

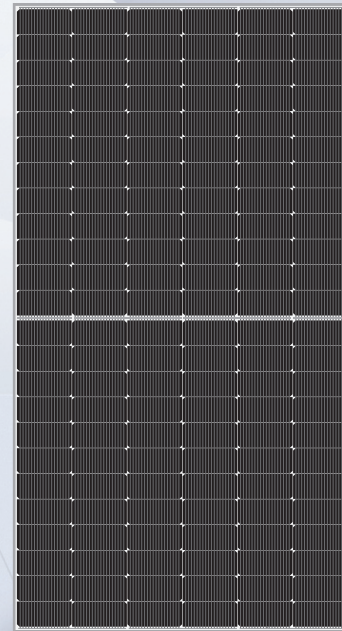
TOPCon

Monofacial

560~590W

SN(560~590W)-144MT **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 22.8%.
- 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.

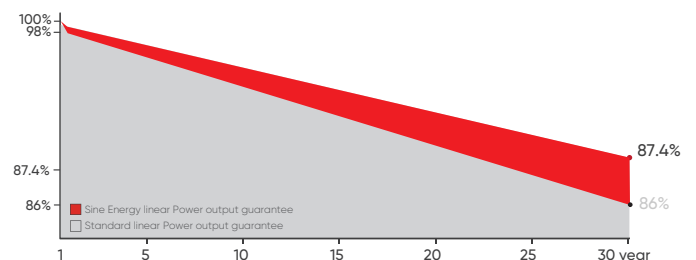
CERTIFICATION

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



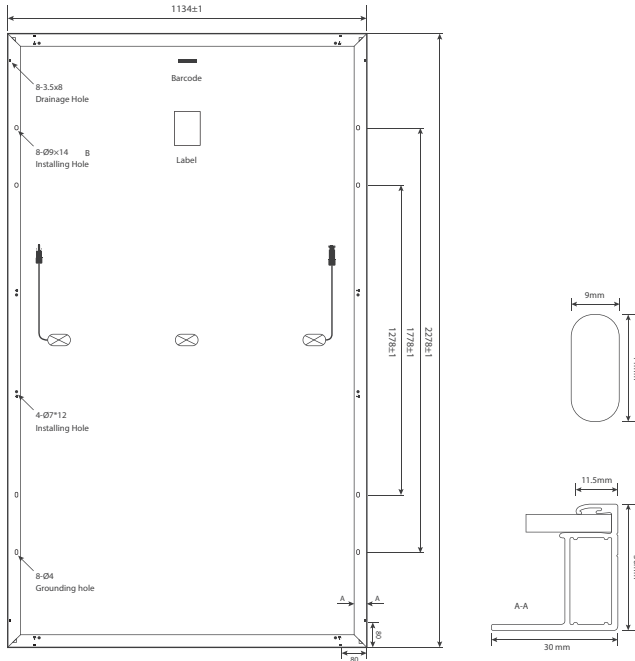
SN(560~590W)-144MT

Weight
26.5kg

Number of Cells
144pcs(24×6)

Module Size
2279×1134×30mm

Packing
37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	182×91mm
Glass	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)	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

ELECTRICAL SPECIFICATION (STC)

	560W	565W	570W	575W	580W	585W	590W
Maximum Power -Pmax(W)	560W	565W	570W	575W	580W	585W	590W
Maximum Power Voltage-Vmp(V)	42.82V	42.91V	43.00V	43.11V	43.22V	43.33V	43.44V
Maximum Power Current-Imp(A)	13.08A	13.17A	13.26A	13.34A	13.42A	13.51A	13.59A
Open Circuit Voltage -Voc(V)	50.99V	51.09V	51.19V	51.30V	51.41V	51.52V	51.63V
Short Circuit Current-Isc(A)	13.89A	13.97A	14.05A	14.14A	14.22A	14.30A	14.38A
Module Efficiency(STC) -ηm(%)	21.7%	21.9%	22.1%	22.3%	22.5%	22.6%	22.8%
Power output tolerance(W)	0~+5W						

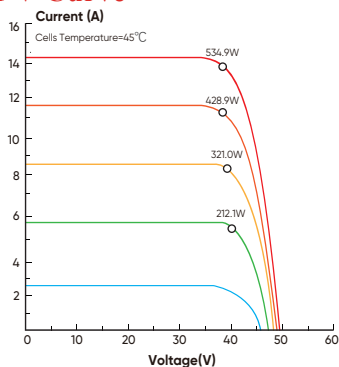
STC:Irradiance:1000W/m², Module Temperature:25°C,Air Mass:1.5

Electrical Specification (NOCT)

	426.3W	430.1W	433.9W	437.7W	441.5W	445.3W	449.1W
Maximum Power -Pmax(W)	426.3W	430.1W	433.9W	437.7W	441.5W	445.3W	449.1W
Maximum Power Voltage-Vmp(V)	40.69V	40.78V	40.87V	40.97V	41.07V	41.18V	41.28V
Maximum Power Current-Imp(A)	10.48A	10.55A	10.62A	10.68A	10.75A	10.82A	10.89A
Open Circuit Voltage -Voc(V)	48.46V	48.55V	48.65V	48.75V	48.86V	48.96V	49.07V
Short Circuit Current-Isc(A)	11.16A	11.22A	11.29A	11.35A	11.42A	11.48A	11.55A

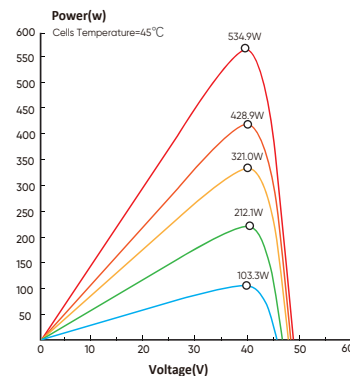
NOCT:Irradiance:800W/m², Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s

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