

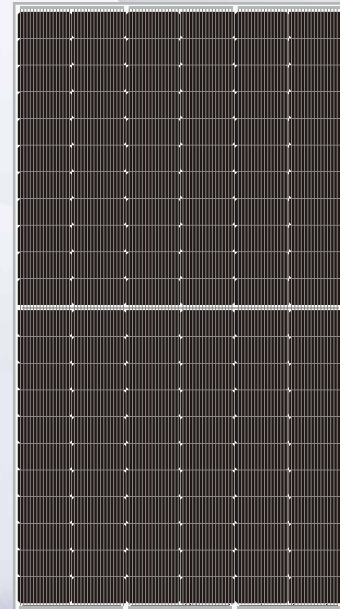
TOPCon

Double Glass Bifacial

600~630W

SN(600~630W)-132MTBR 16BB ▶

Mono MBB N-type large size half cut module



KEY FEATURES



Sine Energy Topcon solar modules adopts the latest 16 bus bar technology decrease the current transverse propagation path by 50% and improve the efficiency of the modules up to 23.3%.



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



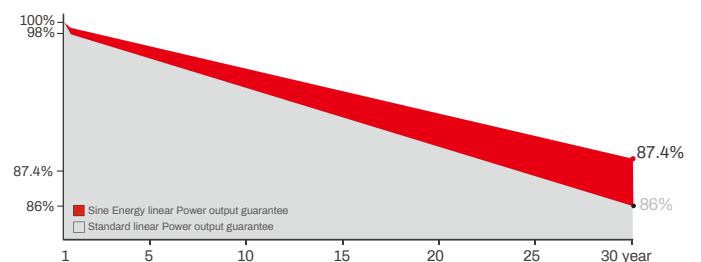
INDUSTRY LEADING WARRANTY

12 years

Guarantee on product material and workmanship

30 years

Linear power output warranty



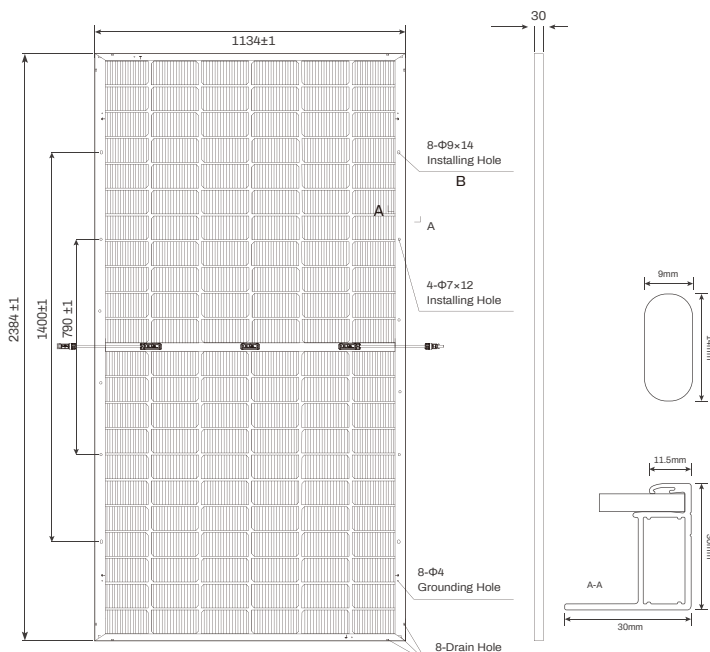
SN(600~630W)-132MTBR

Weight
32kg

Number of Cells
132pcs(22×6)

Module Size
2384×1134×30mm

Packing
37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

| | |
|-----------------|--|
| Solar Cell Type | 210x182mm |
| 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 |

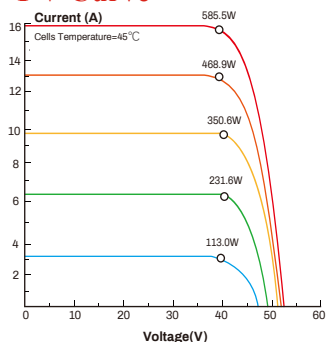
STC — Electrical Characteristics

| Test conditions | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power -Pmax(W) | 600W | 456W | 605W | 460W | 610W | 464W | 615W | 468W | 620W | 472W | 625W | 476W | 630W | 480W |
| Maximum Power Voltage-Vmp(V) | 41.79 | 38.69 | 41.91 | 38.81 | 42.03 | 38.93 | 42.13 | 39.05 | 42.24 | 39.17 | 42.33 | 39.29 | 42.44 | 39.41 |
| Maximum Power Current-Imp(A) | 14.36 | 11.76 | 14.44 | 11.85 | 14.52 | 11.92 | 14.60 | 11.98 | 14.68 | 12.05 | 14.77 | 12.12 | 14.85 | 12.18 |
| Open Circuit Voltage -Voc(V) | 49.56 | 47.63 | 49.64 | 47.75 | 49.72 | 47.87 | 49.80 | 47.99 | 49.88 | 48.11 | 49.97 | 48.23 | 50.06 | 48.35 |
| Short Circuit Current-Isc(A) | 15.32 | 12.27 | 15.43 | 12.35 | 15.46 | 12.43 | 15.55 | 12.50 | 15.63 | 12.58 | 15.69 | 12.65 | 15.78 | 12.73 |
| Module Efficiency(STC) -ηm(%) | 22.19 | | 22.37 | | 22.57 | | 22.75 | | 22.94 | | 23.13 | | 23.31 | |
| 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

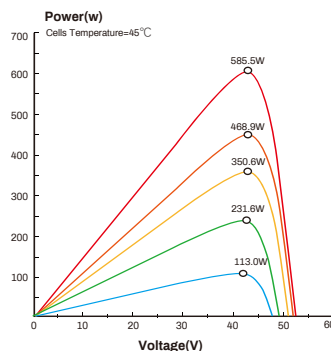
| | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power -Pmax(W) | 657W | 662W | 668W | 673W | 679W | 684W | 690W |
| Maximum Power Voltage-Vmp(V) | 43.17 | 43.26 | 43.35 | 43.45 | 43.54 | 43.64 | 43.73 |
| Maximum Power Current-Imp(A) | 15.22 | 15.30 | 15.41 | 15.49 | 15.59 | 15.63 | 15.77 |
| Open Circuit Voltage -Voc(V) | 49.56 | 49.64 | 49.72 | 49.80 | 49.88 | 49.97 | 50.06 |
| Short Circuit Current-Isc(A) | 16.78 | 16.88 | 16.92 | 17.02 | 17.11 | 17.17 | 17.27 |
| Module Efficiency(STC) -ηm(%) | 24.33 | 24.52 | 24.71 | 24.90 | 25.10 | 25.31 | 25.52 |
| BNPI: AM:1.5, front:1000W/m ² , rear: 135W/m ² , 25°C. | | | | | | | |

I-V Curve



Current-Voltage Curve(SN620-132MTBR)

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



Power-Voltage Curve(SN620-132MTBR)

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