

TOPCon

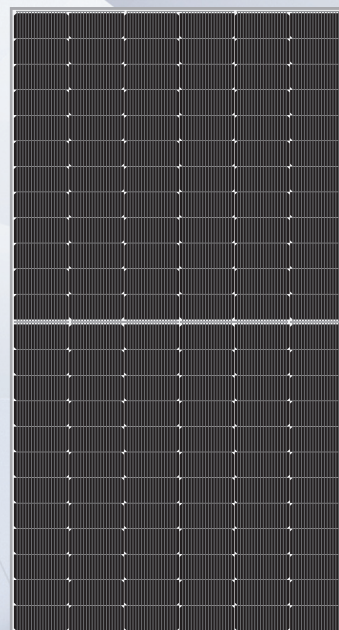
Monofacial

600~630W

SN(600~630W)-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



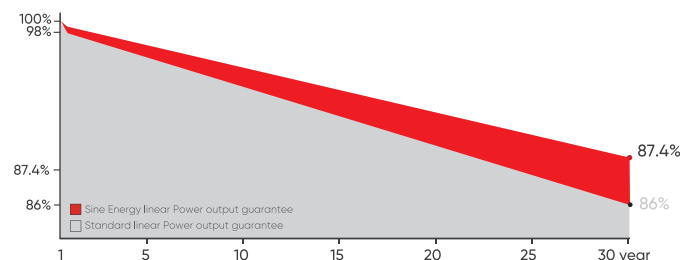
INDUSTRY LEADING WARRANTY

12 years

Guarantee on product material and workmanship

30 years

Linear power output warranty



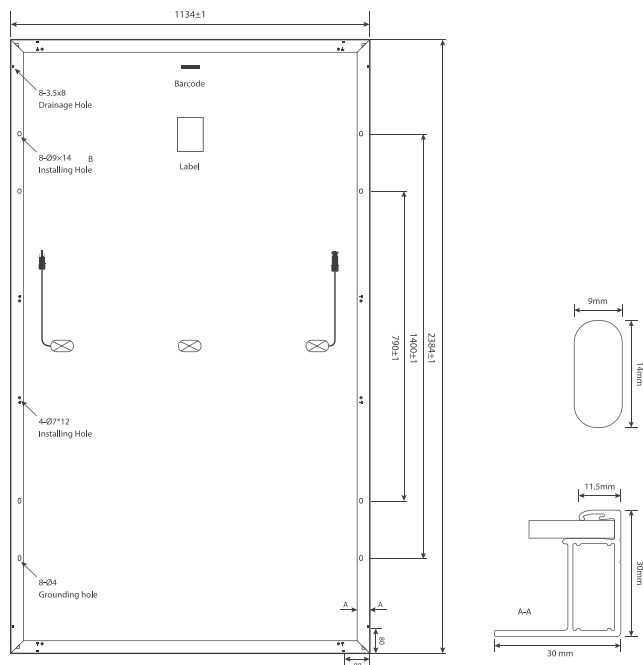
SN(600~630W)-144MT

Weight
28.3kg

Number of Cells
144pcs(24×6)

Module Size
2384×1134×30mm

Packing
37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	182×95.8mm
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
Voc and Lsc tolerance	±3%

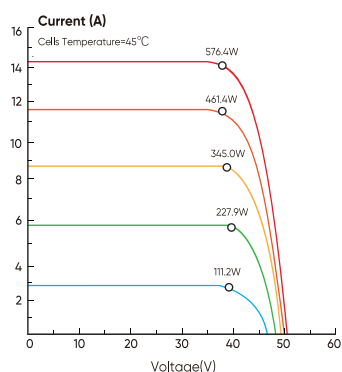
ELECTRICAL SPECIFICATION (STC)

Maximum Power -Pmax(W)	600W	605W	610W	615W	620W	625W	630W
Maximum Power Voltage-Vmp(V)	44.12V	44.26V	44.40V	44.54V	44.67V	44.83V	44.99V
Maximum Power Current-Imp(A)	13.60A	13.67A	13.74A	13.81A	13.88A	13.94A	14.00A
Open Circuit Voltage -Voc(V)	52.32V	52.45V	52.58V	52.71V	52.84V	52.98V	53.14V
Short Circuit Current-Isc(A)	14.45A	14.52A	14.59A	14.66A	14.73A	14.75A	14.82A
Module Efficiency(STC) -ηm(%)	22.19%	22.38%	22.56%	22.75%	22.93%	23.12%	23.30%
Power output tolerance(W)	0~+5W						
STC:Irradiance:1000W/m², Module Tempreature:25°C,Air Mass:1.5							

Electrical Specification (NOCT)

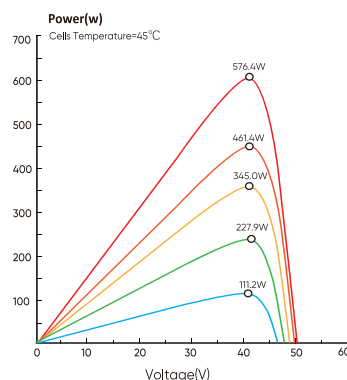
Maximum Power -Pmax(W)	456.7W	460.6W	464.4W	468.2W	472.0W	475.8W	479.6W
Maximum Power Voltage-Vmp(V)	41.93V	42.03V	42.14V	42.23V	42.34V	42.35V	42.47V
Maximum Power Current-Imp(A)	10.89A	10.96A	11.03A	11.09A	11.15A	11.23A	11.30A
Open Circuit Voltage -Voc(V)	49.63V	49.73V	49.84V	49.94V	50.05V	50.17V	50.29V
Short Circuit Current-Isc(A)	11.64A	11.70A	11.76A	11.83A	11.90A	12.13A	12.23A
NOCT:Irradiance:800W/m ² , Ambient Temperature:20°C,Air Mass:1.5,Wind Speed:1m/s							

I-V Curve



Current-Voltage Curve(610W)

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



Power-Voltage Curve(610W)

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