

Tier1

BloombergNEF



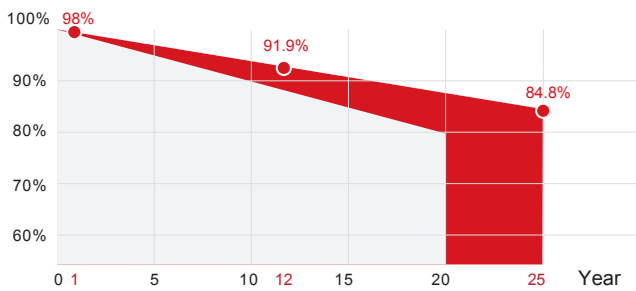
M6 HI-EFF TWIN MONO

SPxxx-144M
425~460W

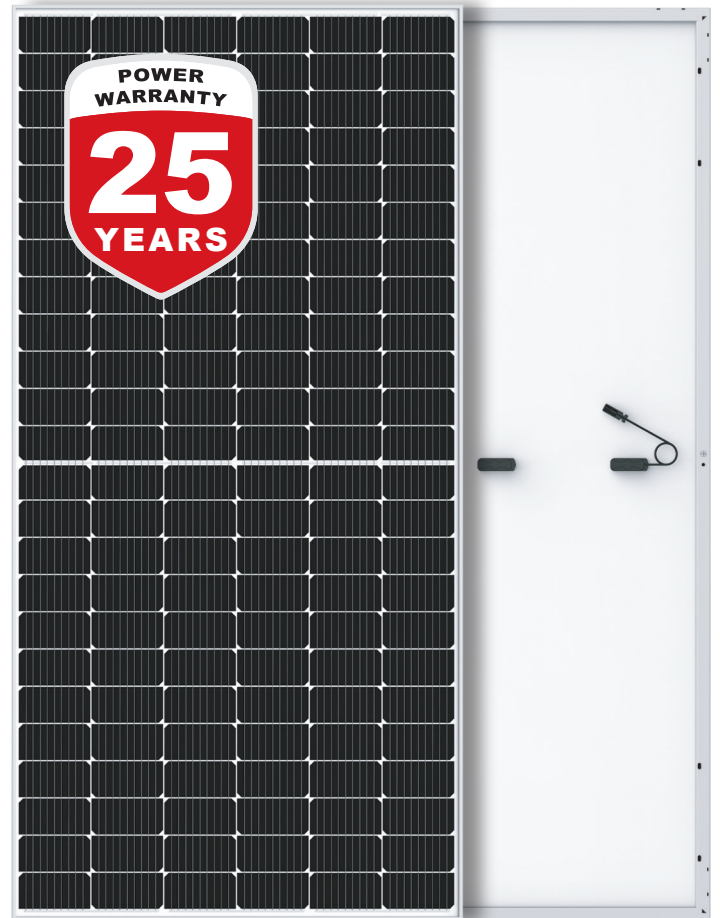
- Silver frame
- Black frame
- Full black
- Bifacial

12Yr quality guarantee | 25Yr power warranty

■ SUNPRO Standard (Additional value from 25-year warranty)
■ Industry Standard



*SUNPRO Standard tiered warranty



WARRANTY & GUARANTEE

Linear output power guarantee
12 years: **91.9%** power output
25 years: **84.8%** power output



WITHSTAND STRONG

Snow load **5400Pa**
Wind load **2400Pa**



R&D AND PRODUCTION

Advanced production line.
The leading solar cell cutting process and **multi busbar design** with SUNPRO Technology.



HIGH EFFICIENCY

Efficiency can reach **21.16%**. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.



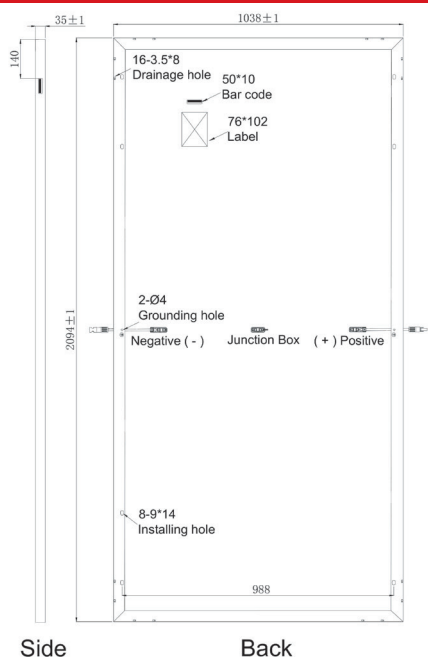
POWER TOLERANCE

Power positive tolerance: **0~+3%**

Typical type

	425W	430W	435W	440W	445W	450W	455W	460W
Max power(Pmax)	425	430	435	440	445	450	455	460
Max power voltage(Vmp)	40.50	40.60	40.70	40.80	40.90	41.00	41.10	41.20
Max power current(Imp)	10.50	10.59	10.69	10.79	10.89	10.98	11.08	11.17
Open circuit voltage(Voc)	49.30	49.40	49.50	49.60	49.70	49.80	49.90	50.00
Short circuit current(Isc)	11.01	11.11	11.23	11.34	11.45	11.56	11.65	11.69
Module Efficiency(%)	19.55	19.78	20.01	20.24	20.47	20.70	20.93	21.16
Max system voltage	DC 1500V(TÜV)							
Maximum Series Fuse Rating	20A							

DIMENSIONS AND STRUCTURE



Electrical parameters at NMOT test conditions

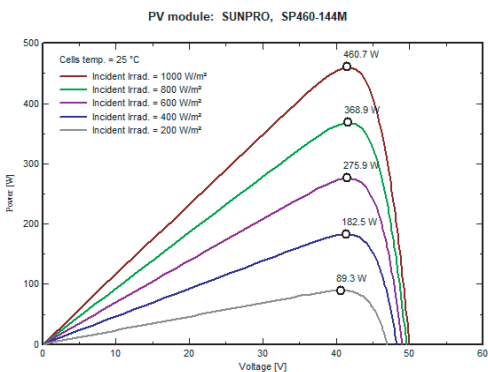
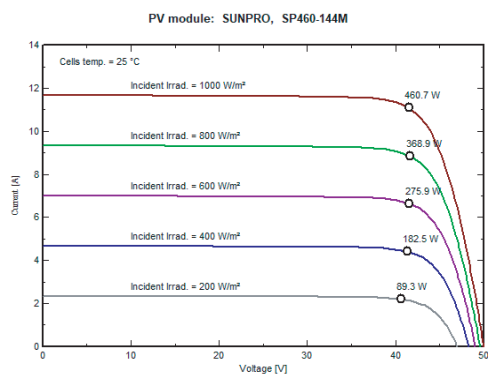
(Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

Typical type	425W	430W	435W	440W	445W	450W	455W	460W
Max power(Pmax)	317	320	324	328	332	335	339	343
Max power voltage(Vmp)	37.8	37.9	37.9	38	38.1	38.2	38.3	38.5
Max power current(Imp)	8.37	8.45	8.54	8.61	8.7	8.78	8.85	8.91
Open circuit voltage(Voc)	45.9	46	46.1	46.2	46.3	46.4	46.5	46.6
Short circuit current(Isc)	8.89	8.97	9.07	9.16	9.24	9.33	9.4	9.44

Mechanical Data

Dimensions	2094x1038x35mm
Weight	23.5 kg
Glass	3.2mm ultra clear embossed tempered coated glass
Output cables	4mm ² , symmetrical lengths 1300mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline PERC, 166x83mm
Number of cells	144 cells (Half-Cell)

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.05%/°C
Temp.Coeff.of Voc(TK Voc)	-0.29%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.34%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	44±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	66
Pallets per container	11
Pieces per container	726

Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, INMETRO, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+3%
Junction box	IP 68
Warranties	12 years product warranty and 25 years 84.8% of power