



HIMIN CLEAN ENERGY HOLDINGS CO.,LTD.

HG-280P/285P/
290P/295P

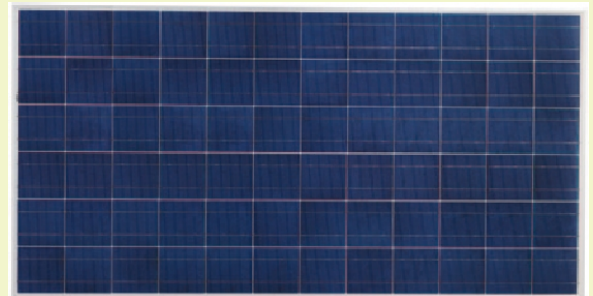


Polycrystalline photovoltaic module



POLYCRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 280W~295W POWER

Himin Clean Energy Holdings Co.,Ltd has concentrated on solar energy research for 15 years. Himin's HG-280P~295P photovoltaic module is designed for large electrical power requirements, this module has super durability to withstand rigorous operating conditions and is suitable for grid connected systems.



Features

- ◆ High-power module(280W~295W)using 156mm square polycrystalline silicon solar cells with 14.4%~15.2% module conversion efficiency.
- ◆ Photovoltaic module with bypass diode minimizes the power drop caused by shade.
- ◆ Using low-iron tempered glass,EVA resin and an aluminium frame for extended outdoor use.
- ◆ DC 24V system and high-voltage output for grid connected system.
- ◆ Output terminal:Lead wire with waterproof connector.

Specifications

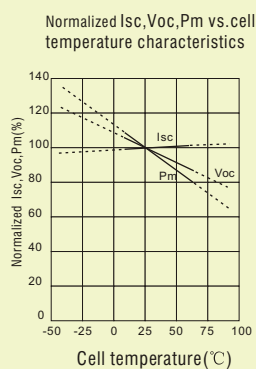
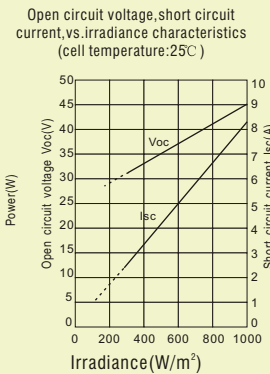
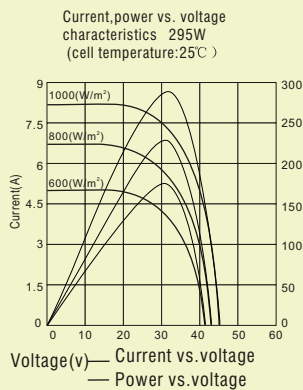
HG-280P~295P

Cell	Polycrystalline silicon solar cells, 156mm square
Number of cells and connections	72 in series
Application	DC 24V system
Maximum system voltage	DC 1,000V
Series fuse rating	15A
Nominal power	280W~295W
Dimensions	1956×992×50mm
Weight	23.6Kg
Type of output terminal	Lead wire with connector

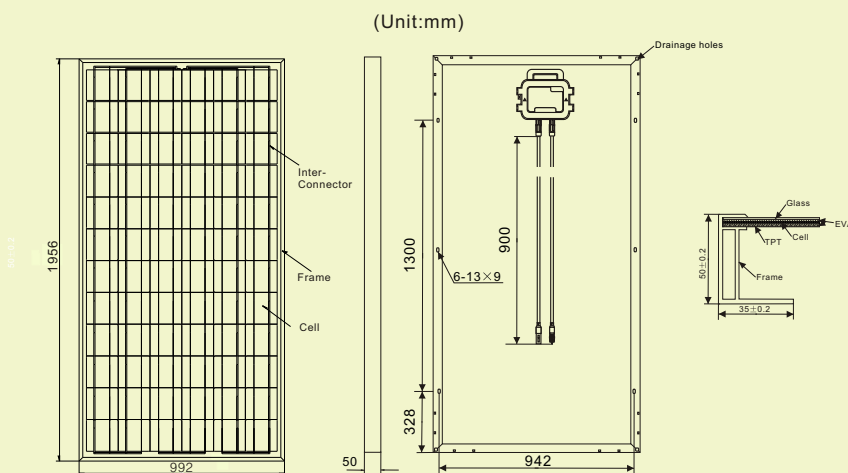
Electro-optical characteristics

Parameters	Symbol	HG-280P	HG-285P	HG-290P	HG-295P
Open circuit voltage	Voc	44.5V	44.7V	45.1V	45.2V
Maximum power voltage	V _{pm}	37.2V	37.4V	37.8V	38.0V
Short circuit current	Isc	8.05A	8.10A	8.20A	8.24A
Maximum power current	I _{pm}	7.53A	7.62A	7.67A	7.76A
Maximum power	P _m	280W	285W	290W	295W
Encapsulated solar cell efficiency	η_c	16.0%	16.2%	16.6%	16.8%
Module efficiency	η_m	14.4%	14.7%	14.9%	15.2%
Power output tolerance		±3%	±3%	±3%	±3%

Characteristics



Outline dimensions



Absolute maximum ratings

Parameters	Rating	Unit
Operating temperature	-40 to +85	°C
Storage temperature	-40 to +85	°C

Temperature coefficients

αP_m	-0.470%/K
αI_{sc}	+0.035%/K
αV_{oc}	-0.351%/K
NOCT	46 ± 2/°C

Conditions

Standard test conditions (STC)

Irradiance
1,000W/m²

AM1.5

Module temperature
25°C

Mechanical specification

Junction box	3 bypass diodes
Cable	Solar cable ,900mm length 4mm ² prefabricated with plug (male/female)
Front glass	Transparent toughened safty glass,3.2mm
Cell encapsulation	EVA(Ethylene-Vinyl-Acetate),0.5mm
Backside	Composite film
Frame	Anodised aluminium cavity frame (screwless) with drainage holes

Permissible operating conditions

Maximum surface load	Entire module certified to withstand high wind loads (2400Pa) and snow loads (5400Pa)
Hail resistance	Maximum diameter of 25mm with impact speed 83km/h

Guarantees and certifications

Product warranty	5 years
Performance guarantee	Guaranteed output of 90% for 10 years and 80% for 25 years
Approvals and certificates	TUV:IEC 61215 EditionII, IEC 61730 I and II

In the absence of confirmation by specification sheets, Himin takes no responsibility for any defects that any occur in equipment using any Himin products shown in catalogs, data books, etc. Contact Himin in order to obtain the latest specification sheets, before using any Himin products. Specifications are subject to change without notice.