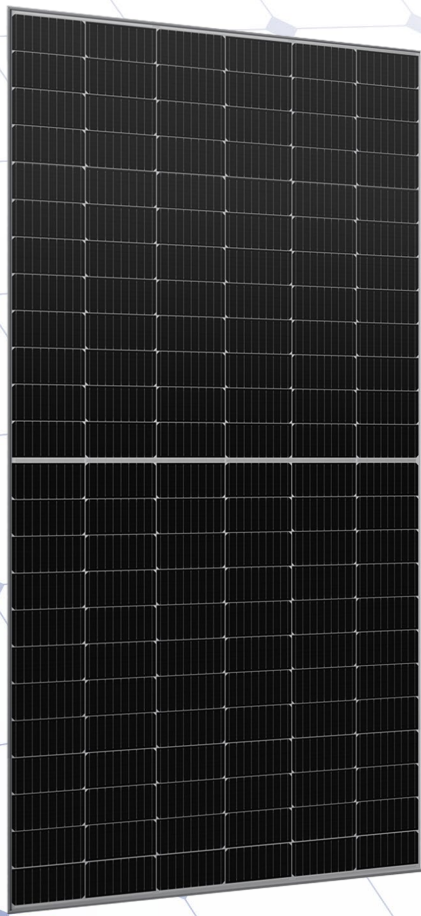




Full Black **TOPCON** Double Glass Bifacial **630~650W**

KS(630~650W)-132MTBRP **20BB** ▶
Mono MBB N-type large size half cut module

KEY FEATURES



Kosmo Solar Topcon solar modules adopt the latest 20 bus bar technology decrease the current transverse propagation path by 50% and improve the efficiency of the modules up to 24.05%.



5-25w higher than Perc modules with the same size result in lower LCOE and O/M cost.



N type topcon modules have better reliability in harsh environment and lower LID/LETID.



N type Topcon solar cells make longer life span, lower degradation and better performance in weak light conditions.



Half cut cell and optimized circuit design as well split junction box reduce 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 ensure high PID resistance.



Ideal for usage in residential rooftops, commercial and large-scale plants.

CERTIFICATION

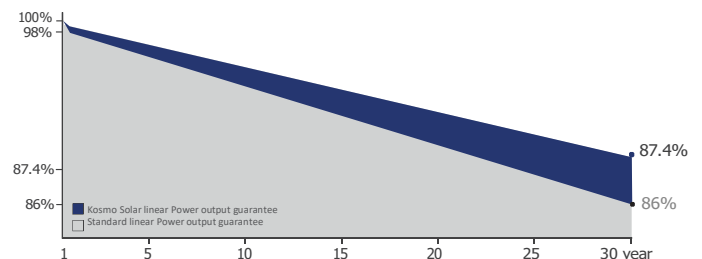
IEC61215 | IEC61730 | IEC 61701 | CE | INMETRO
ISO 9001
2015 Quality Management System
ISO 14001
2015 Environmental Management System
ISO45001
2018 Occupational Health and Safety Management System



INDUSTRY LEADING WARRANTY

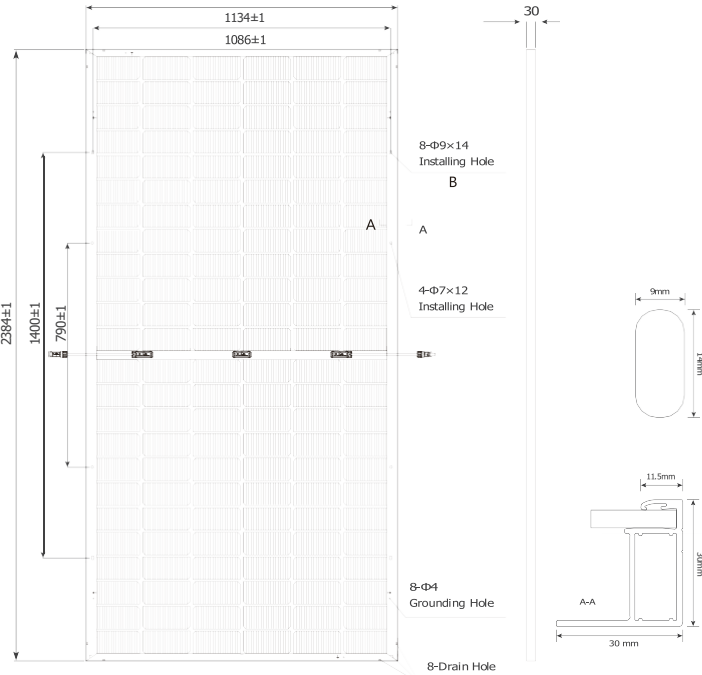
20 years Guarantee on product material and workmanship

30 years Linear power output warranty



KS(630~650W)-132MTBRP

WEIGHT	NUMBER OF CELLS	MODULE SIZE	PACKING
32kg	132pcs(22×6)	2384×1134×30mm	37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	210*182 mm
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℃
Temperature Coefficient of ISC	0.045%/℃
Temperature Coefficient of VOC	-0.230%/℃
Temperature Coefficient of Pmax	-0.280%/℃
Operational Temperature	-40℃~ +85℃
Maximum System Voltage	1500V DC(IEC)
Maximum Series Fuse Rating	25A

STC — Electrical Characteristics

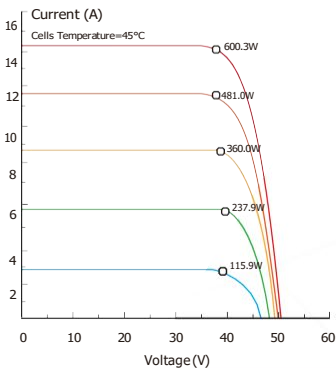
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W)	630W	480W	635W	484W	640W	488W	645W	492W	650W	496W
Maximum Power Voltage-Vmp(V)	42.66	39.41	42.77	39.53	42.87	39.65	42.98	39.77	43.08	39.89
Maximum Power Current-Imp(A)	14.77	12.18	14.85	12.24	14.93	12.31	15.01	12.37	15.09	12.43
Open Circuit Voltage -Voc(V)	50.52	48.35	50.72	48.52	51.02	48.69	51.22	48.86	51.53	49.03
Short Circuit Current-Isc(A)	15.73	12.73	15.76	12.79	15.79	12.85	15.82	12.91	15.85	12.97
Module Efficiency(STC) -ηm(%)	23.31		23.49		23.68		23.86		24.05	
Power output tolerance(W)										
STC:AM:1.5, front:1000W/m ² , 25℃.										
NOCT:AM:1.5, front:800W/m ² , Wind Speed:1m/s, 20℃										

BNPI— Electrical Characteristics

Maximum Power -Pmax(W)	690W	695W	701W	706W	712W
Maximum Power Voltage-Vmp(V)	46.69	46.81	46.92	47.04	47.15
Maximum Power Current-Imp(A)	16.17	16.25	16.34	16.43	16.52
Open Circuit Voltage -Voc(V)	50.52	50.72	51.02	51.22	51.53
Short Circuit Current-Isc(A)	17.22	17.25	17.28	17.31	17.53
Module Efficiency(STC) -ηm(%)	25.51	25.71	25.91	26.12	26.32

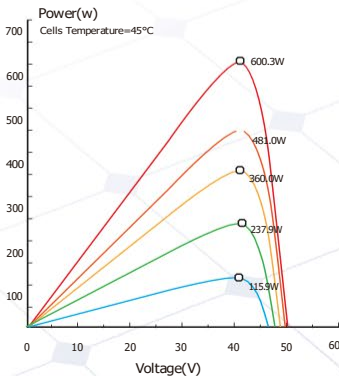
BNPI: AM:1.5, front:1000W/m², rear: 135W/m², 25℃.

I-V Curve



Current-Voltage Curve(610W)

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



Power-Voltage Curve(620W)

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