Edition: October 2008

Length	1675 mm
Width	1001 mm
Height	34 mm
Frame	Aluminium
Weight	22 kg

Provisional data sheet
Subject to change!
Product launch: Midyear 2009

Sunmodule®

SW 220/225/230/235/240/245 mono

The Sunmodule Plus heralds an innovative new module concept from SolarWorld. The Plus-sort (based on a SolarWorld flash report) and five watt model stepping ensures true, highest system efficiency and dispenses with the time-consuming task of sorting the modules on site. The fully automated production process at the SolarWorld factories creates a module quality that is consistently high, which in turn will ensure high yields for the long term.

The glass is set deep into the module frame and they are firmly attached to each other by silicone that is applied with continuous precision. This guarantees exceptional rigidity for the entire module and stops any possible loosening of the frame as a result of strong outward forces in cases such as sliding of heavy snow. Tests carried out in accordance with IEC 61215, applying loads up to 5.4 kN/m², confirm that the module can withstand high loads such as heavy accumulations of snow and ice.

The patented, flat and compact junction box provides perfect protection against corrosion, as well as a capacity to rapidly dissipate any excess heat providing lower operating temperature. The junction box is reliably connected by a solid, welded bond to guarantee lasting functionality. In addition, high-quality, robust cables with factory-equipped connectors are used. The ability to recycle the modules and a 25-year performance warranty are the finishing touches to this top-quality product.

SOLARWORLD
THE SUNPOWERED COMPANY®

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Performance under standard test conditions

		SW 220	SW 225	SW 230	SW 235	SW 240	SW 245
Maximum power	P_{max}	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp	245 Wp
Open circuit voltage	V_{oc}	36.6 V	36.8 V	36.9 V	37.0 V	37.1 V	37.3 V
Maximum power point voltage	V_{mpp}	29.3 V	29.5 V	29.6 V	29.8 V	30.0 V	30.1 V
Short circuit current	I_{sc}	8.18 A	8.30 A	8.42 A	8.54 A	8.66 A	8.78 A
Maximum power point current	I_{mpp}	7.51 A	7.64 A	7.76 A	7.89 A	8.02 A	8.14 A

Performance at 800 W/m², NOCT, AM 1.5

		SW 220	SW 225	SW 230	SW 235	SW 240	SW 245
Maximum power	P_{max}	157 Wp	161 Wp	164 Wp	168 Wp	172 Wp	175 Wp
Open circuit voltage	V_{oc}	33.1 V	33.3 V	33.4 V	33.5 V	33.6 V	33.7 V
Maximum power point voltage	V_{mpp}	26.3 V	26.5 V	26.6 V	26.7 V	26.9 V	27.0 V
Short circuit current	I_{sc}	6.76 A	6.86 A	6.96 A	7.06 A	7.16 A	7.25 A
Maximum power point current	I_{mpp}	5.98 A	6.09 A	6.18 A	6.28 A	6.39 A	6.48 A

Minor reduction in efficiency under partial load conditions at 25°C: at 220 W/m², 95% (+/- 3%) of the STC efficiency (1000 W/m²) is achieved.

Component materials

Cells per module	60
Cell type	monocrystalline silicon
Cell dimensions	156 x 156 mm²

System integration parameters

Maximum system voltage SC II	1,000 V_{DC}
Maximum reverse current	Do not apply external voltages larger than V_{oc} to the module

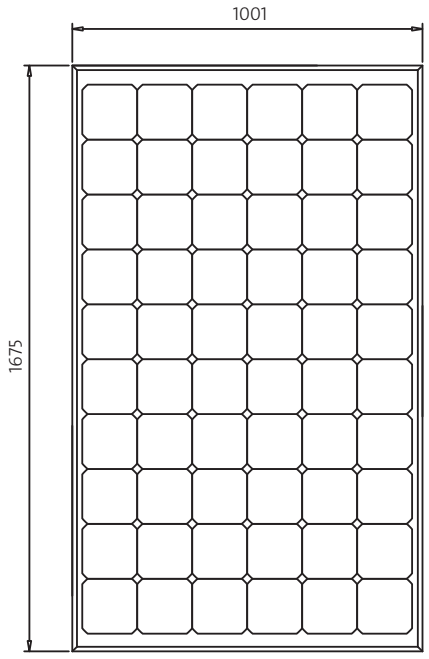
Thermal characteristics

NOCT	46°C
TC I_{sc}	0.036 %/K
TC V_{oc}	-0.33 %/K

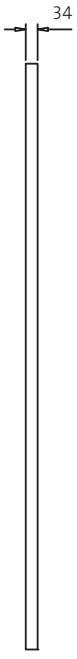
Additional data

Power tolerance	+/- 3 %
Junction box	IP 65
Connector	MC type 4

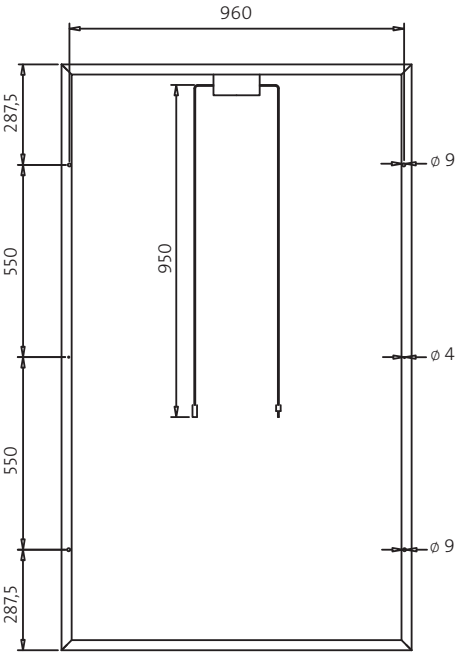
Front



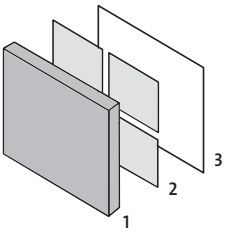
Side



Rear



Construction



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

IEC 61215
Safety class II

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