

GSP 270W/275W/280W/285W



- ✓ Excellent module efficiency 17.5%
- ✓ Positive power tolerance 0/+5W
- ✓ Bankable module
- ✓ PID free
- ✓ Advanced surface texturing
- ✓ Resistance to sand and dust abrasion
- ✓ Safety for salt mist and ammonia corrosion
- ✓ Safety for fire risk
- ✓ Outstanding power output capability at low irradiance
- ✓ Triple 100% EL tests
- ✓ 3800 Pa wind load and 5400 Pa snow load (900 kg snow load per module); 35 mm hail stones at 97 km/h

QUALIFICATIONS AND CERTIFICATES

CE-Compliant, IEC 61215 (Ed.1) application class A, TÜV Safety Class II, UL 1703



WARRANTY

15 Years: Manufacturing Warranty
12 Years Warranty: 90% Power Output
25 Years Warranty: 80% Power Output

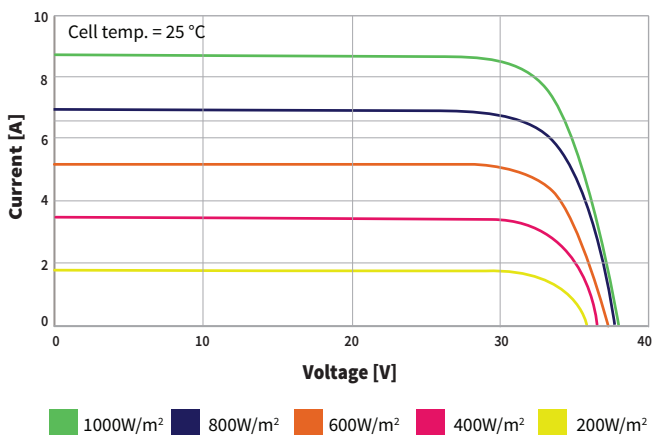
MECHANICAL CHARACTERISTICS

Cell type	Poly-crystalline, 5 bus bars
No. of Cells	60 (6 × 10)
Module Dimensions	1640 × 992 × 35/40 mm (also available: 1650 × 992 × 35/40 mm)
Weight	17.5 kg (18.0 kg)
Glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminum alloy
Junction Box	IP67
Connector	MC4 compatible
Output Cables	4.0 mm ² , length 900 mm
Mechanical load	5400 Pa

ELECTRICAL CHARACTERISTICS

Model	GSP 270	GSP 275	GSP 280	GSP 285
Performance at Standard Test Conditions (STC): 1000 W/m², 25°C, AM 1.5				
Maximum Power (Pmax)	270 W	275 W	280 W	285 W
Operating Voltage (Vmpp)	31.3 V	31.6 V	31.8 V	32.0 V
Operating Current (Impp)	8.63 A	8.71 A	8.81 A	8.91 A
Open-circuit Voltage (Voc)	38.1 V	38.3 V	38.5 V	38.7 V
Short-circuit Current (Isc)	8.99 A	9.08 A	9.18 A	9.27 A
Module Efficiency	16.60 %	16.90 %	17.21 %	17.52 %
Performance at Nominal Operating Cell Temperature (NOCT) : 800 W/m², 20°C, AM 1.5, wind speed 1m/s				
Maximum Power (Pmax)	200 W	204 W	208 W	212 W
Operating Voltage (Vmpp)	29.2 V	29.4 V	29.6 V	29.8 V
Operating Current (Impp)	6.85 A	6.94 A	7.03 A	7.12 A
Open-circuit Voltage (Voc)	35.2 V	35.4 V	35.6 V	35.8 V
Short-circuit Current (Isc)	7.26 A	7.35 A	7.44 A	7.53 A
Module Efficiency	16.50 %	16.80 %	17.11 %	17.41 %
Power Tolerance	0 / +4.99 W			
Maximum System Voltage	1000 VDC / 1500 VDC			
Maximum Series Fuse	20 A			
Temperature Characteristics				
Temperature Coefficient at Pmax	- 0.39 % / °C			
Temperature Coefficient at Voc	- 0.30 % / °C			
Temperature Coefficient at Isc	+ 0.05 % / °C			
Nominal Operating Cell Temperature	45 ± 2 °C			
Operating Temperature	-40 °C to 85 °C			

I-V Curves at different irradiance



I-V Curves at different temperature

