

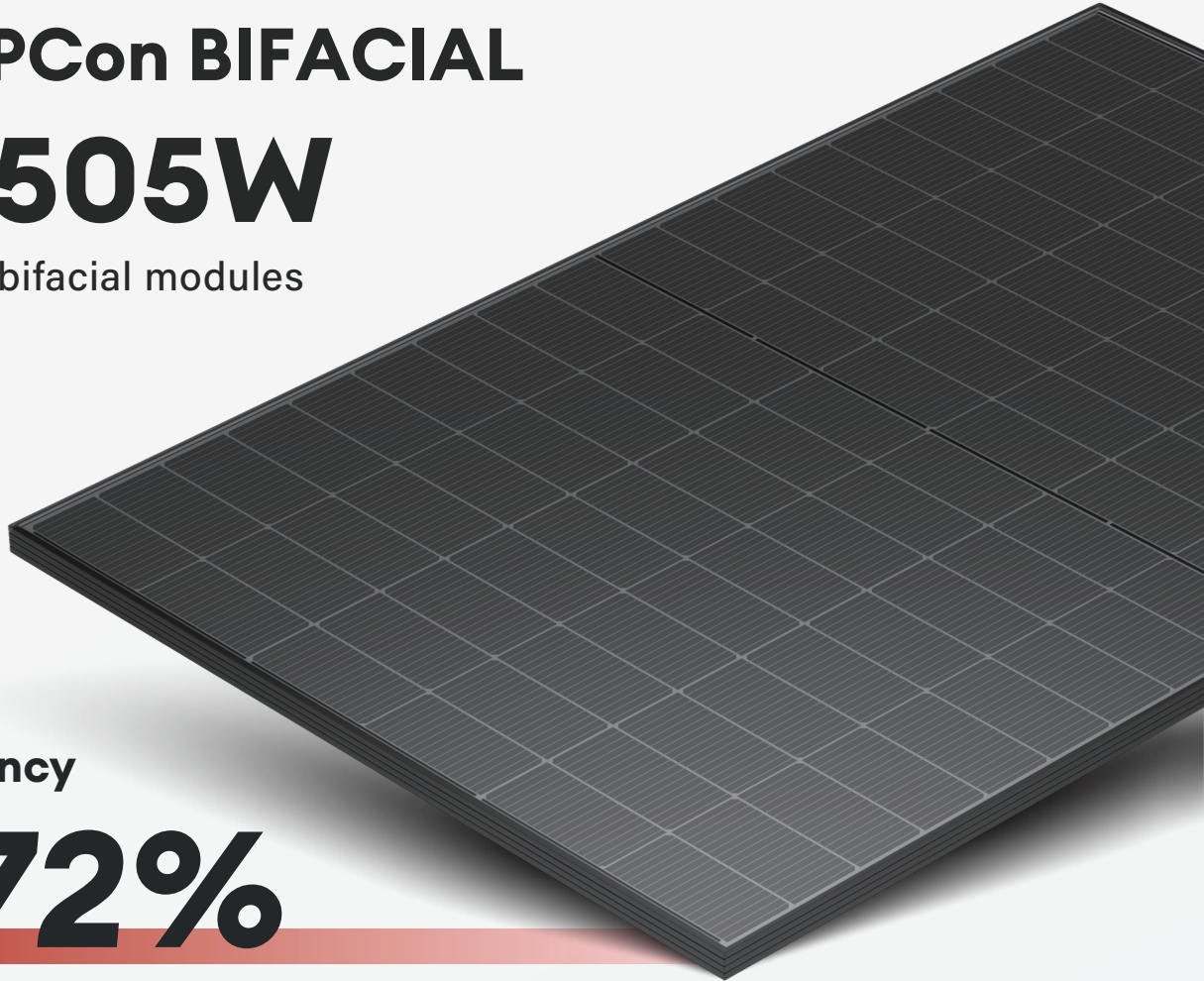
Tier1

BloombergNEF

210R TOPCon BIFACIAL

490-505W

High efficiency bifacial modules



Module efficiency

22.72%



WITHSTAND STRONG



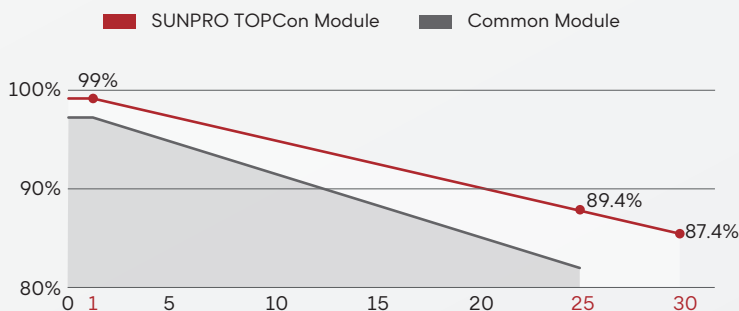
PID RESISTANCE



AUTOMATIC PRODUCTION



HIGH EFFICIENCY



WARRANTY

Quality Guarantee **25 years**

Power Warranty **30 years**

CERTIFICATE



ELECTRIC CHARACTERISTICS

SPDG (490/505W)-N108R12

Model of modules	SPDG490-N108R12		SPDG495-N108R12		SPDG500-N108R12		SPDG505-N108R12	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Power (Pmax/W)	490	370.00	495	374.00	500	378.10	505	382.20
Maximu power current (Vmp)	32.91	30.90	33.14	31.10	33.38	31.40	33.6	31.60
Maximu power current (Imp)	14.89	11.97	14.94	12.01	14.98	12.04	15.03	12.08
Open circuit voltage (Voc)	39.49	37.40	39.75	37.60	40.01	37.90	40.24	38.10
Short circuitcurrent (Isc)	15.75	12.68	15.79	12.72	15.83	12.75	15.88	12.79
Module efficiency	22.05%		22.27%		22.50%		22.72%	

STC (Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m², Cells Temperature25°C)

NMOT (Irradiance 800W/m², Ambient Temperature 20°C,AM1.5,Wind Speed 1m/s)

ELECTRICAL CHARACTERISTICS WITH 15% REAR SIDE POWER GAIN

Front power Pmax/W	563.50	569.25	575.00	580.75
Maximu power voltage (Vmp)	32.91	33.14	33.38	33.60
Maximu power current (Imp)	17.12	17.18	17.23	17.28
Open circuit voltage (Voc)	39.49	39.75	40.01	40.24
Short circuitcurrent (Isc)	18.11	18.16	18.20	18.26

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1960x1134x30mm
Weight	26.6kg
Cell	108 cells,N type Mono-Crystalline , 182.2mm×105 mm
Front glass	2.0mm , Anti-Reflection Coating
Back glass	2.0mm , Heat Strengthened Glass
Frame	Anodized aluminum alloy
Junction box	IP68 , 3 bypass diodes
Output wire	4mm ²
Wire length	Line length 1100mm/customized
Connector	MC4 Compatible
Packing Specification	36 pcs/Pallet ; 864pcs/40' HQ

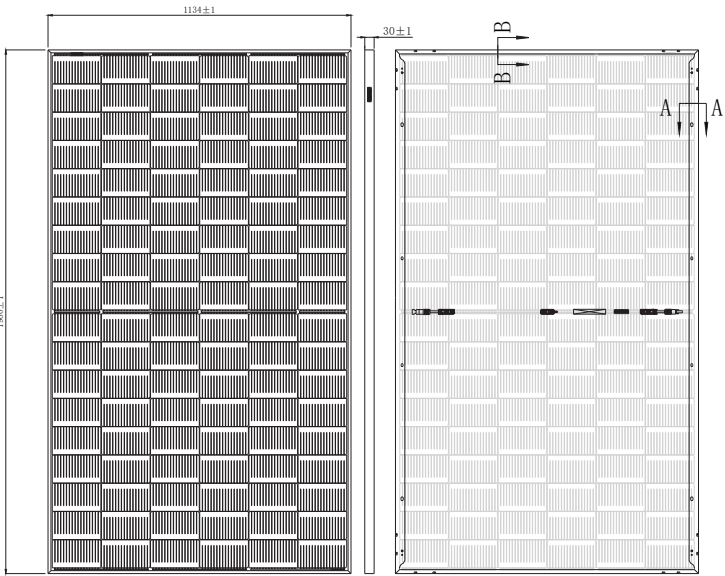
OPERATING PARAMETERS

Power tolerance (W)	(0~+5W)
Maximum system voltage (V)	1500V
Maximum rated fuse current (A)	30A
Current operating temperature (C)	-40~+85°C
Mechanical load	+5400Pa/-2400Pa

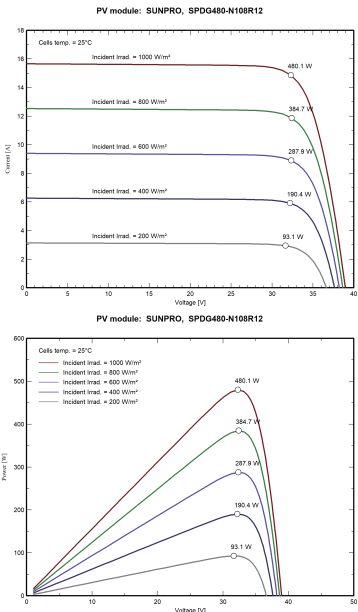
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of Isc (TK Isc)	0.045% / °C
Temp. Coeff. of Voc (TK Voc)	-0.25% / °C
Temp. Coeff. of Pmax (TK Pmax)	-0.30% / °C
Normal Operting Cell Temperature	45±2°C

MODULE DIMENSIONS(MM)



I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



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*The above parameters are for reference only, and the actual parameters of the factory shall prevail