

# Sunmodule®

## SolarWorld Module SW 165/175/185 mono



The Sunmodule® SW 165/175/185 mono by SolarWorld offers an innovative module concept. The unique, fully automated production process ensures the highest level of precision and consistently high production quality. The machine finishing produces a highly homogeneous design.

The monocrystalline 5" cells lie behind a 3 mm hardened-glass glazing and are embedded in transparent EVA (ethylene-vinyl-acetate). The back of the module is sealed with a very high quality Tedlar film. The module stability is the result of the deep inset of the glass in the frame and its continuous bond between the two.

The flat and compact connecting socket is mounted on the back of the module using a unique, patented process. The connecting socket has no hollow cavities, is watertight, resistant to UV radiation and microbes, as well as very temperature resistant. This flat and compact top-quality product represents the ideal solution for every application.

	Module
Length:	1610 mm
Width:	810 mm
Height:	34 mm
Frame:	Aluminium
Weight:	15 kg

Edition: April 2006

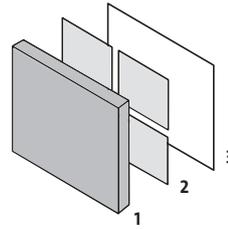


SolarWorld AG  
Kurt-Schumacher-Straße 12-14  
53113 Bonn/Germany  
Tel.: +49-228-55920-0  
E-Mail: [service@solarworld.de](mailto:service@solarworld.de)  
[www.solarworld.de](http://www.solarworld.de)



## SolarWorld Module SW 165/175/185 mono

### Design



- 1] Front: tempered glass
- 2] 72 monocrystalline solar cells  
125 mm x 125 mm  
embedded in EVA  
(ethylene-vinyl-acetate)
- 3] Rear: Tedlar foil

### Performance under standard test conditions (STC)

	165 Wp	175 Wp	185 Wp
Peak power (Pmax)	165 Wp	175 Wp	185 Wp
Maximum power point voltage (Vmpp)	35.3 V	35.7 V	36.0 V
Maximum power point current (Impp)	4.7 A	4.9 A	5.1 A
Open circuit voltage (Voc)	44.1 V	44.4 V	44.5 V
Short circuit current (Isc)	5.2 A	5.4 A	5.5 A

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

	125 Wp	131 Wp	138 Wp
Peak power (Pmax)	125 Wp	131 Wp	138 Wp
Maximum power point voltage (Vmpp)	32.7 V	33.1 V	33.4 V
Maximum power point current (Impp)	3.8 A	4.0 A	4.1 A
Open circuit voltage (Voc)	40.9 V	41.1 V	41.2 V
Short circuit current (Isc)	4.2 A	4.4 A	4.5 A

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

### Component materials

Cells per module	72
Solar cells	monocrystalline silicon
Cell dimensions	125 x 125 mm

### Thermal characteristics

NOCT	46°C
TK Isc	0.06 %/K
TK Voc	-0.35 %/K

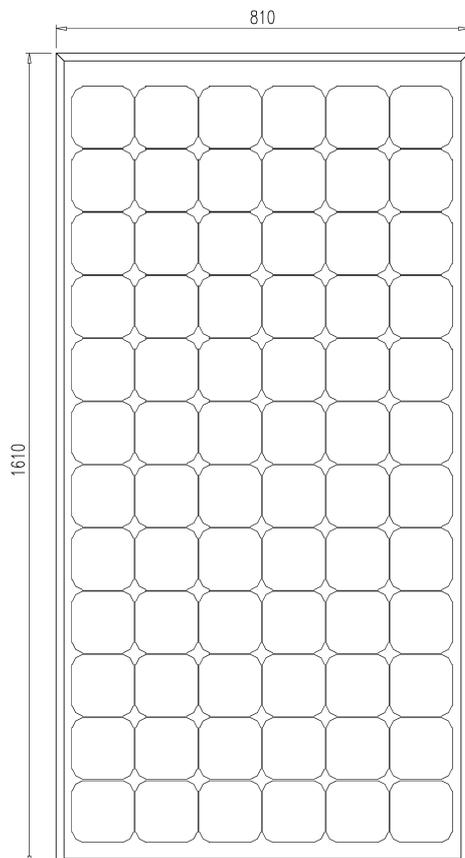
### System design characteristics

Maximum system voltage	715 V
Reverse current load	Do not apply external voltages in excess of Voc to the module.

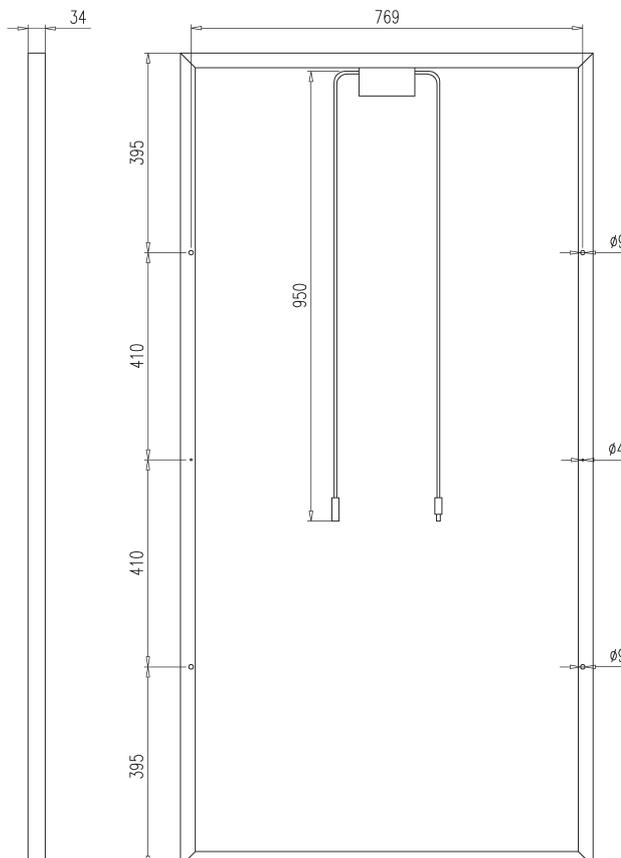
### Rated power and maximum tolerance

Rated power	165/175/185 Wp +/- 3 %
Connecting socket	IP 65
Plug	MC type 4

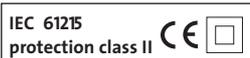
front view



rear view



Modules certified according to:



SolarWorld AG reserves the right to make specification changes.  
This data sheet complies with the requirements of EN 50380.  
This data sheet is also available in german language.