

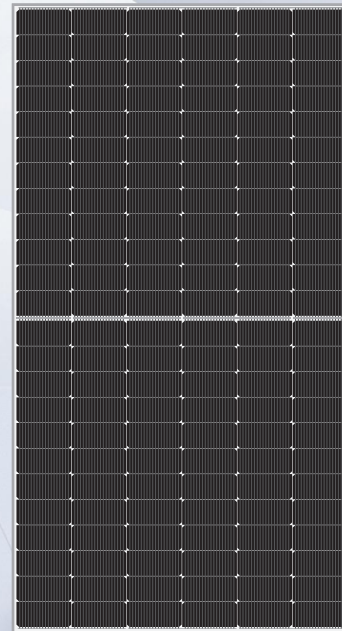
# TOPCON

**Double Glass Bifacial**


**570~590W**


SN(570~590W)-144MTB **18BB** >


**Mono MBB N-type** large size half cut module





## KEY FEATURES


- 


Sine Energy Topcon solar modules adopts the latest 18 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 conditons
- 

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

Lower thermal coefficient for higher power generation at higher temperature.
- 

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

Ideal for usage in residential rooftops, commercial and large-scale plants.

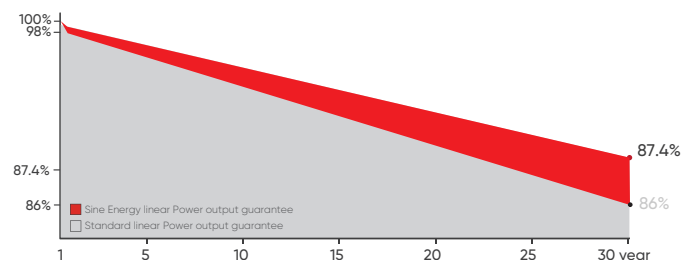
## CERTIFICATION

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

- 12 years** Guarantee on product material and workmanship
- 30 years** Linear power output warranty



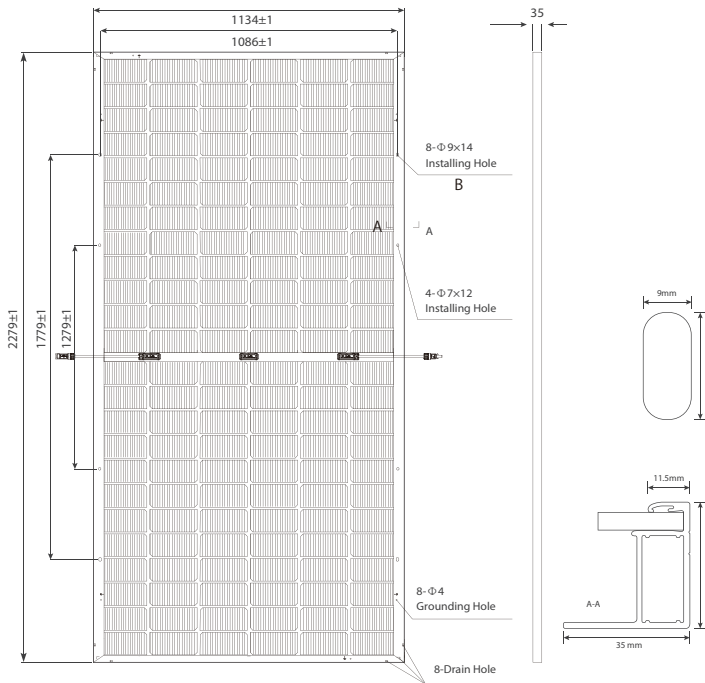
# SN(570~590W)-144MTB

Weight  
**32.5kg**

Number of Cells  
**144pcs(24×6)**

Module Size  
**2279×1134×35mm**

Packing  
**31pcs/pallet,620pcs/40HQ**



## MECHANICAL SPECIFICATIONS

Solar Cell Type	182×91mm
Glass	Dual glass, 2.0mm coated tempered glass
Frame	Silver Anodized Aluminium Alloy
Junction Box	IP68
No. of Diodes	3pcs
Output Cable	4.0mm <sup>2</sup> 400/400mm (custmized available)
Connector	MC4 Compatible (MC4 Original optional)
Wind/Snow Load	2400pa/5400pa

## TEMPERATURE COEFFICIENT

Nominal Operating Cell Temp(NOCT)	45±2°C
Temperature Coefficient of ISC	0.045% / °C
Temperature Coefficient of VOC	-0.230% / °C
Temperature Coefficient of Pmax	-0.280% / °C
Operational Temperature	-40°C ~ +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)	570W	429W	575W	433W	580W	437W	585W	441W	590W	445W
Maximum Power Voltage-Vmp(V)	42.08V	39.52V	42.17V	39.65V	42.26V	39.78V	42.35V	39.91V	42.44V	40.04V
Maximum Power Current-Imp(A)	13.55A	10.86A	13.64A	10.92A	13.73A	10.99A	13.82A	11.05A	13.91A	11.11A
Open Circuit Voltage -Voc(V)	52.76V	48.21V	52.85V	48.34V	52.94V	48.47V	53.03V	48.60V	53.12V	48.73V
Short Circuit Current-Isc(A)	13.95A	11.55A	14.04A	11.62A	14.13A	11.69A	14.22A	11.76A	14.31A	11.83A
Module Efficiency(STC) -ηm(%)	22.06%		22.25%		22.44%		22.63%		22.83%	

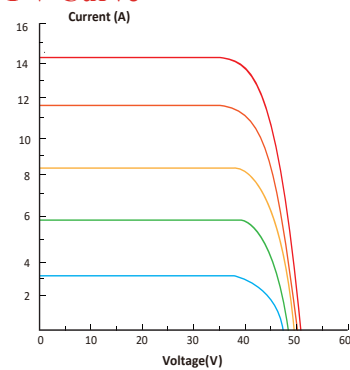
TC:Irradiance:1000W/m<sup>2</sup>, Module Temperature:25°C,Air Mass:1.5

NOCT:Irradiance:800W/m<sup>2</sup>, Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s

## Bifacial Output-Rearside Power Gain

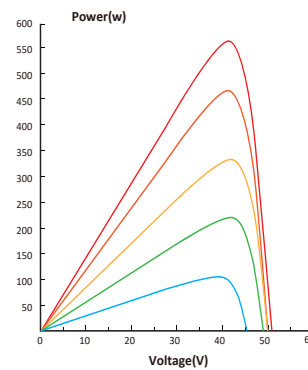
%	Parameter	570W		580W		585W		590W	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
5%	Maximum Power(Pmax)	598.5W	441.5W	603.75W	445.5W	609W	449.5W	614.25W	453.5W
	Module Efficiency STC(%)	23.16%	23.36%	23.36%	23.56%	23.56%	23.77%	23.77%	23.96%
10%	Maximum Power(Pmax)	627W	456.5W	632.5W	460.5W	638W	464.5W	643.5W	468.5W
	Module Efficiency STC(%)	24.26%	24.47%	24.47%	24.68%	24.68%	24.89%	24.89%	25.11%
15%	Maximum Power(Pmax)	655.5W	471.5W	661.5W	474.5W	667W	477.5W	673W	480.5W
	Module Efficiency STC(%)	25.36%	25.59%	25.59%	25.81%	25.81%	26.04%	26.04%	26.25%

## I-V Curve



Current-Voltage Curve(570W)

— 1000W/m<sup>2</sup>  
— 800W/m<sup>2</sup>  
— 600W/m<sup>2</sup>  
— 400W/m<sup>2</sup>  
— 200W/m<sup>2</sup>



Power-Voltage Curve(570W)

— 1000W/m<sup>2</sup>  
— 800W/m<sup>2</sup>  
— 600W/m<sup>2</sup>  
— 400W/m<sup>2</sup>  
— 200W/m<sup>2</sup>