



Tier1

BloombergNEF

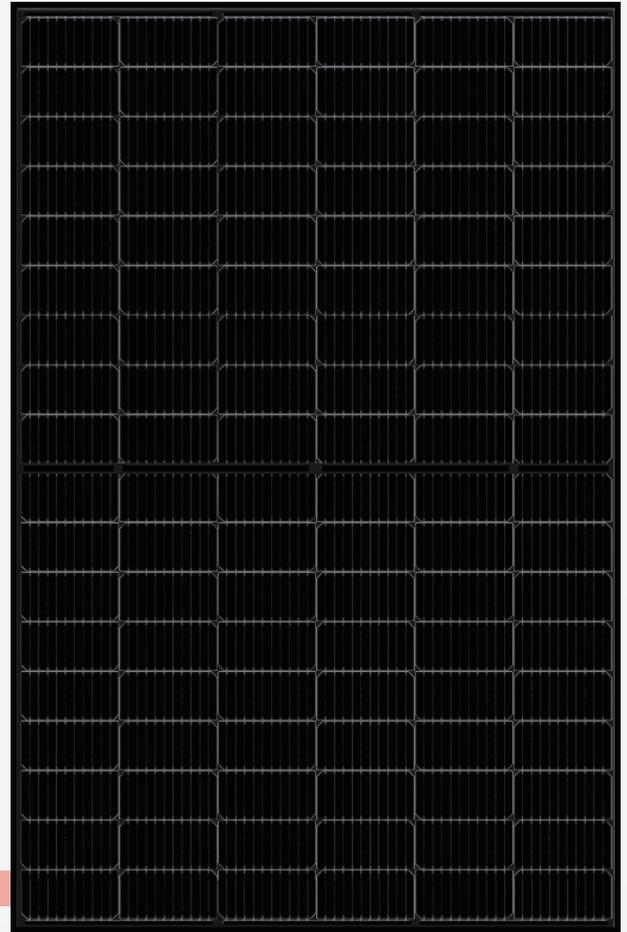
Power the future

PERC 182 BIFACIAL

405-420W

High efficiency bifacial modules

· Full black



 UTILITY

 C&I

Module efficiency

21.48%



Better leveled cost of energy



Better high temperature stability

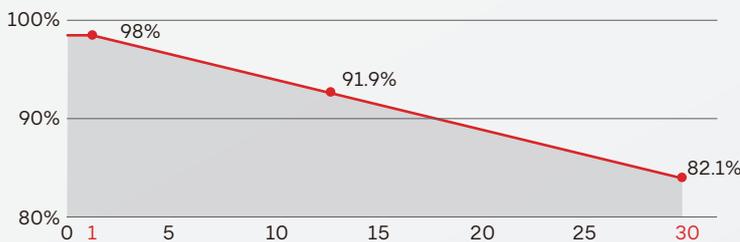


Improved low-light performance



Excellent bifacial performance

Linear performance guarantee for 30 years



WARRANTY

Quality Guarantee **15 years**

Power Warranty **30 years**

CERTIFICATE



ELECTRIC CHARACTERISTICS

SPDG (405/420W)-108M10

Model of modules	SPDG405-108M10		SPDG410-108M10		SPDG415-108M10		SPDG420-108M10	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Power (Pmax/W)	405	304	410	307	415	311	420	316
Maximum power voltage (Vmp)	31.04	28.8	31.25	29.10	31.47	29.20	31.69	29.5
Maximum power current (Imp)	13.05	10.52	13.12	10.58	13.19	10.65	13.26	10.71
Open circuit voltage (Voc)	37.13	34.90	37.33	35.10	37.53	35.30	37.73	35.50
Short circuit current (Isc)	13.83	11.15	13.90	11.20	13.97	11.26	14.04	11.32
Module efficiency	20.72%		20.97%		21.23%		21.48%	

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	465.75	471.5	477.25	483
Maximum power voltage (Vmp)	31.04	31.25	31.47	31.69
Maximum power current (Imp)	15.00	15.09	15.17	15.24
Open circuit voltage (Voc)	37.13	37.33	37.53	37.73
Short circuit current (Isc)	15.90	15.98	16.07	16.17

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1722x1134x35mm
Weight	23.3kg
Cell	108 cells,Mono-Crystalline PERC,182mm x91mm
Front glass	2.0mm ultra clear embossed semi-tempered coated glass
Back glass	2.0mm black mesh glazed tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68
Output wire	4mm ²
Wire length	Line length 1100mm
Connector	MC4 Compatible IP68
Packing Specification	31 pcs/Pallet ; 806 pcs/40' HQ

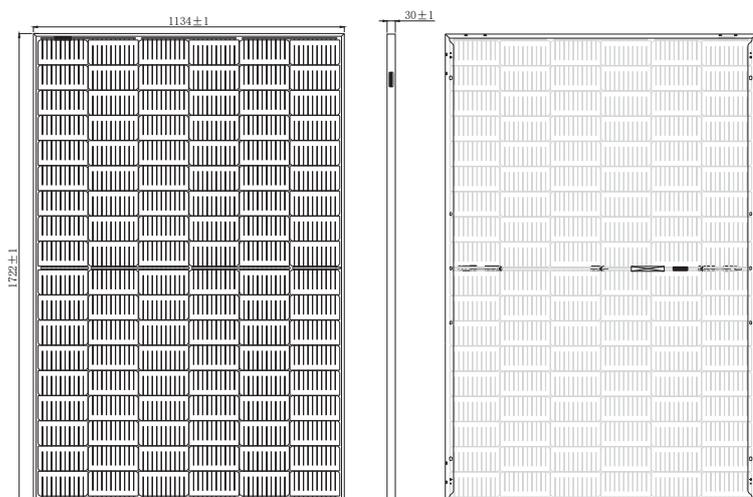
OPERATING PARAMETERS

Power tolerance (W)	(0~+5W)
Maximum system voltage (V)	1500V
Maximum rated fuse current (A)	35A
Current operating temperature (C)	-40~+85°C
Mechanical load	+5400Pa/-2400Pa

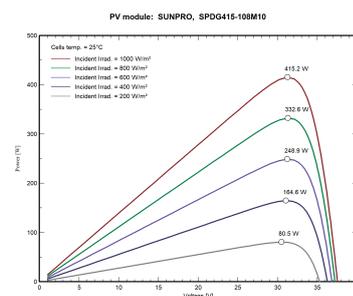
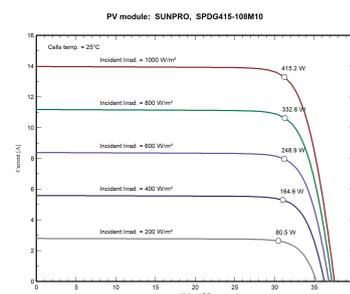
TEMPERATURE CHARACTERISTICS

Temp. Coeff. of Isc (TK Isc)	0.048% / °C
Temp. Coeff. of Voc (TK Voc)	-0.27% / °C
Temp. Coeff. of Pmax (TK Pmax)	-0.34% / °C
Normal Operating Cell Temperature	44±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