GermanSolar
The Partner For Your Solar Lifetime!®

Powerline
Poly 60 Cells Solar Panel

GSP - 275W 280W 285W 290W 295W

GermanSolar is a specialist in customization, utilizing colored glass, frames, and back-sheet material and shapes to expertly match your ideas with the prospective application. With innovative technology and design, GermanSolar offers high-quality modules with enhanced aesthetic appearance for building structuresmand facades. By providing outstanding customization options, GermanSolar supports your required project needs with colored and shaped panels of your choice and advises you to choose the right size, thickness, shape, and color to compliment the design of your application and your building.

FEATURES

- **Best price-performance ratio**
- **Positive power of up to +5.00 Wp**
- **EL tested and micro cracks inspected**
- **Fully automated production line with German quality engineering and design standards**
- **Better performance in diffused sunlight and high temperature**
- **High ammonia & salt mist resistant certified, and PID-free**
- **Withstands wind loads up to 2400Pa / heavy snow loads up to 5400Pa**
- **12 years** 12-year limited product warranty
- **25 years** 25-year linear performance warranty
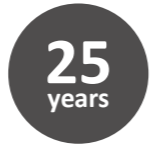
PRODUCT CERTIFICATES

ETL Intertek | ETL EU Intertek | FM APPROVED | Class I Division II Groups A,B,C&D | Ex | IECEx | ISO 14001 | ISO 9001 | RoHS | CE

Powerline

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Electrical Data

Nominal Max. Power (Pmax)*	275W	280W	285W	290W	295W
Open Circuit Voltage (Voc)	38.32	38.55	38.9	39.14	39.42
Short Circuit Current (Isc)	9.08	9.18	9.25	9.32	9.39
Max. Power Voltage (Vmpp)	32.31	32.55	32.83	33.14	33.44
Max. Power Current (Impp)	8.51	8.6	8.68	8.75	8.82
Module Efficiency (%)	16.48	16.78	17.08	17.38	17.68
Power Tolerance	0 ~ +5W				
Temperature Coefficient (Pmax)	-0.35% / °C				
Temperature Coefficient (Isc)	+0.04% / °C				
Temperature Coefficient (Voc)	-0.25% / °C				

* STC: Irradiance 1000W/m, Cell Temperature 25°C, Air Mass AM1.5.

Electrical Data, NMOT *

Nominal Max. Power (Pmax)	204W	208W	211W	215W	219W
Open Circuit Voltage (Voc)	35.47	35.69	36.01	36.23	36.49
Short Circuit Current (Isc)	7.28	7.36	7.43	7.49	7.55
Max. Power Voltage (Vmpp)	29.42	29.64	29.89	30.18	30.45
Max. Power Current (Impp)	6.93	7.01	7.07	7.13	7.19
NMOT (Nominal Module Operating Temperature)	41°C ± 3°C				

* NMOT: Irradiance at 800W/m, Ambient Temperature 20°C, Wind Speed 1m/s.

Mechanical Data

Dimensions	1640 x 992x 35mm(64.57× 39.06× 1.38inches)
Weight	17.5kg (38.58lb)
Solar Cell	Polycrystalline 157mm
Front glass	3.2mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Frame	Anodized aluminium alloy, original or black
Junction Box	IP67, 3 diodes
Cable	4 mm² (IEC),12AWG (UL), 900mm
Connector	MC4 or MC4 compatible
Application Classification	Class A
Module Fire Performance	Type 1 (UL 1703) or Class C (IEC 61730)

Operating Conditions

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Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)
Operating Temperature	-40°C~ +85°C
Max. Series Fuse Rating	20A
Front Side Maximum Static Loading/ Rear Side Maximum Static Loading	5400 Pa/2400 Pa

Packaging

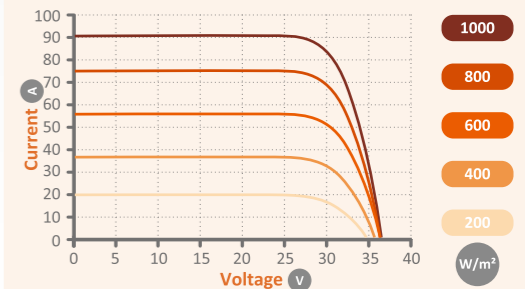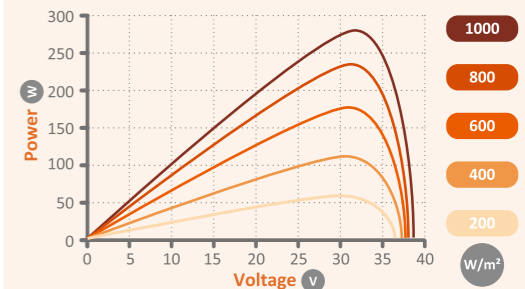|	
Standard packaging	30pcs /pallet
Module quantity per 20' container	360pcs
Module quantity per 40' container	840pcs /40' HQ container

Design (mm)

Front View | Back View

Grounding Mark 2-Ø8
Grounding holes 2-Ø4
Mounting holes 4-14*9
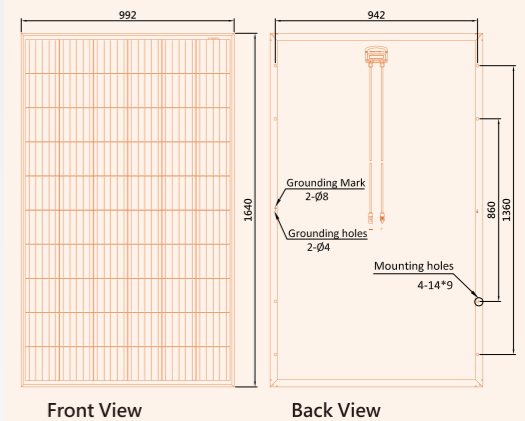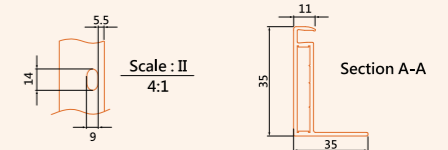
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Section A-A

GSP-285W I-V CURVES

1000 / 800 / 600 / 400 / 200 W/m²

GSP-285W P-V CURVES

1000 / 800 / 600 / 400 / 200 W/m²

LINEAR PERFORMANCE WARRANTY
12 Year Product Warranty | **25 years** Linear Power warranty

GermanSolar Standard | Industry Standard

Value from GermanSolar's linear warranty