

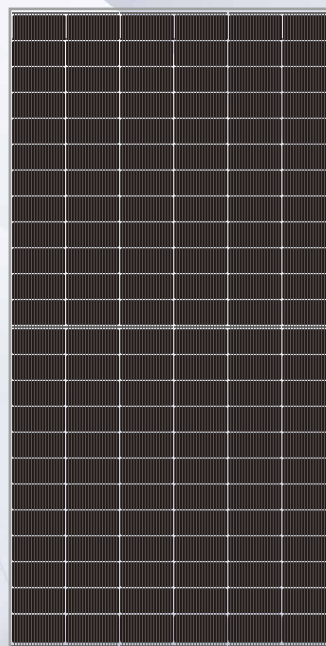
TOPCon

Double Glass Bifacial

570~600W

SN(570~660W)-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 23.22%.



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



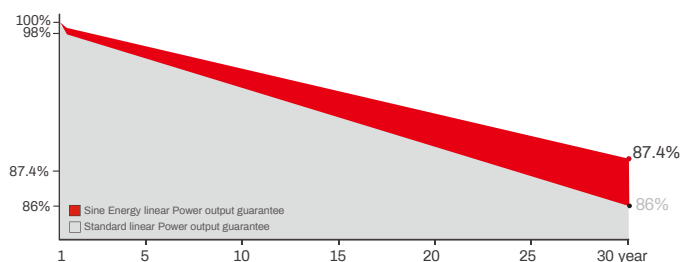
INDUSTRY LEADING WARRANTY

12 years

Guarantee on product material and workmanship

30 years

Linear power output warranty



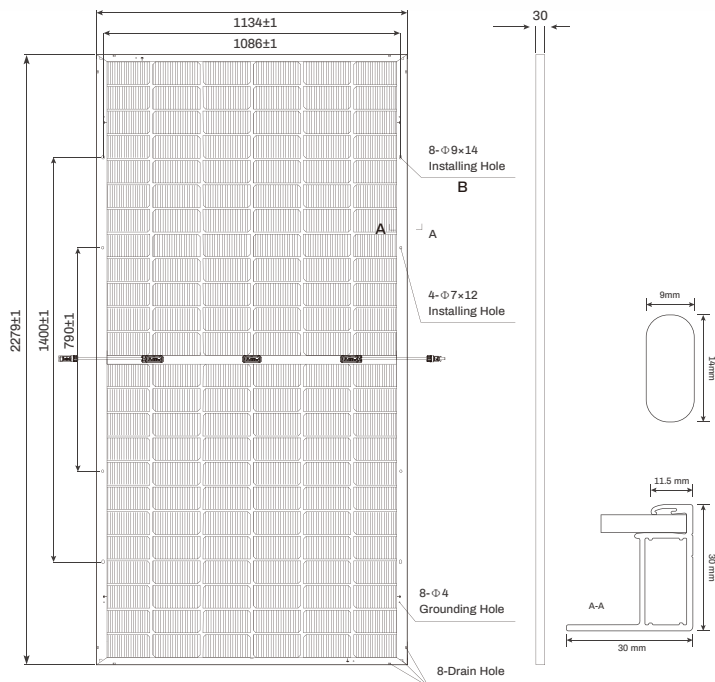
SN(570~600W)-144MTB

Weight
30.5kg

Number of Cells
144pcs(24×6)

Module Size
2279×1134×30mm

Packing
37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	182×183mm
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
Fire Rating	Class C
Protection Class	Class II

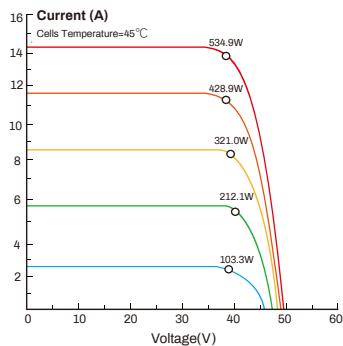
STC — Electrical Characteristics

Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W)	570W	434W	575W	438W	580W	442W	585W	446W	590W	450W	595W	454W	600W	458W
Maximum Power Voltage-Vmp(V)	43.00	40.87	43.11	40.97	43.22	41.07	43.33	41.18	43.44	41.28	43.56	41.38	43.68	41.48V
Maximum Power Current-Imp(A)	13.26	10.62	13.34	10.68	13.42	10.75	13.51	10.82	13.59	10.89	13.67	10.97	13.74	11.04A
Open Circuit Voltage -Voc(V)	51.19	48.65	51.30	48.75	51.41	48.86	51.52	48.96	51.64	49.07	51.76	49.19	51.88	49.31V
Short Circuit Current-Isc(A)	14.05	11.29	14.14	11.35	14.22	11.42	14.30	11.48	14.38	11.55	14.55	11.83	14.63	11.91A
Module Efficiency(STC) -ηm(%)	22.06		22.25		22.44		22.65		22.84		23.04		23.22	
Power output tolerance(W)	±3%													
STC:AM:1.5, front:1000W/m ² , 25°C. NOCT:AM:1.5, front:800W/m ² , Wind Speed:1m/s, 20°C														

BNPI — Electrical Characteristics

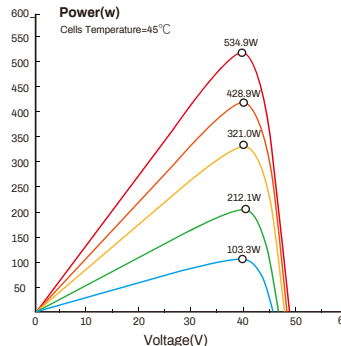
Maximum Power -Pmax(W)	624W	629W	635W	641W	646W	652W	657W
Maximum Power Voltage-Vmp(V)	43.95	44.02	44.14	44.23	44.32	44.42	44.50
Maximum Power Current-Imp(A)	14.20	14.29	14.39	14.50	14.58	14.68	14.77
Open Circuit Voltage -Voc(V)	51.19	51.30	51.41	51.52	51.64	51.76	51.88
Short Circuit Current-Isc(A)	15.38	15.48	15.56	15.65	15.74	15.92	16.01
Module Efficiency(STC) -ηm(%)	24.15	24.36	24.56	24.79	25.00	25.22	25.42
BNPI: AM:1.5, front:1000W/m ² , rear: 135W/m ² , 25°C.							

I-V Curve



Current-Voltage Curve(SN580-144MTB)

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



Current-Voltage Curve(SN580-144MTB)

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