



**Tier1**

BloombergNEF

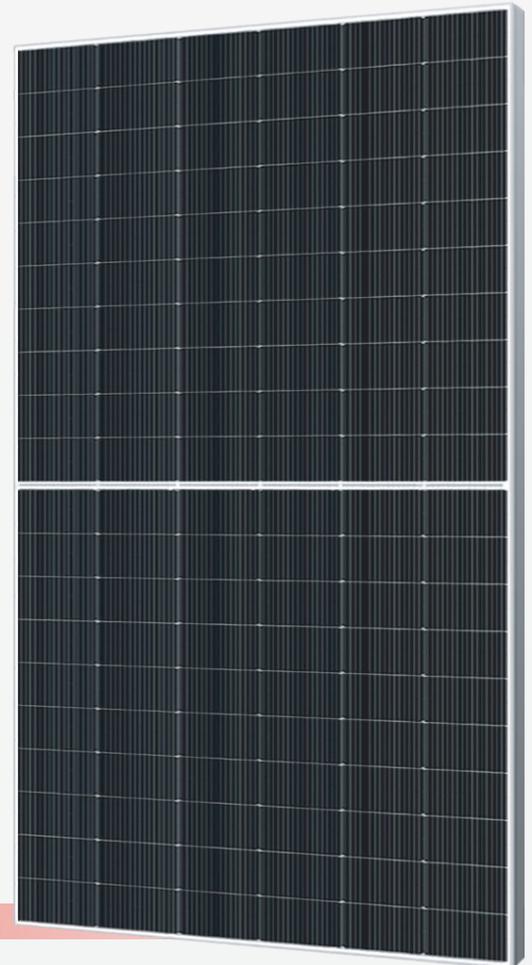
*Power the future*

# PERC 182 BIFACIAL

# 445-470W

High efficiency bifacial modules

· Silver frame, White mesh



 UTILITY

 C&I

## Module efficiency

# 21.70%



**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



Ariel Green



## ELECTRIC CHARACTERISTICS

## SPDG (445/470W)-120M10

Model of modules	SPDG445-120M10		SPDG450-120M10		SPDG455-120M10		SPDG460-120M10		SPDG465-120M10		SPDG470-120M10	
	STC	NMOT										
Power ( Pmax/W )	445	334	450	338	455	341	460	346	465	350	470	354
Maximum power voltage ( Vmp )	34.56	32.10	34.81	32.30	35.06	32.60	35.31	32.80	35.56	33.00	35.81	33.30
Maximum power current ( Imp )	12.88	10.40	12.93	10.44	12.98	10.49	13.03	10.54	13.08	10.58	13.13	10.63
Open circuit voltage ( Voc )	41.30	38.80	41.50	39.00	41.70	39.20	41.90	39.40	42.10	39.60	42.30	39.80
Short circuit current ( Isc )	13.65	11.00	13.70	11.04	13.75	11.08	13.80	11.12	13.85	11.16	13.90	11.20
Module efficiency	20.55%		20.78%		21.01%		21.47%		21.47%		21.70%	

STC ( Electrical parameters at standard test conditions. STC:AM=1.5, 1000W/m<sup>2</sup> ,Cells Temperature25°C )

NMOT ( Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C,AM1.5,Wind Speed 1m/s )

## ELECTRICAL CHARACTERISTICS WITH 15% REAR SIDE POWER GAIN

Front power Pmax/W	511.75	517.5	523.25	529	534.75	540.5
Maximum power voltage ( Vmp )	34.56	34.81	35.06	35.31	35.56	35.81
Maximum power current ( Imp )	14.81	14.87	14.92	14.98	15.04	15.09
Open circuit voltage ( Voc )	41.3	41.5	41.7	41.9	42.1	42.3
Short circuit current ( Isc )	15.7	15.8	15.81	15.87	15.97	16.06

## STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1910x1134x35mm
Weight	26kg
Cell	120 cells,Mono-Crystalline PERC,182mm x 91mm
Front glass	2.0mm ultra clear embossed semi-tempered coated glass
Back glass	2.0mm white mesh glazed tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68
Output wire	4mm <sup>2</sup>
Wire length	Line length 1100mm
Connector	MC4 Compatible IP68
Packing Specification	31 pcs/Pallet ; 744 pcs/40' HQ

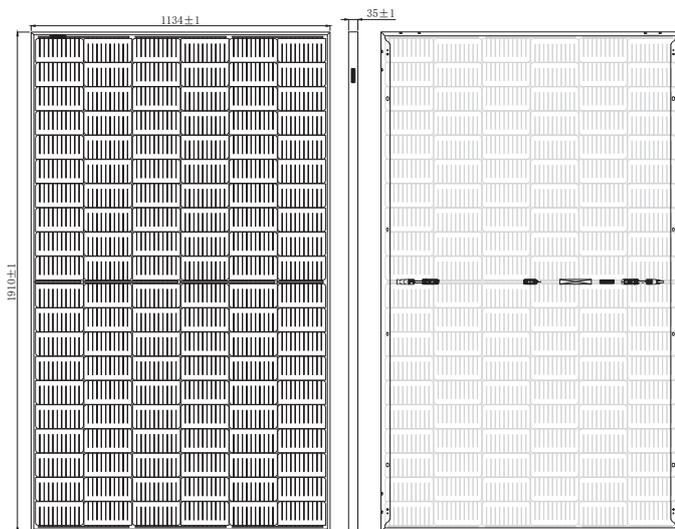
## OPERATING PARAMETERS

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

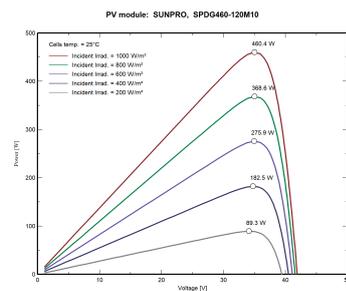
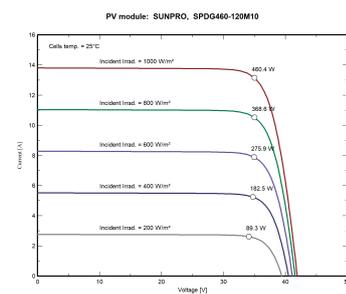
## TEMPERATURE CHARACTERISTICS

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