

## Sunmodule® SW 80 /85 /90 poly/RIA

With its Sunmodule® SolarWorld presents a photovoltaic module ideally suitable for both off-grid and small on-grid applications. Highest quality standards are applied in the entire manufacturing process. SolarWorld's in-depth expertise ensures best performance and highest energy yields over the entire lifespan, even under challenging climatic conditions.

The Sunmodule® is particularly used in industrial applications such as powering off-grid telecom or monitoring systems. It also covers a wide range of rural electrification applications in remote areas, e.g. solar home systems, village power supply, street lighting and many more.

The compact dimensions of the Sunmodule® and the solid workmanship of its aluminum frame allow easy and flexible mounting. The design of the water repellent junction box makes wiring easy and secure. The junction box is equipped with two cable glands and two easy to wire spring-type clamps, so no special tools are needed. This simplifies installation and speeds up the installation process.



### Performance under standard test conditions (STC\*)

		SW 80	SW 85	SW 90
Maximum power	$P_{max}$	80 Wp	85 Wp	90 Wp
Open circuit voltage	$V_{oc}$	21,5 V	21,9 V	22 V
Maximum power point voltage	$V_{mpp}$	17,9 V	17,9 V	17,7 V
Short circuit current	$I_{sc}$	4,82 A	5,42 A	5,45 A
Maximum power point current	$I_{mpp}$	4,48 A	4,98 A	5,1 A

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

### Component materials

Cells per module		36
Cell type	poly crystalline silicon	
Cell dimensions		156 x 104 mm <sup>2</sup>

### Thermal characteristics

NOCT		46°C
TC I <sub>sc</sub>		0.034 %/K
TC V <sub>oc</sub>		-0.34 %/K

### Performance at 800 W/m<sup>2</sup>, NOCT, AM 1.5

		SW 80	SW 85	SW 90
Maximum power	$P_{max}$	57,3 Wp	63,2 Wp	65,3 Wp
Open circuit voltage	$V_{oc}$	19,4 V	19,4 V	19,9 V
Maximum power point voltage	$V_{mpp}$	16,1 V	16,1 V	16,1 V
Short circuit current	$I_{sc}$	3,98 A	4,37 A	4,39 A
Maximum power point current	$I_{mpp}$	3,57 A	3,98 A	4,08 A

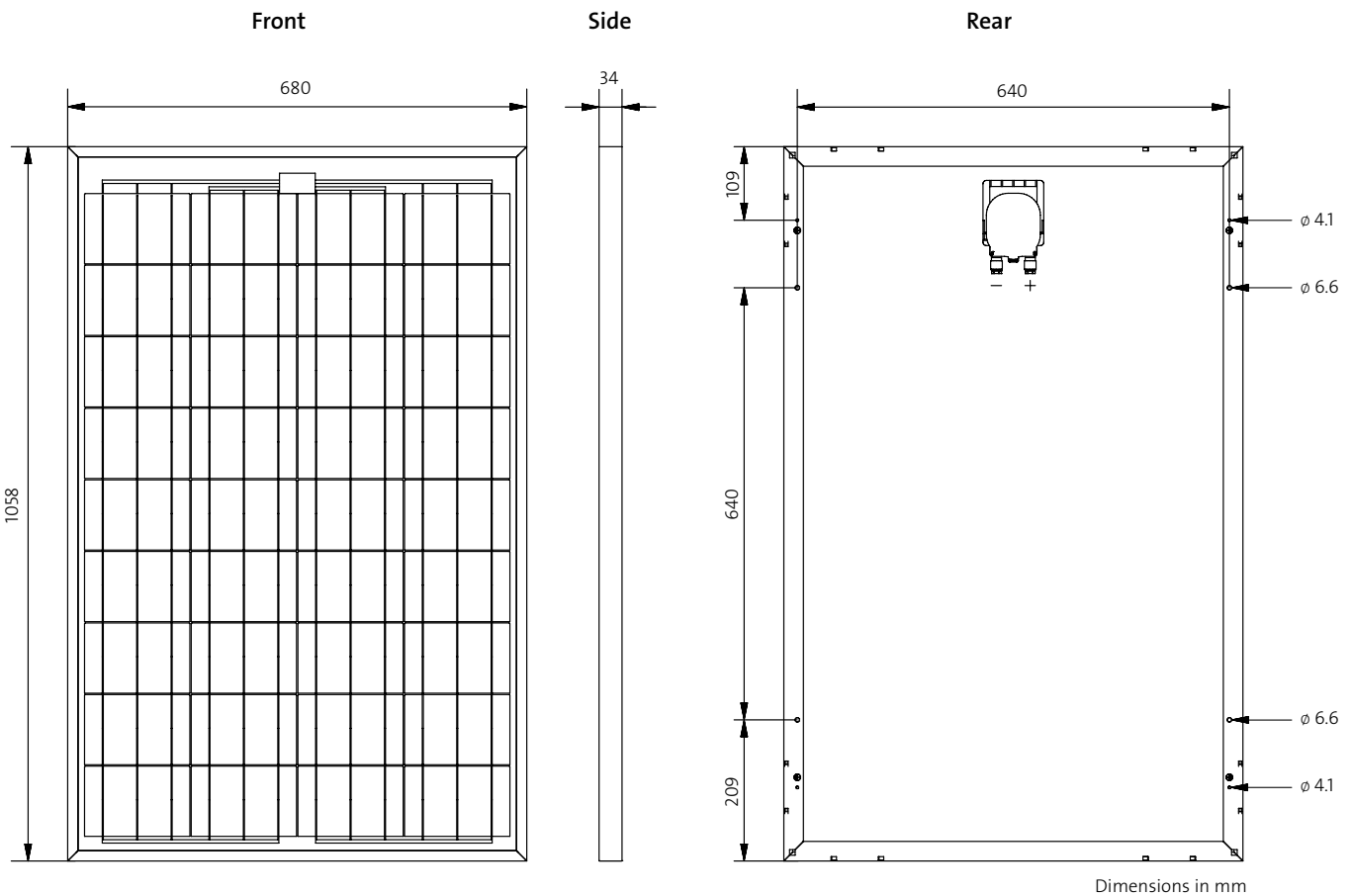
Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m<sup>2</sup>, 95% (+/- 5%) of the STC efficiency (1000 W/m<sup>2</sup>) is achieved.

### System integration parameters

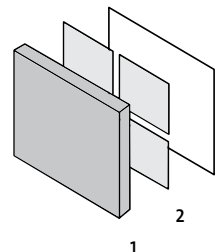
Maximum system voltage SC II	1000 V <sub>DC</sub>
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### Additional data

Power tolerance	+/- 5 %
Maximum outer cable diameter	6.9 mm
Maximum wire cross section	4 mm <sup>2</sup> (AWG 12)

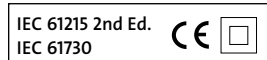


### Construction



- 1] Front: tempered glass
- 2] crystalline solar cells embedded in EVA (ethylene-vinyl-acetate)
- 3] Rear: Multilayer

In preparation



SolarWorld AG reserves the right to make specification changes without notice.