage | U <sub>mpp</sub> | 26,5 V   | 26,7 V   | 27,1 V   | 27,4 V   | 27,7 V   |
| Short circuit current       | I <sub>sc</sub>  | 6,75 A   | 6,82 A   | 6,73 A   | 6,80 A   | 6,84 A   |
| Maximum power point current | I <sub>mpp</sub> | 6,08 A   | 6,15 A   | 6,28 A   | 6,37 A   | 6,37 A   |

Minor reduction in efficiency under partial load conditions at 25°C: at 200W/m², 95% (+/-3%) of the STC efficiency (1000 W/m²) 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

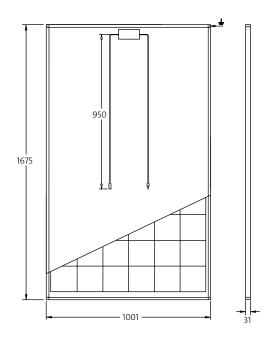
| NOCT                | 46 °C     |
|---------------------|-----------|
| TC I <sub>sc</sub>  | 0,034 %/K |
| TC U <sub>oc</sub>  | -0,34 %/K |
| TC P <sub>mpp</sub> | -0,48 %/K |

#### SYSTEM INTEGRATION PARAMETERS

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

#### ADDITIONAL DATA

| Measuring tolerance                   | +/- 3 %                 |
|---------------------------------------|-------------------------|
| J-Box                                 | IP65                    |
| Connector                             | MC4                     |
| SolarWorld Plus-Sorting <sup>1)</sup> | $P_{Flash} \ge P_{max}$ |













<sup>1)</sup> The output identified by SolarWorld ( $P_{Flash}$ ) is always higher than the nominal output ( $P_{max}$ ) of the module. 2) Depending on the market.

<sup>2)</sup> 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.