

## HQ280P Series—275W,280W,285W,290W,295W

### POLYCRYSTALLINE SOLAR MODULE

## High-quality and high-efficiency



### **Features**



# High module conversion efficiency

Module efficiency up to 16.1% achieved through advanced cell technology and manufacturing capabilities



### Positive tolerance

Guaranteed positive tolerance of 5% delivers higher outputs reliably



### Self-cleaning & anti-reflective

Higher module efficiency from anti-reflective, hydrophobic layer with higher light absorption and minimal surface dust

## Excellent weak light performance

Excellent performance under low light conditions



### Extended wind and snow load tests

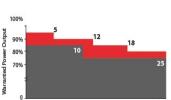
Module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) \*



# HQsolar current sorting process

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage

#### Industry-leading Warranty based on Pnom



- · Based on nominal power (Pnom)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90%, 18 years/85%, 25 years/80% \*\*\*
- Warrants 6.7% more than the market standard over 25 years
- 10-year material and workmanship warranty



#### Superior Frame Design

Specially designed drainage holes and rigid construction prevent frames from deforming. Screwless frame design for a long term durability.

### HQ Solar Co., Ltd.

No.2 Yingbin Avenue, The National

Economic Development Zone, Dongtai

City, Jiangsu Province, China

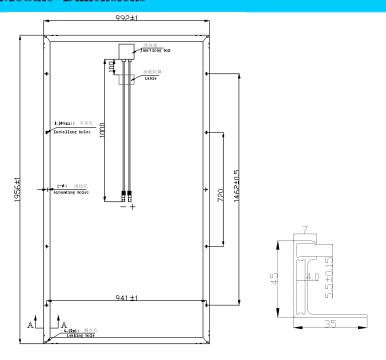
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E-mail: <u>sales@hqsolar.com.cn</u>, Web: www.hqsolar.com.cn HQ Solar Co.,Ltd. is a manufacture of high quality mono- and poly- crystalline silicon PV modules in East China; with an annual capacity of 300MW. Our 160 research staff and workers dedicate themselves to providing inexhaustible and renewable energy.

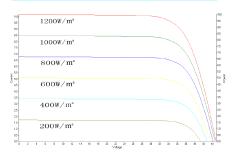
**HQ** SOLAR

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## Module Dimensions



## IV Curve at Different Irradiance Levels



## Certification

















ELECTRICAL CHARACTERISTICS							
The rated power may only vary by-0/+4.99Wp and all other electrical parameters by ±5%							
Power Classification	Pmax(w)	HQ280P-275₩	HQ280P-280₩	HQ280P-285₩	HQ280P-290₩	HQ280P-295₩	
Voltage at Max Power Point	Vmp (V)	35. 54	35. 69	35. 84	35. 99	36. 11	
Current at Max Power Point	Imp (A)	7.74	7.85	7.96	8.06	8. 17	
Open Circuit Voltage	Voc (V)	44. 72	44. 95	45. 33	45. 43	45. 59	
Short Circuit Current	Tsc(A)	0.9	0.25	0.49	0 5	0.50	

The electrical data apply to standard test conditions(STC): Irradiance of  $1000\mathrm{W/m^2}$  with AM 1.5 spectra at 25%

DIMENSIONS AND WEIGHT				
Cells/ Module	72(6×12)			
Module Dimensions	1956×992mm			
Module Thickness (Depth)	45 mm			
Approximate Weight	23 kg			

CHARACTERISITIC DATA				
Type of Solar Cell High-efficiency poly crystalline solar cells of 156*156mm				
Frame	Silver anodized aluminum alloy			
Glass	Tempered (low-iron), 3.2 mm (0.13in)			
Junction Box	IP65 rated; 3 internal bypass diodes			
Cable & Connections	Length: 1000mm; 4 mm² cables; TUV & UL approved			

TEMPERATURE COEFFICIENTS				
Voltage	β, Voc(%/K)	-0.351		
Current	α, Is c(%/K)	+0.035		
Power	γ, Pmax(%/K)	-0.47		
NOCT Avg	(+/-2°℃)	45		

LIMITS				
Max System Voltage	1000 VDC for IEC(600 VDC for UL)			
Operating Module Temperature	-40°C to +85°C			
Storm Resistance/ Static Load	Tested to IEC 61215 for loads up to 5400 Pa; hail and wind resistant			

