



Tier1

BloombergNEF

Power the future

TOPCon 186.8R MONO-FACIAL

630-645W

High efficiency mono-facial modules

· Silver frame, White backboard



 UTILITY

 C&I

Module efficiency

22.53%



Better leveled cost of energy



Better high temperature stability

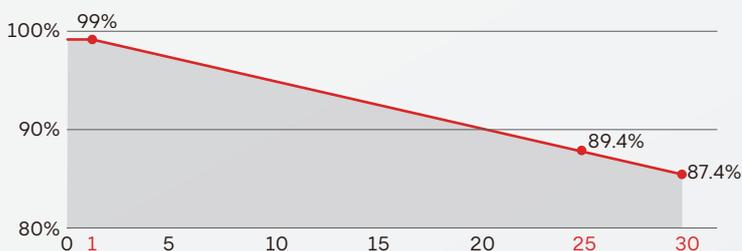


Improved low-light performance



Excellent bifacial performance

Linear performance guarantee for 30 years



WARRANTY

Quality Guarantee **15** years

Power Warranty **30** years

CERTIFICATE



Model of modules	SP580-N144R10	SP585-N144R10	SP590-N144R10	SP595-N144R10
	STC	STC	STC	STC
Power (Pmax/W)	630	635	640	645
Maximum power voltage (Vmp)	46.64	46.73	46.82	46.91
Maximum power current (Imp)	13.51	13.59	13.67	13.75
Open circuit voltage (Voc)	56.29	56.4	56.51	56.62
Short circuit current (Isc)	14.07	14.14	14.21	14.28
Module efficiency	22.00%	22.18%	22.35%	22.53%

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)

IRRADIANCE 800W/M², AMBIENT TEMPERATURE 20°C , AM1.5,WIND SPEED 1M/S

Front power Pmax/W	475.60	479.50	483.30	487.30
Maximum power voltage (Vmp)	44.30	44.40	44.50	44.60
Maximum power current (Imp)	10.74	10.79	10.86	10.92
Open circuit voltage (Voc)	53.20	53.30	53.40	53.50
Short circuit current (Isc)	11.34	11.40	11.45	11.51

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	2525 × 1134 × 35mm
Weight	29.7kg
Cell	156 cells,N-Type Crystalline Silicon 182×93.4mm
Glass	3.2mm ultra clear embossed tempered coated glass
Frame	Anodized aluminum alloy
Junction box	IP68 , 3 bypass diodes
Output wire	4mm ²
Wire length	Line length 1400mm/customized
Connector	MC4 Compatible
Packing Specification	31 pcs/Pallet ; 496 pcs/40' HQ

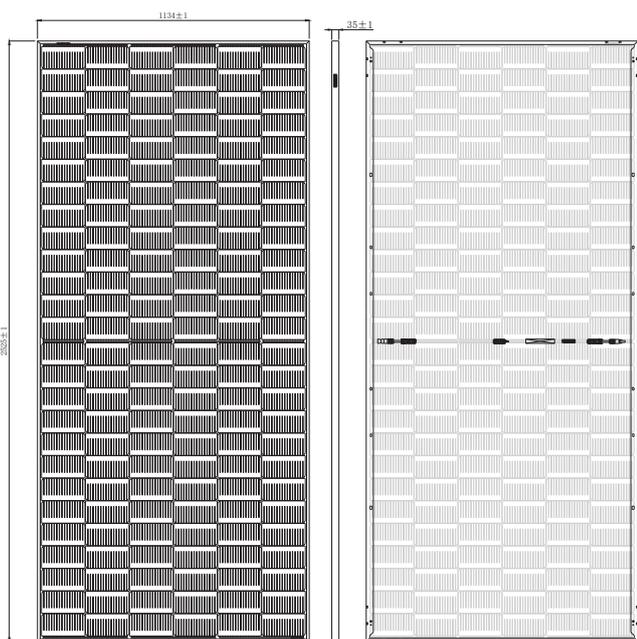
OPERATING PARAMETERS

Power tolerance (W)	(0~+5W)
Maximum system voltage (V)	1500V
Maximum rated fuse current (A)	25A
Current operating temperature (C)	-40~+85°C
Mechanical load	+5400Pa/-2400Pa

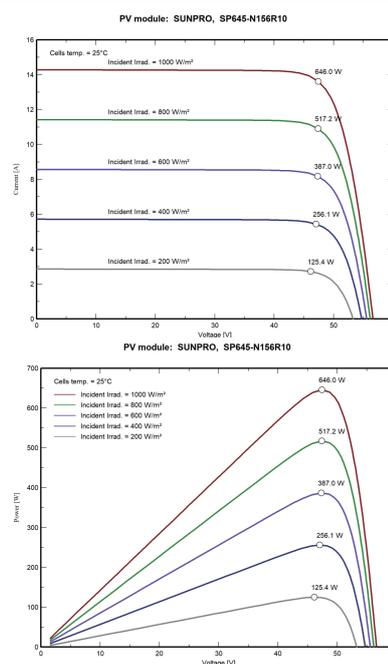
TEMPERATURE CHARACTERISTICS

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