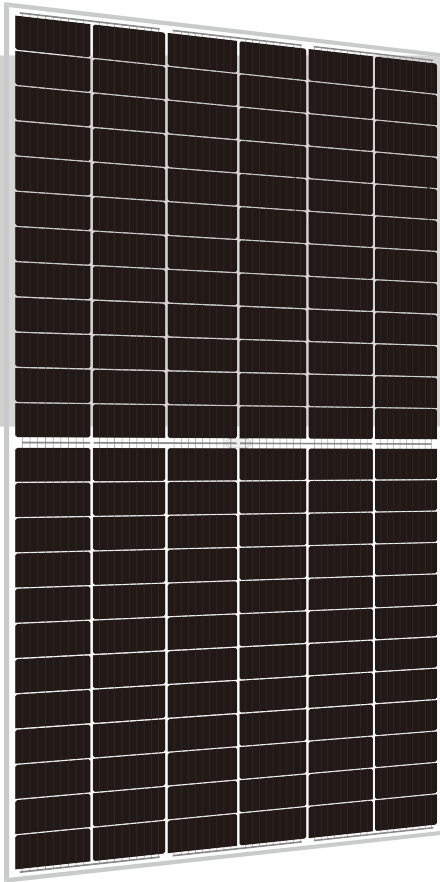




Mono-crystalline Series 540W-555W

SN(540-555)-144MB(Transparent Bifacial)

MODULE DATASHEET



Company Introduction

Anhui Sine New Energy Co., Ltd. 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, 158.7mm*158.75mm, 166mm*166mm, 182mm*182mm, 210mm*210mm. 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



Withstand up to 1500V system voltage, effectively reduce the BOS cost.



Use reflected and scattered light to increase energy generation by an additional 10%-30%



New cell string layout and split junction box makes Lower current and series resistance, helps minimize mismatch loss, internal power loss and shadow effect.



Lower thermal coefficient for greater energy production at high temperature.



Cell crack risk limited in small region, enhance the module reliability.



Special cell process ensures good performance under low irradiance conditions.



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

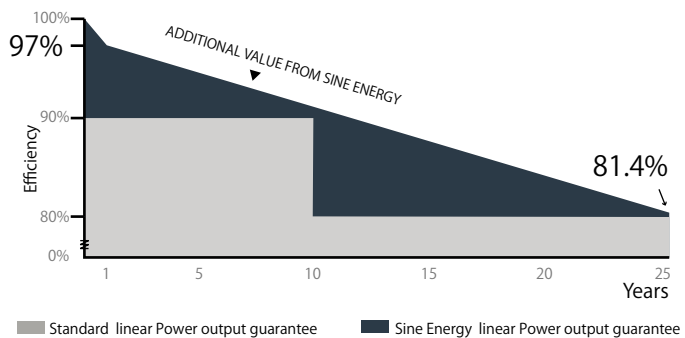
144pcs solar cells

182x91mm

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 test.
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 customer service.

Warranty



Standard linear Power output guarantee

Sine Energy linear Power output guarantee



Guarantee on product material and workmanship



Linear power output warranty



SN(540W-555W)-144MB

Engineering Drawings

Electrical Specification (STC*/NOCT*)

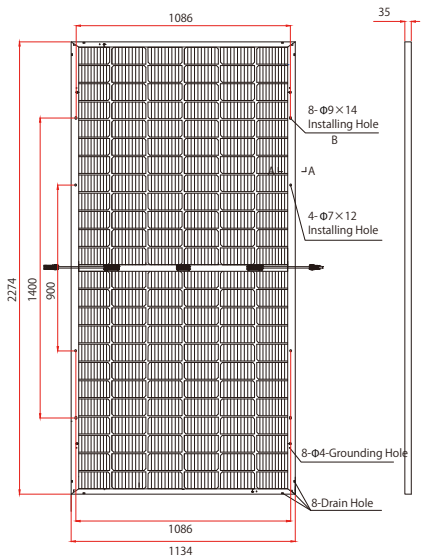
Test conditions :	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W) :	540W	404W	545W	408W	550W	412W	555W	416W
Maximum Power Voltage-Vmp(V):	41.03	37.79	41.18	37.94	41.33	38.09	41.48	38.24
Maximum Power Current-Imp(A):	13.17	10.70	13.24	10.77	13.31	10.84	13.38	10.91
Open Circuit Voltage -Voc(V):	49.53	45.56	49.68	45.71	49.83	45.86	49.98	46.01
Short Circuit Current-Isc(A):	13.63	11.37	13.71	11.44	13.79	11.51	13.87	11.58
Module Efficiency(STC) - η m(%):	20.96		21.15		21.35		21.54	
Power Output Tolerance (W):	0+5W							

STC:Irradiance:1000W/m², Module Temperature:25°C,Air Mass:1.5

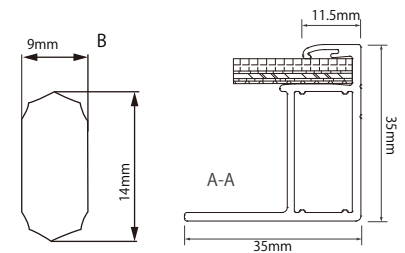
NOCT:Irradiance:800W/m², Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s

Bifacial Output-Rearside Power Gain

5%	Maximum Power(Pmax) :	567	572.25	577.5	582.75
	Module Efficiency STC(%) :	21.99	22.19	22.39	22.60
15%	Maximum Power(Pmax) :	621	626.75	632.5	638.25
	Module Efficiency STC(%) :	24.08	24.30	24.53	24.75
25%	Maximum Power(Pmax) :	675	681.25	687.5	693.75
	Module Efficiency STC(%) :	26.18	26.42	22.66	26.90



Back View



Mechanical Specifications:

Solar Cell Type:	Bifacial Mono-crystalline 182x91mm
Number of Cells:	144pcs (24x6)
Module Size:	2274*1134*35mm
Weight:	29kg
Glass:	High transparency self-cleaning solar glass 3.2mm
Back Sheet:	Transparent TPT
Frame:	Silver Anodized Aluminium Alloy
Junction Box:	IP68
Number of Diodes:	3pcs
Cable:	4.0mm ² 400/400mm
Connector:	MC4 Compatible
Wind/Snow Load:	2400pa/5400pa

Temperature Coefficient:

Nominal Operating Cell Temp(NOCT):	44±2°C
Temperature Coefficient of ISC:	0.060%/°C
Temperature Coefficient of VOC:	-0.30%/°C
Temperature Coefficient of Pmax:	-0.39%/°C

Maximum Ratings

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

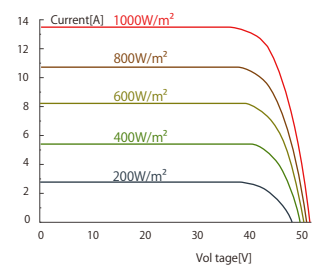
Optional:

Connector:	MC4 Original
Backsheet:	Glass
Frame:	Black Anodized Aluminium Alloy

Packaging Information:

Number per Box:	31PCS
Number per 20GP:	200PCS
Number per 40HC:	620PCS

Current-Voltage Curve (545W)



Power-Voltage Curve (545W)

