

GermanSolar

Premium Line

Outstanding features of the Premium Line by GermanSolar

- Only high-performance cells which have been thoroughly tested are used
- Use of 4 mm special-purpose glass
- Load capacity: 5400 Pa
- Can withstand extreme weather conditions (hail, snow, ice, sharply fluctuating temperatures, etc.)
- Outstanding design thanks to anthracite powder-coated solar panel frame and white backsheet
- Flash data for every panel
- Low chance of mismatching due to extremely low power tolerance of $\pm 3\%$



Monocrystalline | 60 cells
GSM6-220/225/230/235/240/245/250

Mechanical data

Dimensions	1637 x 987 mm
Thickness	40 mm
Weight	Approx. 21.8 kg
Laminate/glass	5.8mm /4mm ESG extra-white tempered safety glass, impact resistance in accordance with DIN 52337
Coloration	White backsheet
Deformation	1.2° at the module level
Surface load	5400 Pa max.

Technical data

The following calculations are based on the electrical data from 60 monocrystalline cells (156 x 156 mm).

Model GSM6	220	225	230	235	240	245	250
Power rating P _{mp} (W _p)	220	225	230	235	240	245	250
Rated current I _{mp} (A)	7.35	7.43	7.52	7.59	7.72	7.81	7.89
Rated voltage V _{mp} (V)	29.94	30.36	30.66	30.97	31.08	31.39	31.68
Short-circuit current I _{sc} (A)	8.16	8.21	8.26	8.31	8.35	8.39	8.45
Open-circuit voltage V _{oc} (V)	37.02	37.20	37.29	37.35	37.38	37.47	37.56
Module efficiency (%)	13.62	13.96	14.27	14.55	14.85	15.17	15.47

Temp. coeff. P	-0.45 %/K
Temp. coeff. I _s	+1.17mA/K
Temp. coeff. V _{oc}	-132.6mV/K
Bypass diodes	3 in the junction box
Junction box	Certified special box with tension spring clamps
Connector	1 m, including plug-in system
Maximum permissible values	System voltage: 1000 V Rated power tolerance: +/-3% Operating temperature range: -40 to +85°C
Protection class	2

The product manufacturing process for PV generator components is based on glass film technology. In this process, the high quality of the laminate structure is achieved thanks to the composite film on the back side of the panel and the completely sealed edges. This ensures that the panel will have an extremely long life.

Certification

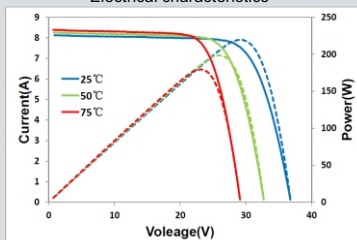
This special laminate is certified in accordance with IEC standards 61215 and 61730. ID: 0000023436 TÜV Rheinland.

Quality

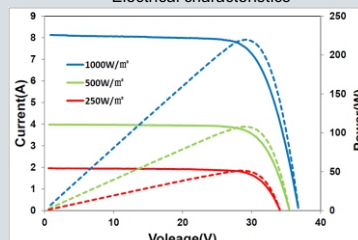
The production facility is TÜV-, MCS-, CE-, CEC-, CSA- and ISO 9001:2000-certified, and validated in accordance with EMAS II.

Regular individual inspections ensure that the products' electrical, optical and mechanical properties are always of the highest quality.

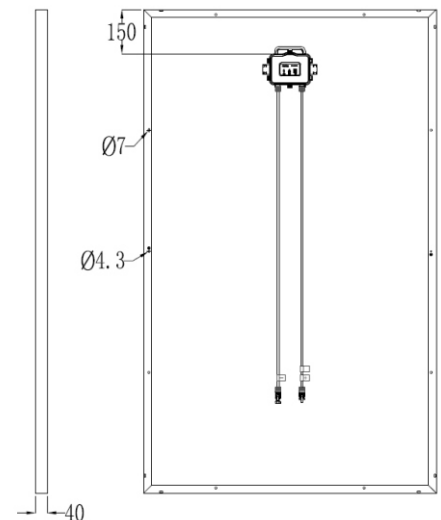
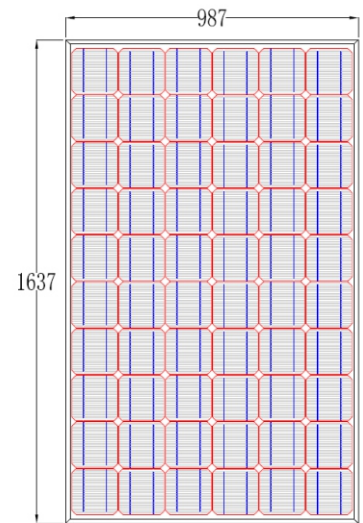
Electrical characteristics



Electrical characteristics



Subject to technical changes



Product shipped with the cables required to connect the panel (connector and plug-in system)
Length: 100 cm

All electrical values are based on perpendicular solar irradiation at 1000 W/m² and a temperature of 25°C (normal conditions with AM = 1.5).



GermanSolar AG
Am Seegraben 9-10
03051 Cottbus, Germany
Tel. +49 (0)355 494943-0
Fax +49 (0)355 494943-10
info@germansolar.com
www.germansolar.com