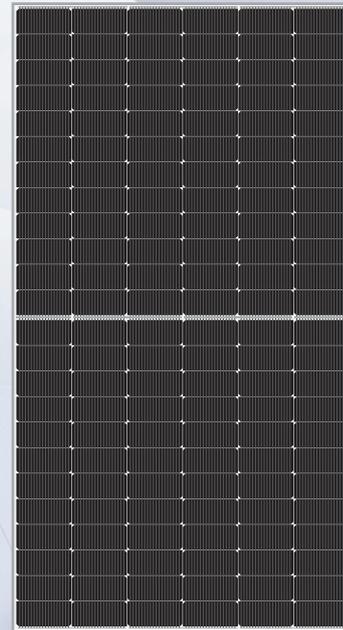


TOPCON

Double Glass Bifacial 560~590W

SN(560~590W)-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 conditions.



Half cut cell and optimized circuit design as well split junction 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



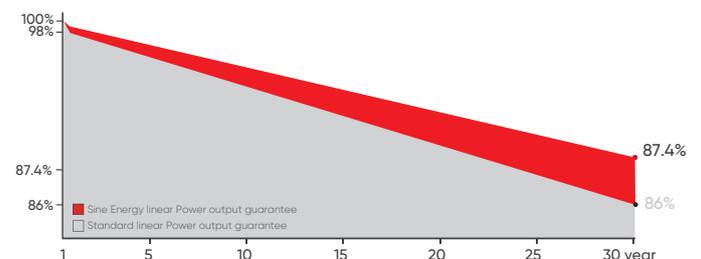
INDUSTRY LEADING WARRANTY

12 years

Guarantee on product material and workmanship

30 years

Linear power output warranty



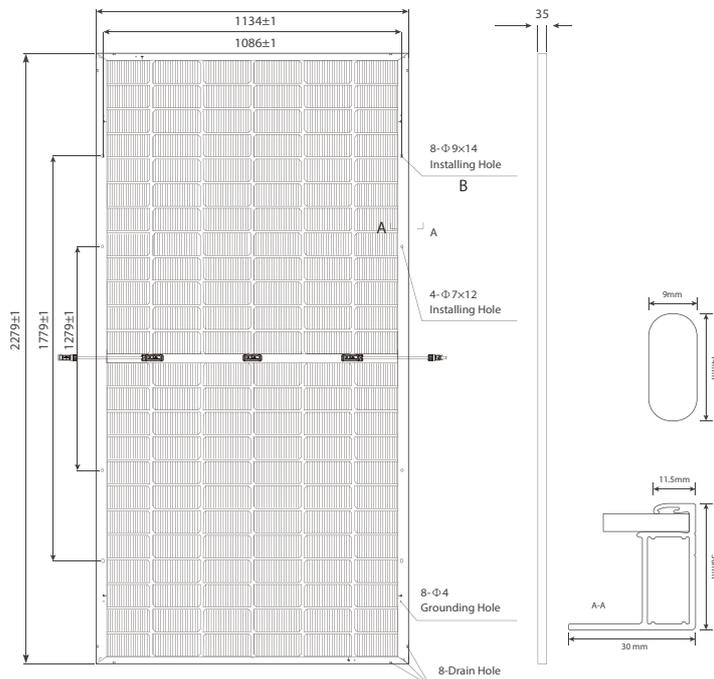
SN(560~590W)-144MTB

Weight
32.5kg

Number of Cells
144pcs(24×6)

Module Size
2279×1134×30mm

Packing
37pcs/pallet,740pcs/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 ² 400/400mm (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

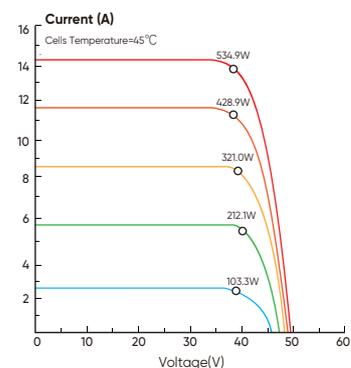
Test conditions	STC	NOCT												
Maximum Power -Pmax(W)	560W	426.3W	565W	430.1W	570W	433.9W	575W	437.7W	580W	441.5W	585W	445.3W	590W	449.1W
Maximum Power Voltage-Vmp(V)	42.82V	40.69V	42.91V	40.78V	43.00V	40.87V	43.11V	40.97V	43.22V	41.07V	43.33V	41.18V	43.44V	41.28V
Maximum Power Current-Imp(A)	13.08A	10.48A	13.17A	10.55A	13.26A	10.62A	13.34A	10.68A	13.42A	10.75A	13.51A	10.82A	13.59A	10.89A
Open Circuit Voltage -Voc(V)	50.99V	48.46V	51.09V	48.55V	51.19V	48.65V	51.30V	48.75V	51.41V	48.86V	51.52V	48.96V	51.64V	49.07V
Short Circuit Current-Isc(A)	13.89A	11.16A	13.97A	11.22A	14.05A	11.29A	14.14A	11.35A	14.22A	11.42A	14.30A	11.48A	14.38A	11.55A
Module Efficiency(STC) -ηm(%)	21.90%		21.86%		22.05%		22.25%		22.44%		22.64%		22.83%	

TC: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

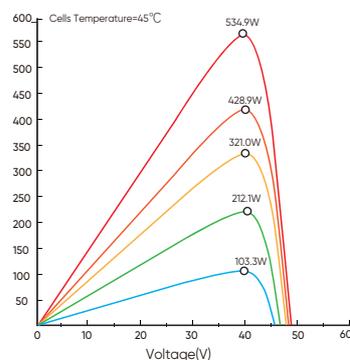
		5%		10%		15%	
		Maximum Power(Pmax)	Module Efficiency STC(%)	Maximum Power(Pmax)	Module Efficiency STC(%)	Maximum Power(Pmax)	Module Efficiency STC(%)
5%	Maximum Power(Pmax)	588W		593.25W		598.5W	
	Module Efficiency STC(%)	22.75%		22.95%		23.16%	
10%	Maximum Power(Pmax)	644W		644.75W		627W	
	Module Efficiency STC(%)	24.92%		24.95%		24.26%	
15%	Maximum Power(Pmax)	700W		706.25W		655.5W	
	Module Efficiency STC(%)	27.08%		27.33%		25.36%	

I-V Curve



Current-Voltage Curve(580W)

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



Power-Voltage Curve(580W)

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