

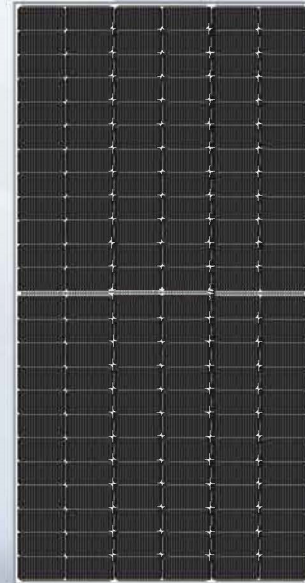
TOPCON

Bifacial 560~580W

SN(560~580W)-144MTB

Mono MBB N-type large size half cut bifacial module

Max Cell Efficiency 24.1%



KEY FEATURES



Sine Energy Topcon solar modules adopts the latest 16 bus bar technology decrease the current transverse propagation path by 50% and improve the efficiency of the modules up to 22%.



5-25w higher than Perc modules with the same size result in lower LCOE and O/M cost.



N type topcon modules has better reliability in harsh environment and lower LID/LETID.



N type Topcon solar cells makes longer life span, lower degradation and better performance in weak light conditions.



Half cut cell and optimized circuit design as well split junction box makes lower the power loss caused by shadow and mismatch.



Lower temperature coefficient for higher power generation at higher temperature.



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



Suitable for industrial and commercial roof and large-scale ground power station projects.

CERTIFICATION

IEC61215 | IEC61730 | IEC 61701 | CE | INMETRO
ISO 9001

2015 Quality Management System
ISO 14001

2015 Environmental Management System
ISO45001

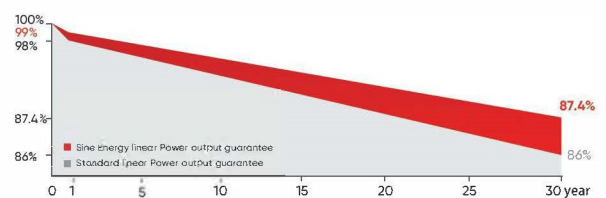
2018 Occupational Health and Safety Management
System



INDUSTRY LEADING WARRANTY

25 years Guarantee on product material and workmanship

30 years Linear power output warranty



Anhui Sine New Energy Co., Ltd.

Website: www.sine-energy.com

If any update, Sine Energy would not make further notice. Sine Energy reserves the right of final interpretation.



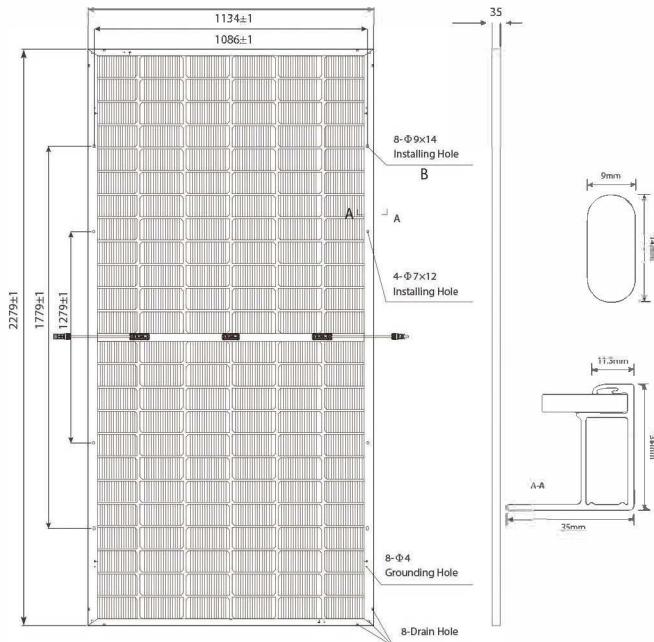
SN(560~580W)-144MTB

Weight
26.5kg

Number of Cells
144pcs(24*6)

Module Size
2279*1134*35mm

Packing
31pcs/pallet, 620pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	182×91mm
Glass	3.2mm tempered, high transmission ART coating
Back Sheet	White KPF
Frame	Silver Anodized Aluminium Alloy
Junction Box	IP68
No. of Diodes	3pcs
Output Cable	4.0mm ² 400/400mm (custmized available)
Connector	MC4 Compatible (MC4 Original optional)
Wind/Snow Load	2400pa/5400pa

TEMPERATURE COEFFICIENT

Nominal Operating Cell Temp(NOCT)	44±2°C
Temperature Coefficient of ISC	0.046%/°C
Temperature Coefficient of VOC	-0.25%/°C
Temperature Coefficient of Pmax	-0.3%/°C
Operational Temperature	-40~85°C
Maximum System Voltage	1500V DC(IEC)
Maximum Series Fuse Rating	25A

STC — ELECTRICAL CHARACTERISTICS

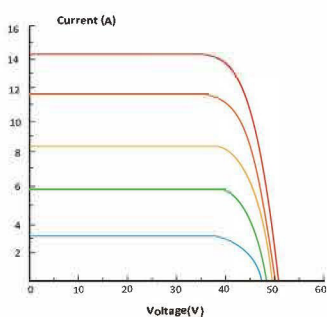
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W)	560W	421W	565W	425W	570W	429W	575W	433W	580W	437W
Maximum Power Voltage -Vmp(V)	41.79V	39.26V	41.94V	39.39V	42.09V	39.52V	42.24V	39.65V	42.39V	39.78V
Maximum Power Current -Imp(A)	13.42A	10.72A	13.49A	10.79A	13.56A	10.86A	13.63A	10.92A	13.70A	10.99A
Open Circuit Voltage -Voc(V)	50.48V	47.95V	50.61V	48.07V	50.75V	48.21V	50.88V	48.34V	51.02V	48.47V
Short Circuit Current -Isc(A)	14.15A	11.42A	14.23A	11.49A	14.31A	11.55A	14.39A	11.62A	14.47A	11.69A
Module Efficiency(STC) -ηm(%)	21.67%		21.86%		22.06%		22.25%		22.44%	

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

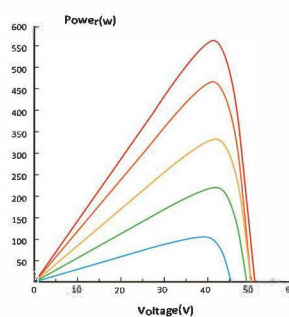
Angle	Parameter	560W	570W	580W	590W	600W
5%	Maximum Power(Pmax)	588W	593.25W	598.5W	603.75W	609W
	Module Efficiency STC(%)	22.75%	22.95%	23.16%	23.36%	23.56%
15%	Maximum Power(Pmax)	644W	644.75W	655.5W	661.25W	667W
	Module Efficiency STC(%)	24.92%	24.95%	25.36%	25.59%	25.81%
25%	Maximum Power(Pmax)	700W	706.25W	712.5W	718.75W	725W
	Module Efficiency STC(%)	27.08%	27.33%	27.57%	27.81%	28.05%

I-V CURVE



Current-Voltage Curve(570W)

— 1000W/m²
— 800W/m²
— 600W/m²
— 400W/m²
— 200W/m²



Power-Voltage Curve(570W)

— 1000W/m²
— 800W/m²
— 600W/m²
— 400W/m²
— 200W/m²