

# 140 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 Electro Luminescence (EL) testing of each panel ensures no micro-cracks or mismatch on cells.



Ammonia Endurance test was carried out under 70 °C, 70 % relative humidity and 750 ppm NH<sub>3</sub> density for 1500 hours, which prolongs the lifespan and improves the technical performance of panels applied 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.



## Features

- Up to +5W power tolerance of each panel ensuring high ROI
- High 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

## Certificates



No. 201109-E330812



No. SHEMA10030030903TXC



Environment Friendly

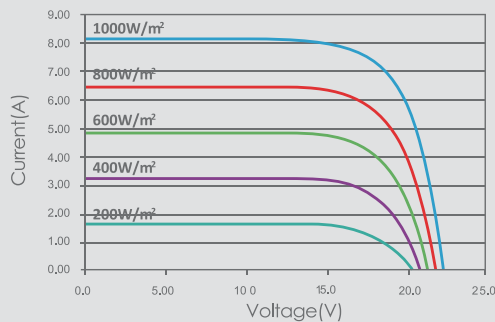
## Electrical Characteristics

Characteristics	Unit	GES-6P135	GES-6P140	GES-6P145
Maximum Power (Pmax)	W	135	140	145
Power Tolerance	W	(0,+5)	(0,+5)	(0,+5)
Open Circuit Voltage (Voc)	V	22.0	22.2	22.4
Short Circuit Current (Isc)	A	8.00	8.06	8.63
Maximum Power Voltage (Vmp)	V	17.3	17.5	17.7
Maximum Power Current (Imp)	A	7.80	8.00	8.19
Cell Efficiency ( $\eta_c$ )	%	15.9 ~ 16.5	16.5 ~ 17.1	17.1 ~ 17.7
Module Efficiency ( $\eta_m$ )	%	13.5 ~ 14.0	14.0 ~ 14.5	14.5 ~ 15.0
Cell Technology	156mm×156mm, Monocrystalline Silicon; 36pcs(4×9)			
Pmax Temperature Coefficient	%/°C	-0.42		
Voc Temperature Coefficient	%/°C	-0.30		
Isc Temperature Coefficient	%/°C	+0.083		
Maximum System Voltage	VDC	715(TUV);600(UL)		
Maximum Series Fuse Rating	A	13		
Operating Temperature	°C	-40~+85		
NOCT	°C	45±2		

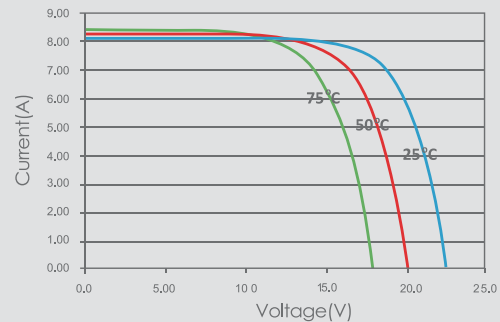
STC: 1000W/m<sup>2</sup>, AM1.5 and 25°C cell temperature; NOCT: Nominal Operating Cell Temperature

## I-V Curves

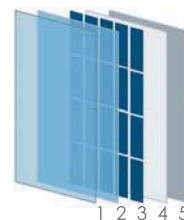
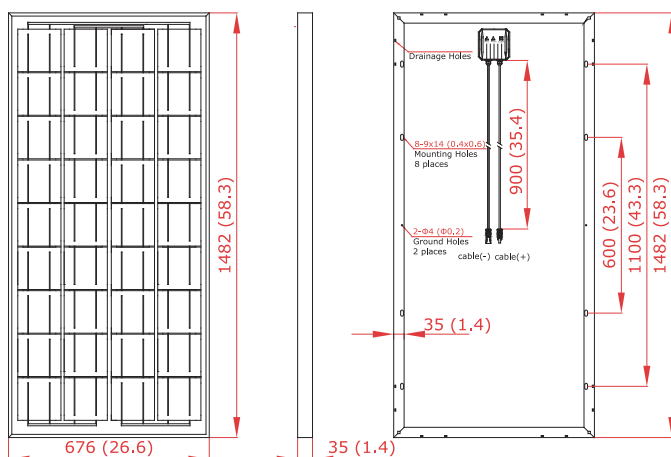
I-V Curves of PV Module GES-6P140  
(Cell Temp. 25°C)



I-V Curves of PV Module GES-6P140  
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	1482 x 676 x 35 mm (58.3 x 26.6 x 1.4 inch)
Weight	11.5 kg (25.4 lbs.)
Cable Length	900 mm (35.4 inch)
Bypass Diodes	2 pcs
Junction Box	IP65
Front Glass	3.2 mm (0.1 inch) tempered low-iron glass
Frame	Anodized aluminum alloy

\* Specifications are subjected to change without further notice.