

Poly-crystalline Series 270W-295W SN(270W-295W)-60P

MODULE DATASHEET



60pcs solar cells 156.75x156.75mm

Why Sine Energy

- 1. Variety kinds of modules to meet the diversified needs of our clients and the projects
- 2. High automatic production lines and advanced technology enables us to produce modules with consistent quality
- 3. Stringent supplier audit and control as well as the BOM quality
- 4. Automatic materials filtration and sorting plus spot check every batch as well as 100% two times EL test
- 5. One stop solution to all the solar needs of our clients.
- 6. Strong enterprise management system and reliable professional









Company Introduction

Anhui Sine New Energy Co., Ltd, established in 2020, is a high-tech enterprise specialized in developing, designing and producing solar modules, we produce various kinds of solar modules with the following types of solar cell: 156.75mm*156.75mm, 158.7mm5*158.75mm, 166mm*166mm, 182mmx182mm, 210mmx210mm. The power of our solar modules ranges from 270W poly to 590W mono half-cell, and all the modules is IEC 61215,IEC61730,CE,CB and PID free certified.

Key Features



High conversion efficiency due to top quality wafers and advanced cells technology.



Selected encapsulating materials and stringent production process control ensures highly PID resistant.



Excellently withstanding harsh environments, such as salt mist, sand mist as well as ammonia etc.



Optimized system performance due to module level current sorting and 100% two times EL.

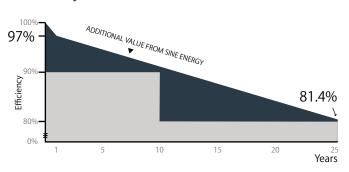


Special cell process ensures good performance under low irradiance conditions.



Highly transparent self- cleaning glass brings additional yield and easy maintenance.

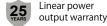
Warranty



E-mail: info@sine-energy.com



Guarantee on product material and workmanship



SN(270W-295W)-60P



Electrical Specification (STC*)

Maximum Power -Pmax(W):	270W	275W	280W	285W	290W	295W
Maximum Power Voltage-Vmp(V):	31.29	31.54	31.88	31.96	32.20	32.40
Maximum Power Current-Imp(A):	8.63	8.72	8.78	8.92	9.01	9.10
Open Circuit Voltage -Voc(V):	38.30	38.46	38.85	39.01	39.70	40.00
Short Circuit Current-Isc(A):	9.16	9.22	9.33	9.44	9.69	9.74
Module Efficiency - η m(%):	16.60	16.90	17.21	17.52	17.83	18.13
Power Output Tolerace (W):			0-+	5W		

 $STC: Irradiance: 1000 W/m^2, Module \ Tempreature: 25^{\circ}C, Air\ Mass: 1.5$

Electrical Specification (NOCT*)

Maximum Power -Pmax(W):	196.02W	200.02W	204.13W	208.14W	212.03W	215.98W
Maximum Power Voltage-Vmp(V):	28.79	28.41	28.66	28.83	28.97	29.12
Maximum Power Current-Imp(A):	6.81	7.05	7.12	7.22	7.32	7.42
Open Circuit Voltage -Voc(V):	34.98	35.37	35.68	35.98	36.29	36.65
Short Circuit Current-Isc(A):	7.27	7.34	7.38	7.45	7.52	7.59

NOCT:Irradiance:800W/m², Ambient Tempreature:20°C, Air Mass:1.5, Wind Speed:1m/s

Mechanical Specifications:

Solar Cell Type:	Poly-crystalline 156.75x156.75mm
Number of Cells:	60pcs (10x6)
Module Size:	1640*992*35mm
Weight:	18kg
Glass:	High transparency self-cleaning solar glass 3.2mm
Back Sheet:	White TPT
Frame:	Silver Anodized Aluminium Alloy
Junction Box:	IP67
Number of Diodes:	3pcs
Cable:	4.0mm ² 900mm
Connector:	MC4 Compatible
Wind/Snow Load:	2400pa/5400pa

Temperature Coefficient:

Nominal Operating Cell Temp(NOCT):	45±2℃
Temperature Coefficient of ISC:	0.060%℃
Temperature Coefficient of VOC:	-0.309%℃
Temperature Coefficient of Pmax:	-0.39%℃

Maximum Ratings

Operational Temperature:	-40~85°C		
Maximum System Voltage:	1500V DC(IEC)		
Maximum Series Fuse Rating: 20A			

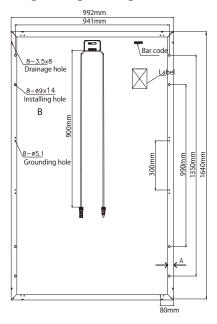
Optional:

Connector:	MC4 Original
Backsheet:	Black/Transparent TPT
Frame:	Black Anodized Aluminium Alloy

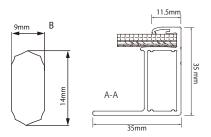
Packaging Information:

Number per Box:	30PCS
Number per 20GP:	360PCS
Number per 40GP:	840PCS
Number per 40HC:	924PCS

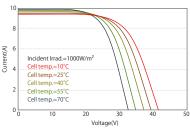
Engineering Drawings



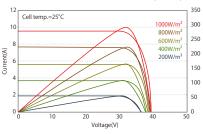
Back View



U-I Curve at Different Temperature (290W)



U-I/P-U Curve at Different Irradiation(290W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT

Sine Energy reserve the right to change specifications without notification.