

TOPCON
Double Glass Bifacial
580~600W

KS(580~600W)-144MBB **18BB** ▶
Mono MBB N-type large size half cut module

KEY FEATURES



Kosmo Solar Topcon solar modules adopt the latest 18 bus bar technology decrease the current transverse propagation path by 50% and improve the efficiency of the modules up to 23.21%.



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

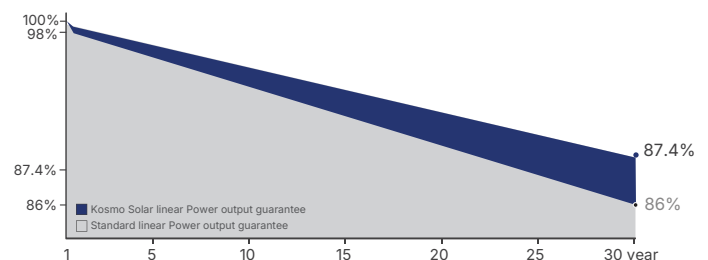
IEC61215 | IEC61730 | IEC 61701 | CE | INMETRO
ISO 9001
2015 Quality Management System
ISO 14001
2015 Environmental Management System
ISO45001
2018 Occupational Health and Safety Management System



INDUSTRY LEADING WARRANTY

20 years Guarantee on product material and workmanship

30 years Linear power output warranty



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WEIGHT

32.5kg

NUMBER OF CELLS

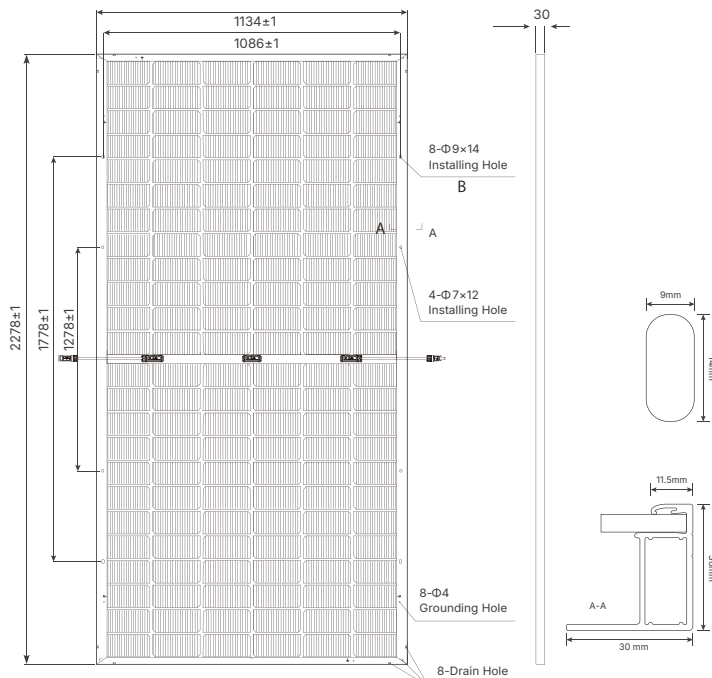
144pcs(24×6)

MODULE SIZE

2278×1134×30mm

PACKING

37pcs/pallet,740pcs/40HQ



MECHANICAL SPECIFICATIONS

Solar Cell Type	182×91 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°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

STC — Electrical Characteristics

Test conditions	STC		NOCT		STC		NOCT		STC		NOCT	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmax(W)	580W	441.5W	585W	445.3W	590W	449.1W	595W	452.9W	600W	456.7W		
Maximum Power Voltage-Vmp(V)	43.22V	41.07V	43.33V	41.18V	43.44V	41.28V	43.56V	41.38V	43.68V	41.48V		
Maximum Power Current-Imp(A)	13.42A	10.75A	13.51A	10.82A	13.59A	10.89A	13.67A	10.94A	13.74A	11.01A		
Open Circuit Voltage -Voc(V)	51.41V	48.86V	51.52V	48.96V	51.64V	49.07V	51.76V	49.19V	51.88V	49.31V		
Short Circuit Current-Isc(A)	14.22A	11.42A	14.30A	11.48A	14.38A	11.55A	14.55A	11.65A	14.63A	11.72A		
Module Efficiency STC- ηm(%)	22.44%		22.64%		22.83%		23.02%		23.21%			

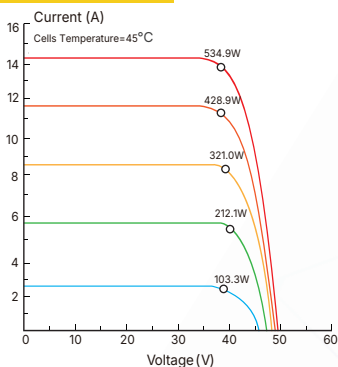
TC:Irradiance:1000W/m², Module Temperature:25°C,Air Mass:1.5

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

Bifacial Output-Rearside Power Gain

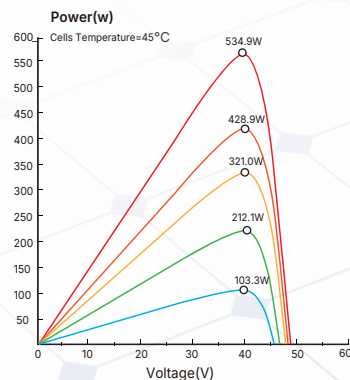
Irradiance	Parameter	580W		600W		614.25W		619.5W		624.75W		630W	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
5%	Maximum Power(Pmax)	598.5W	603.75W	609W	614.25W	619.5W	624.75W	630W					
	Module Efficiency STC(%)	23.16%	23.36%	23.56%	23.77%	23.96%	24.18%	24.38%					
10%	Maximum Power(Pmax)	627W	632.5W	638W	643.5W	649W	654.5W	660W					
	Module Efficiency STC(%)	24.26%	24.47%	24.68%	24.89%	25.11%	25.33%	25.54%					
15%	Maximum Power(Pmax)	655.5W	661.5W	667W	673W	678.5W	684W	689.5W					
	Module Efficiency STC(%)	25.36%	25.59%	25.81%	26.04%	26.25%	26.47%	26.69%					

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