



Tier1

BloombergNEF

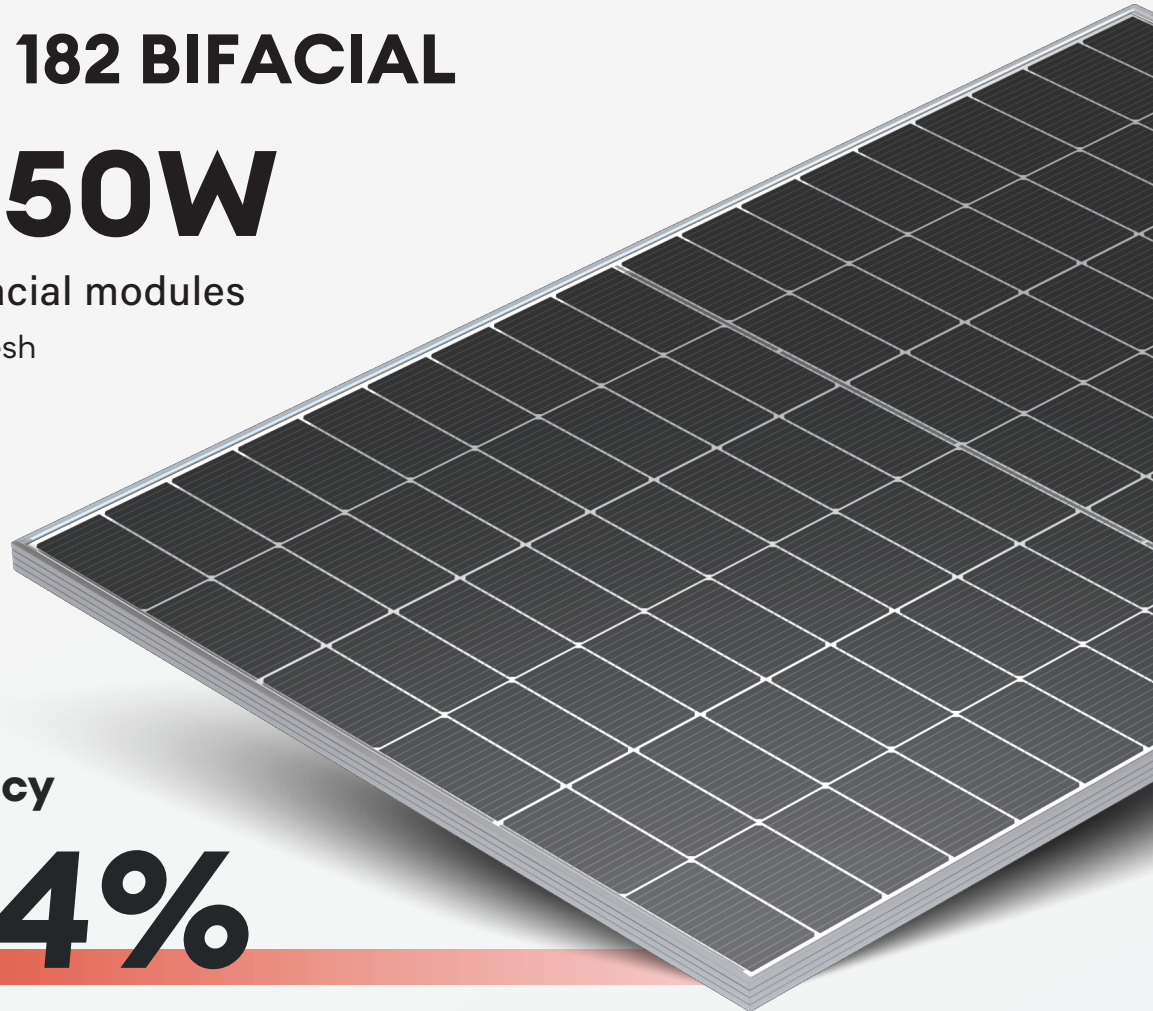
Power the future


TOPCon 182 BIFACIAL

435-450W

High efficiency bifacial modules

· Silver frame, White mesh



 UTILITY

 C&I

Module efficiency

23.04%



Better leveled cost of energy



Better high temperature stability

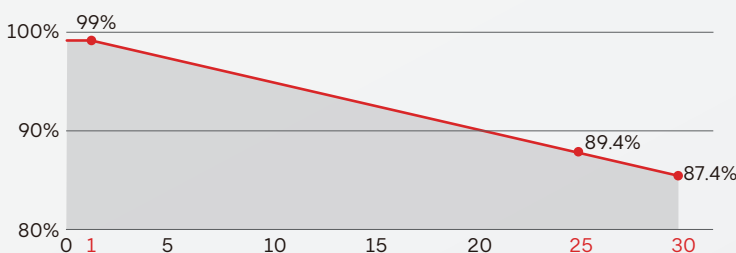


Improved low-light performance



Excellent bifacial performance

Linear performance guarantee for 30 years



WARRANTY

Quality Guarantee **25 years**

Power Warranty **30 years**

CERTIFICATE



Model of modules	SPDG435-N108M10		SPDG440-N108M10		SPDG445-N108M10		SPDG450-N108M10	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Power (Pmax/W)	435	325.00	440	329.00	445	332.4	450	336.2
Maximum power voltage (Vmp)	31.94	29.80	32.09	29.90	32.25	30	32.41	30.1
Maximum power current (Imp)	13.62	10.91	13.72	11.00	13.8	11.08	13.89	11.16
Open circuit voltage (Voc)	38.43	36.00	38.53	36.10	38.64	36.2	38.75	36.3
Short circuit current (Isc)	14.34	11.56	14.43	11.63	14.53	11.71	14.63	11.79
Module efficiency	22.28%		22.53%		22.79%		23.04%	

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	500.25	506.00	511.75	517.50
Maximum power voltage (Vmp)	31.94	32.09	32.25	32.41
Maximum power current (Imp)	15.66	15.77	15.87	15.97
Open circuit voltage (Voc)	38.43	38.53	38.64	38.75
Short circuitcurrent (Isc)	16.49	16.59	16.71	16.82

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1722x1134x35mm
Weight	23.3kg
Cell	108 cells,N type Mono-Crystalline,182mm×91mm
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	31 pcs/Pallet ; 806pcs/40' HQ

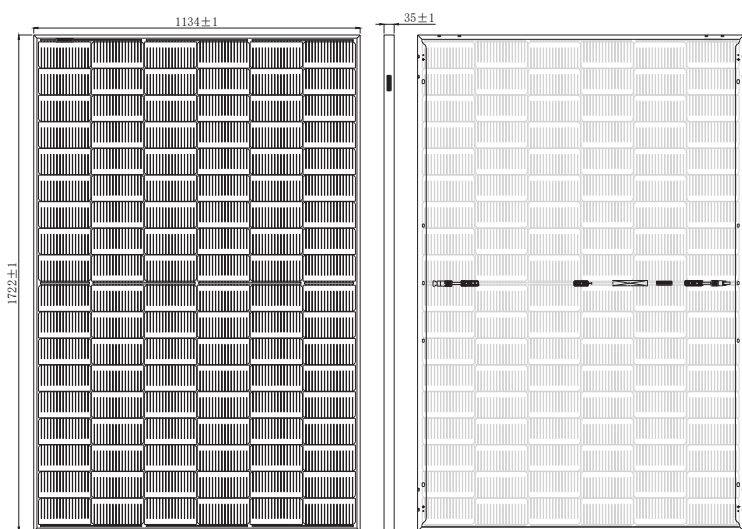
OPERATING PARAMETERS

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

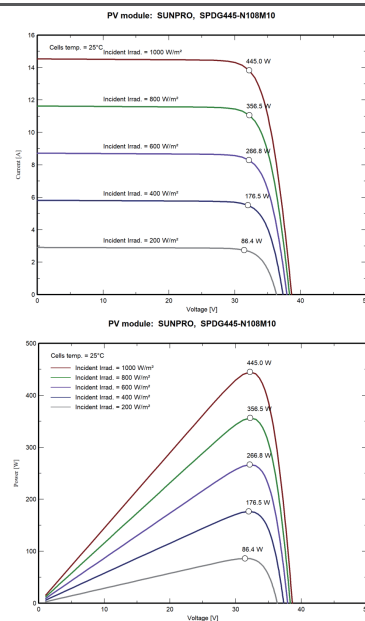
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of Isc (TK Isc)	0.046% / °C
Temp. Coeff. of Voc (TK Voc)	-0.25% / °C
Temp. Coeff. of Pmax (TK Pmax)	-0.30% / °C
Normal Operating 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