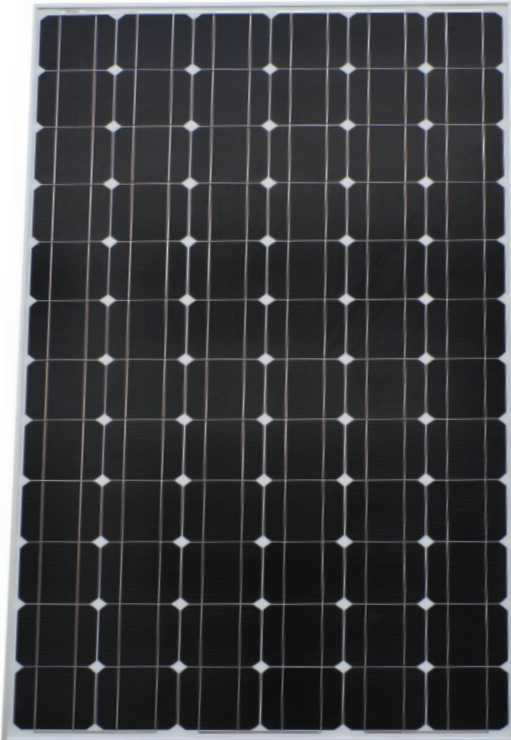




HQ290M Series—280W,285W,290W,295W,300W

MONOCRYSTALLINE 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



Self-cleaning & anti-reflective

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



Positive tolerance

Guaranteed positive tolerance of 5% delivers higher outputs reliably



Excellent weak light performance

Excellent performance under low light conditions



Extended wind and snow load tests

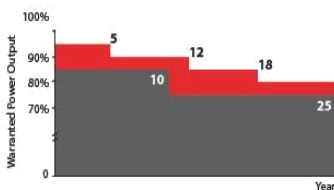
Module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) *



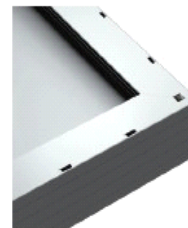
HQsolar current sorting process

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

Tel: +86 0515-68831993

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Web: www.hq solar.com.cn

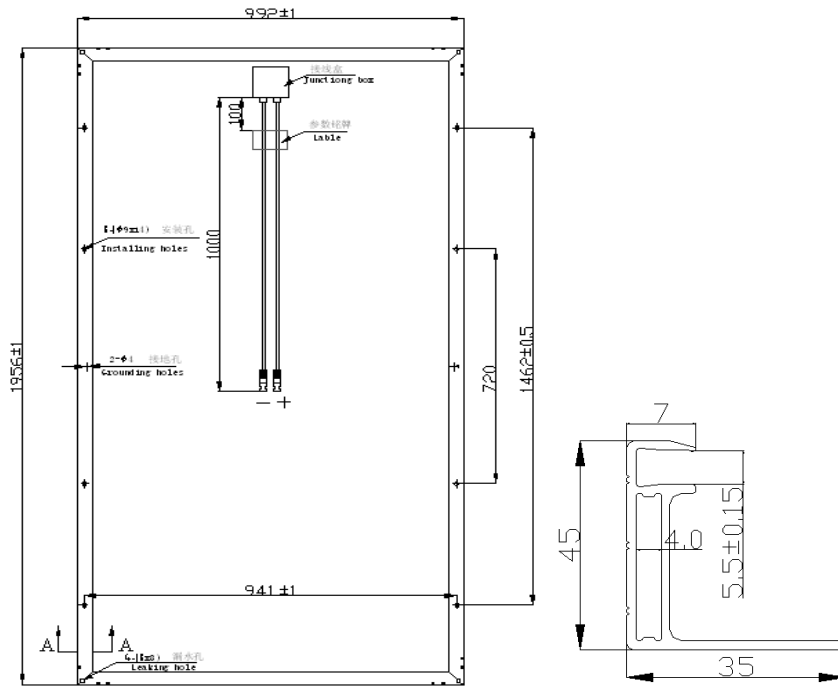
HQ Solar Co., Ltd. is a manufacture of high quality mono- and poly- crystalline silicon PV modules in East China; with an annual capacity of 300MW. Our 160 research staff and workers dedicate themselves to providing inexhaustible and renewable energy.

HQ SOLAR

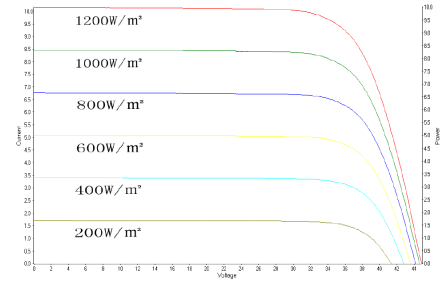
IEC61215, IEC61730, TUV Safety Class II, CE

HQ290M Series—280W,285W,290W,295W,300W

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 $\pm 5\%$

Power Classification	$P_{max}(w)$	HQ290M-280W	HQ290M-285W	HQ290M-290W	HQ290M-295W	HQ290M-300W
Voltage at Max. Power Point	V_{mp} (V)	35.9	36.1	36.3	36.47	36.8
Current at Max. Power Point	I_{mp} (A)	7.8	7.9	8	8.09	8.16
Open Circuit Voltage	V_{oc} (V)	44.4	44.6	44.9	45	45.1
Short Circuit Current	I_{sc} (A)	8.43	8.5	8.57	8.68	8.8

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

DIMENSIONS AND WEIGHT

Cells/ Module	72(6×12)
Module Dimensions	1956×992mm
Module Thickness(Depth)	45 mm
Approximate Weight	22.8 kg

CHARACTERISITIC DATA

Type of Solar Cell	High-efficiency mono 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 mm ² cables; TUV & UL approved

TEMPERATURE COEFFICIENTS

Voltage	$\beta, V_{oc}(\%/K)$	-0.346
Current	$\alpha, I_{sc}(\%/K)$	+0.036
Power	$\gamma, P_{max}(\%/K)$	-0.47
NOCT Avg	(+/-2°C)	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