

## VG- P280 – 305W

### POLYCRYSTALLINE SOLAR MODULE

#### Characteristics & Performance

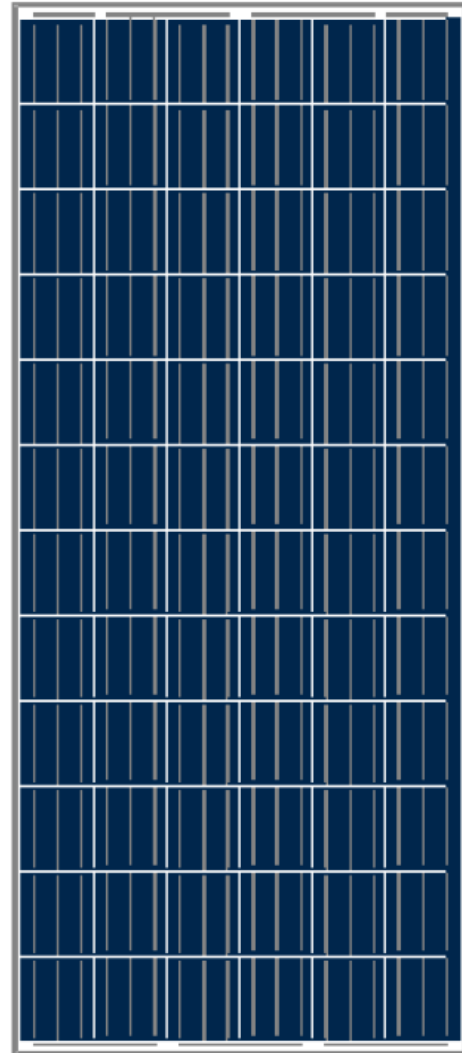
- Use of only certified materials at highest quality standards.
- The process of cell and module production is fully automated with 100% quality control and product traceability.
- Heavy load mechanical resistance: TUV certified (5400 Pa tested against snow and 2400 Pa tested against wind).
- Excellent performance even during low solar radiation.
- Guaranteed positive tolerance 0 / +3% of power for each module.

#### Quality & Environmental Certificates

- ISO 9001 quality standards and ISO 14001 environmental standards.
- OHSAS 18001 occupational health and safety standards.
- IEC 61215 and IEC 61730 Class A certifications.
- Conformity to CE.

#### 25 Year Linear Power Guarantee

- Commercial – 12 years on material and manufacturing defects
- Performance
  - Power not less than 90% of power peak during 10 years
  - Power not less than 80% of power peak during 25 years

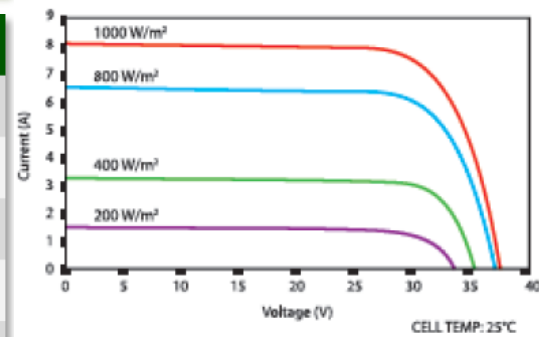


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### Electrical Characteristics

Maximum power (Pmax)	280 W	285 W	290 W	295 W	300 W	305 W
Open-Circuit voltage (Voc)	44.4V	44.5V	44.6V	44.7V	44.8V	44.9V
Short-circuit Current (Isc)	8.43A	8.51A	8.64A	8.72A	8.78A	8.82A
Max-Power Voltage (Vmp)	35.7V	35.9V	36.1V	36.2V	36.4V	36.6V
Max-Power Current (Imp)	7.84A	7.94A	8.03A	8.15A	8.24A	8.33A </td
Module Efficiency (%)	14.4	14.7	14.9	15.2	15.4	15.4

### Various Irradiance Levels



### Temperature Coefficients (Tc)

NOCT (Nominal Operating Cell Temperature)	47±2°C
Temperature coefficient of Pmax	-0.48 %/°C
Temperature coefficient of Isc	0.02 %/°C
Temperature coefficient of Voc	-0.33 %/°C

### Electrical Characteristics

Dimensions	1956x992x40 mm
Weight	25.0 kg
Frame	Aluminum alloy
Front Glass	Tempered glass, 3.2 mm
Cells	156x156 mm; 6x12 pcs.
Junction Box	IP67, combined with 6 by-pass diodes
Output Cables	Solar cable: 4mm <sup>2</sup> , length 900 mm

### System Design

Maximum System Voltage	1000 V
Operating Temperature	-40°C to 85°C
Series Fuse Rating	15 A
Hail Safety Impact Velocity	25 mm to 23 m/s
Fire Safety Classification	Class C
Static Load Wind/Snow	5.4 kN/m <sup>2</sup>

### Physical data (unit: mm)

