

## GES-6P280 GES-6P285

GES-6P270 GES-6P275 GES-6P290

### 280 Watt Polycrystalline Photovoltaic Module



Outstanding mechanical load performance enables each panel to withstand wind up to 200 km/h or snow up to 550 kg/m<sup>2</sup>



In-line Electroluminescence (EL) testing of each panel ensures no micro-cracks or mismatch on cells.



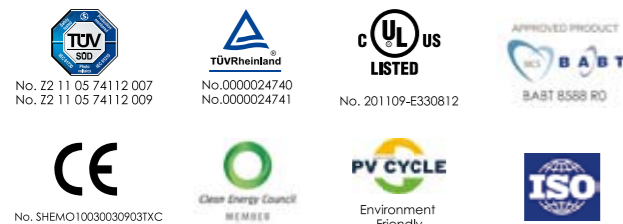
Ammonia Endurance Test(IEC62716) and Salt Mist Test(IEC61701) verified the excellent performance of each panel in harsh or unusual environments.



Aging test under 85 °C and 85 % relative humidity for at least 1500 hours guarantees a low power degradation for 25 years.



\*Black modules are also available



### Features

- Up to +5W power tolerance of each panel ensuring high ROI
- High cell conversion efficiency up to 17.6%
- Outstanding electrical performance under high temperature and low-irradiance conditions
- Easy installation and all-weather applications thanks to innovative engineering design

### Insurance

All performance and cooperation warranties are ensured with Product Liability and Financial Injury (E&O) Liability Insurance with CHUBB INSURANCE (CHINA) COMPANY LIMITED.

### Warranty

#### GESOLAR guarantees

- Up to +5W power tolerance of each panel
- Workmanship and materials in 10 years
- 90 % minimum power output in 12 years
- 80 % minimum power output in 25 years

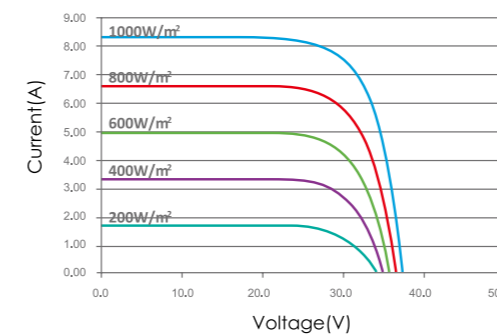
### Electrical Characteristics

Characteristics	Unit	GES-6P270	GES-6P275	GES-6P280	GES-6P285	GES-6P290
Maximum Power (Pmax)	W	270	275	280	285	290
Power Tolerance	W	(0,+5)	(0,+5)	(0,+5)	(0,+5)	(0,+5)
Open Circuit Voltage (Voc)	V	44.5	44.6	44.8	45.0	45.2
Short Circuit Current (Isc)	A	8.20	8.25	8.33	8.44	8.55
Maximum Power Voltage (Vmp)	V	35.0	35.1	35.2	35.3	35.4
Maximum Power Current (Imp)	A	7.71	7.85	7.95	8.07	8.19
Cell Efficiency (ηc)	%	15.9~16.2	16.2~16.5	16.5~16.8	16.8~17.1	17.1~17.4
Module Efficiency (ηm)	%	13.9~14.2	14.2~14.4	14.4~14.7	14.7~14.9	14.9~15.2
Cell Technology 156mm×156mm, Polycrystalline Silicon;72pcs(6×12)						
Pmax Temperature Coefficient	%/°C	-0.42				
Voc Temperature Coefficient	%/°C	-0.30				
Isc Temperature Coefficient	%/°C	+0.083				
Maximum System Voltage	VDC	1000(TUV);600(UL)				
Maximum Series Fuse Rating	A	13				
Operating Temperature	°C	-40 ~ +85				
NOCT	°C	45±2				

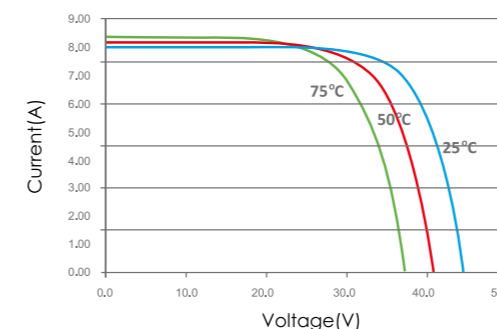
STC: 1000W/m<sup>2</sup>, AM1.5 and 25°C cell temperature; NOCT: Nominal Operating Cell Temperature

### I-V Curves

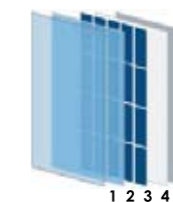
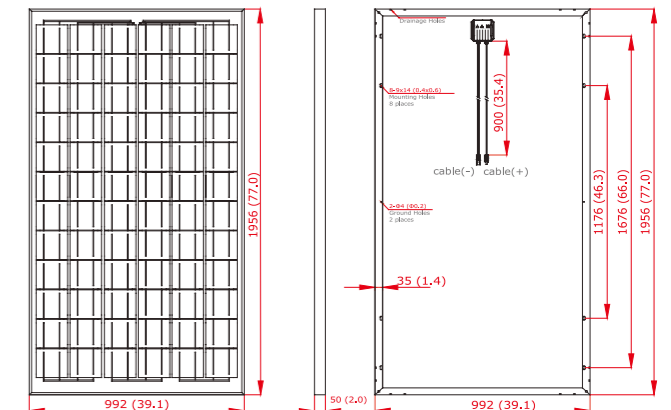
I-V Curves of PV Module GES-6P280 (Cell Temp..25°C)



I-V Curves of PV Module GES-6P280 at Different Cell Temperatures(AM1.5,1000W/m<sup>2</sup>)



### Physical Characteristics Unit: mm(inch)



1. Tempered Glass
2. EVA(Ethylene Vinyl Acetate)
3. Solar Cells
4. EVA(Ethylene Vinyl Acetate)
5. Backsheet

Dimension	1956 x 992 x 50 mm (77.0 x 39.1 x 2.0 inch)
Weight	24 kg (52.9 lbs.)
Cable Length	900 mm (35.4 inch)
Bypass Diodes	3 pcs
Junction Box	IP65/IP67
Front Glass	3.2 mm (0.1 inch) tempered low-iron glass
Frame	Anodized aluminum alloy

\* Specifications are subjected to change without further notice.