

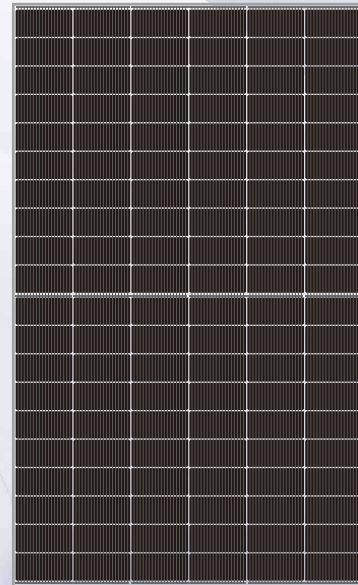
TOPCon

Double Glass Bifacial


640~660W


SN(640~660W)-120MTBS 18BB >


Mono MBB N-type large size half cut module





KEY FEATURES


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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 23.32%.
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5-25w higher than Perc modules with the same size result in lower LCOE and O/M cost.
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N type topcon modules has better reliability in harsh environment and lower LID/LETID.
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N type Topcon solar cells makes longer life span, lower degradation and better performance in weak light conditions
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Half cut cell and optimized circuit design as well split junction box makes lower the power loss caused by shadow and mismatch.
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Lower thermal coefficient for higher power generation at higher temperature.
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Selected encapsulating materials and stringent production process controls ensures highly PID resistant.
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Ideal for usage in residential rooftops, commercial and large-scale plants.

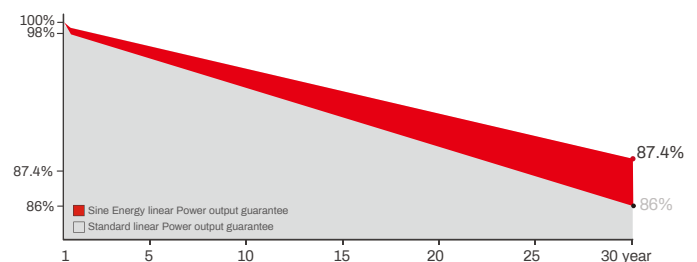
CERTIFICATION

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



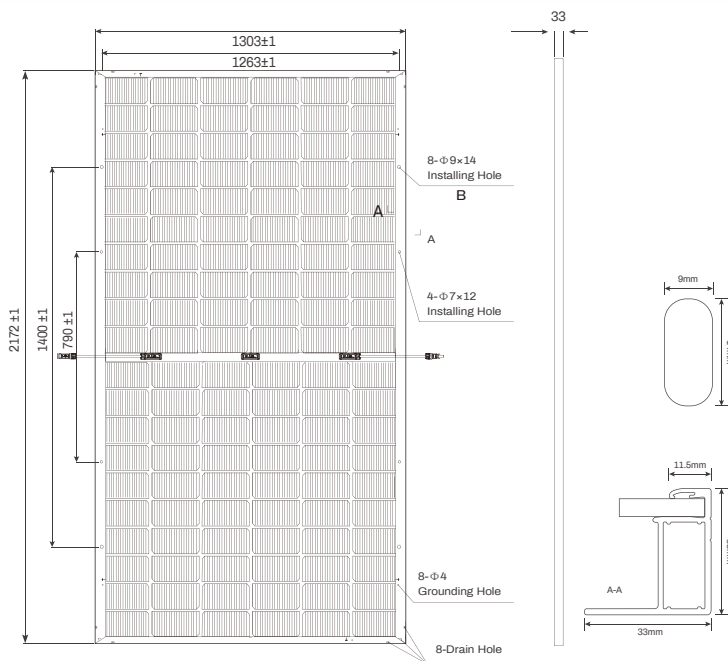
SN(640~660W)-120MTBS

Weight
33.5kg

Number of Cells
120pcs(20×6)

Module Size
2172×1303×33mm

Packing
37pcs/pallet,660pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	210×210mm
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	30A
Fire Rating	Class C
Protection Class	Class II

STC — Electrical Characteristics

Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W)	640W	484W	645W	488W	650W	492W	655W	496W	660W	500W
Maximum Power Voltage-Vmp(V)	36.81	34.49	36.90	34.69	37.00	34.89	37.09	35.10	37.19	35.30
Maximum Power Current-Imp(A)	17.39	14.03	17.48	14.67	17.57	14.10	17.66	14.13	17.75	14.17
Open Circuit Voltage -Voc(V)	44.85	42.01	45.06	42.24	45.17	42.47	45.27	42.70	45.37	42.93
Short Circuit Current-Isc(A)	17.91	14.77	18.00	14.81	18.09	14.85	18.18	14.89	18.27	14.93
Module Efficiency(STC) -ηm(%)	22.62		22.79		22.97		23.14		23.32	
Power output tolerance(W)	±3%									

STC:AM:1.5, front:1000W/m², 25°C. NOCT:AM:1.5, front:800W/m², Wind Speed:1m/s, 20°C

BNPI — Electrical Characteristics

Maximum Power -Pmax(W)	701W	706	712W	717W	723W
Maximum Power Voltage-Vmp(V)	39.19	39.29	39.39	39.49	39.59
Maximum Power Current-Imp(A)	17.88	17.97	18.06	18.15	18.25
Open Circuit Voltage -Voc(V)	44.95	45.06	45.17	45.27	45.37
Short Circuit Current-Isc(A)	19.60	19.70	19.80	19.90	20.00
Module Efficiency(STC) -ηm(%)	24.76	24.94	25.14	25.33	25.53

BNPI: AM:1.5, front:1000W/m², rear: 135W/m², 25°C.

I-V Curve

