

GES-P230 GES-P235

GES-P225 GES-P240 GES-P245

Polycrystalline Photovoltaic Module

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Features

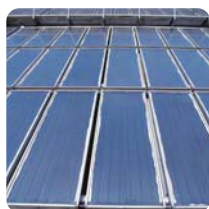
- High efficient solar cells are utilized in photovoltaic module
Cell efficiency up to 17.4%
- High module efficiency and stable power output
based on leading process technology
- Outstanding electrical performance under high-
temperature conditions or low-irradiance conditions
- Ease of installation and all-weather applications
due to the innovative engineering design

Applications

- On-grid utility systems
- On-grid commercial systems
- Off-grid residential systems

Quality and Warranty

- Peak power of single module is guaranteed in (0, +5)W power tolerance
- Rigorous quality control meets the highest international standard
- Product quality and liability are insured
- 5 years limited warranty on material and workmanship
- 12 years and 25 years limited warranty for minimum power output



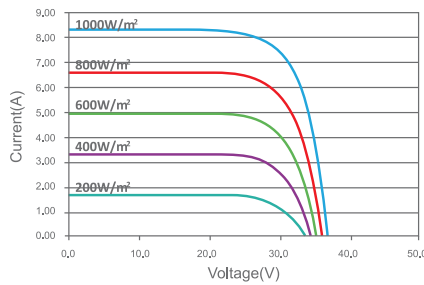
ELECTRICAL CHARACTERISTICS

Module Type	Unit	GES-P225	GES-P230	GES-P235	GES-P240	GES-P245
Maximum Power (Pmax)	W	225	230	235	240	245
Power Tolerance	W	(0, +5)	(0, +5)	(0, +5)	(0, +5)	(0,+5)
Open Circuit Voltage (Voc)	V	37.0	37.0	37.1	37.2	37.3
Short Circuit Current (Isc)	A	8.16	8.22	8.28	8.33	8.75
Maximum Power Voltage (Vmp)	V	29.7	29.8	30.0	30.2	30.4
Maximum Power Current (Imp)	A	7.59	7.73	7.84	7.95	8.06
Cell Efficiency(ηc)	%	15.9 ~ 16.2	16.2 ~ 16.6	16.6 ~ 16.9	16.9 ~ 17.3	17.3 ~ 17.7
Module Efficiency (ηm)	%	13.8 ~ 14.1	14.1 ~ 14.4	14.4 ~ 14.8	14.8 ~ 15.1	15.1 ~ 15.4
Cell Technology		156mm x 156mm Polycrystalline Silicon; 60pcs (6×10)				
Pmax Temperature Coefficient	%/°C	-0.35				
Voc Temperature Coefficient	%/°C	-0.32				
Isc Temperature Coefficient	%/°C	+0.04				
Maximum System Voltage	VDC	1000(TUV);600(UL)				
Maximum Series Fuse Rating	A	13				
Operating Temperature	°C	-40 ~ +85				
NOCT	°C	45±2				

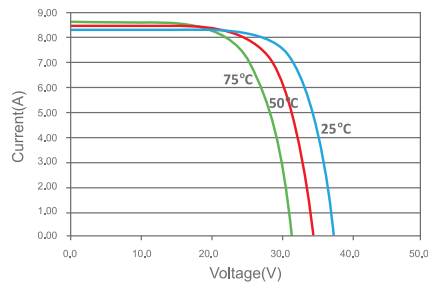
STC: 1000W/m², AM1.5 and 25°C cell temperature; NOCT: Nominal Operating Cell Temperature

I-V CURVES

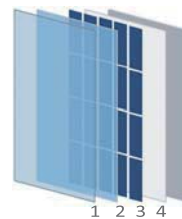
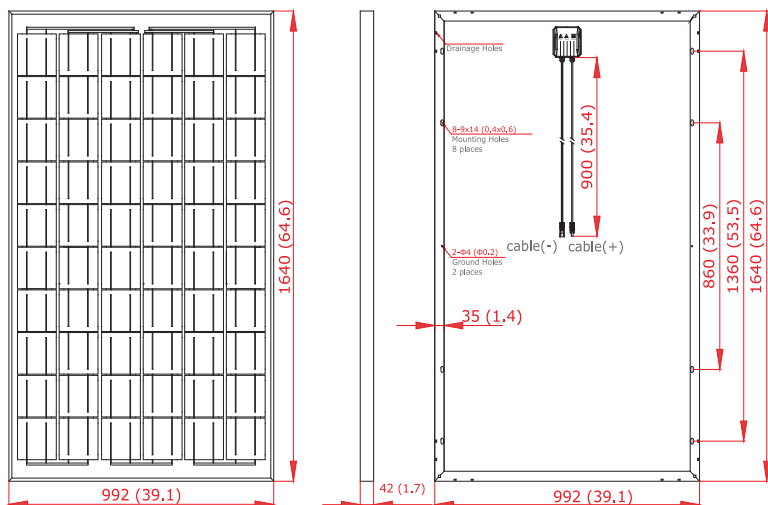
I-V Curves of PV Module GES-P230
(Cell Temp. 25°C)



I-V Curves of PV Module GES-P230
at different cell temperatures (AM1.5, 1000W/m²)



PHYSICAL CHARACTERISTICS Unit: mm(inch)



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

Dimension	1640 x 992 x 42mm (64.6 x 39.1 x 1.7 inch)
Weight	19.5 kg (43.0 lbs.)
Cable Length	900 mm (35.4 inch)
Bypass Diodes	3 pcs
Junction Box	IP65 rated
Front Glass	3.2 mm (0.1 inch) tempered low-iron glass
Frame	Anodized aluminum alloy

*Specifications are subjected to change without further notice