

Tier1

BloombergNEF



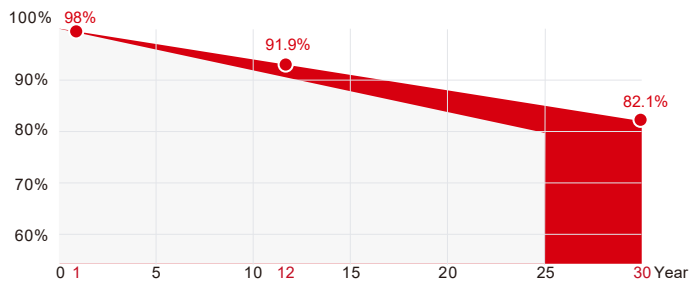
M10 HI-EFF TWIN MONO

SPDG xxx-144M10 520~550W

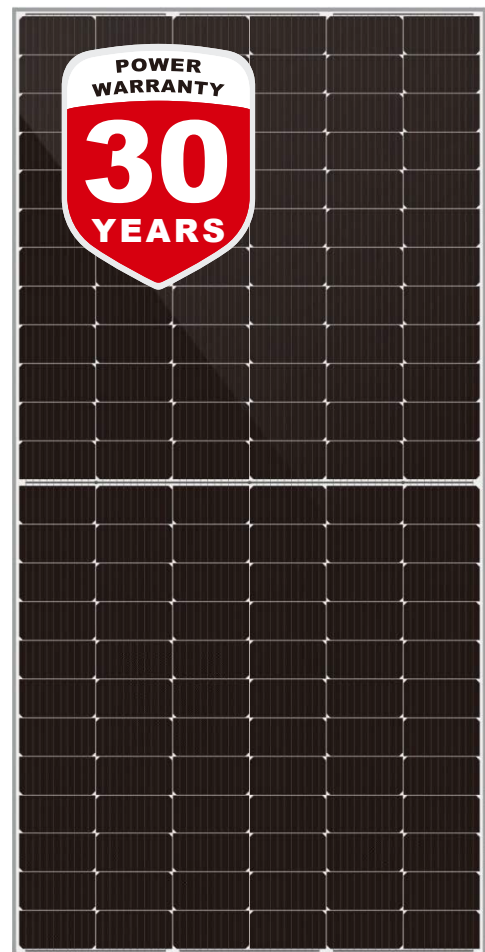
- Double glass
- Silver frame
- Silver frame
- Full black

15 Yr quality guarantee | 30 Yr power warranty

SUNPRO Standard (Additional value from 30-year warranty)
 Industry Standard



*SUNPRO Standard tiered warranty



WARRANTY & GUARANTEE

Linear output power guarantee
12 years: 91.9% power output
30 years: 82.1% power output

WITHSTAND STRONG

Snow load 5400Pa
Wind load 2400Pa

TWO-SIDED BENEFITS

High efficiency solar cells.
Effective working area of both sides >75%, with significant power increase. Capture more sunlight and turn it into electricity

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 21.28%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.

Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m², Cells Temperature 25°C)

Typical type	520W	525W	530W	535W	540W	545W	550W
Max power(Pmax)	520	525	530	535	540	545	550
Max power voltage(Vmp)	41.02	41.21	41.39	41.54	41.69	41.83	41.96
Max power current(Imp)	12.68	12.74	12.81	12.88	12.96	13.03	13.11
Open circuit voltage(Voc)	48.94	49.11	49.26	49.42	49.58	49.74	49.90
Short circuit current(Isc)	13.53	13.61	13.69	13.76	13.84	13.92	14.00
Module Efficiency(%)	20.12	20.31	20.51	20.70	20.89	21.09	21.28
Max system voltage	DC 1500V(TÜV,UL)						
Maximum Series Fuse Rating	30A						

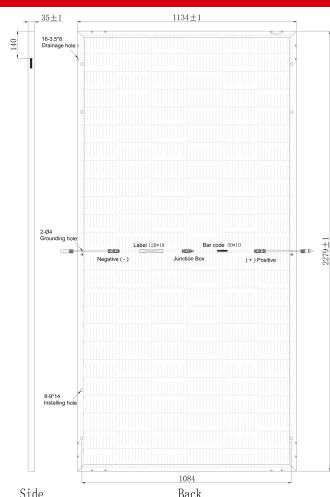
Electrical parameters at NMOT test conditions (Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

Typical type	520W	525W	530W	535W	540W	545W	550W
Max power(Pmax)	389	393	397	401	405	406	410
Max power voltage(Vmp)	37.90	38.00	38.20	38.30	38.50	38.30	38.50
Max power current(Imp)	10.29	10.35	10.41	10.47	10.53	10.59	10.65
Open circuit voltage(Voc)	45.90	46.10	46.20	46.40	46.6	46.40	46.50
Short circuit current(Isc)	10.91	10.97	11.04	11.09	11.16	11.22	11.28

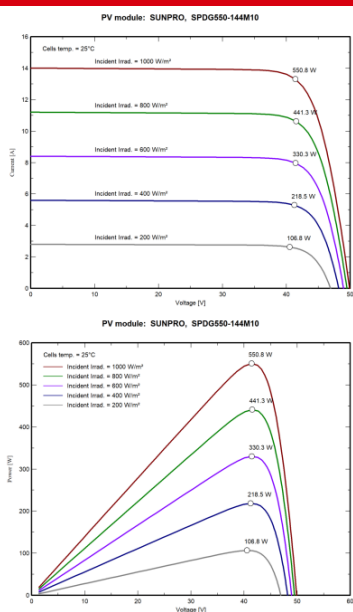
Electrical Characteristics with 15% Rear Side Power Gain

Front power Pmax/W	520W	525W	530W	535W	540W	545W	550W
Total power Pmax/W	598	603.75	609.5	615.25	621	626.75	632.5
Vmp/V(Total)	41.02	41.21	41.39	41.54	41.69	41.83	41.96
Imp/A(Total)	14.58	14.65	14.73	14.81	14.90	14.98	15.07
Voc/V(Total)	48.94	49.11	49.26	49.42	49.58	49.74	49.90
Isc/A(Total)	15.56	15.65	15.74	15.82	15.92	16.01	16.10

DIMENSIONS AND STRUCTURE



I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Mechanical Data

Dimensions	2279×1134×35mm
Weight	34kg
Glass	(F) 2.0mm ultra clear embossed semi-tempered coated glass (B) 2.0mm semi-tempered glass
Output cables	4mm ² , symmetrical lengths 1300mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline PERC, 182x91mm
Number of cells	144cells (Half-Cell)

Temperature Characteristics

Packing Configuration

Temp.Coeff.of Isc(TK Isc)	0.048%/°C	Container	40'HQ
Temp.Coeff.of Voc(TK Voc)	-0.27%/°C	Pieces per pallet	62
Temp.Coeff.of Pmax(TK Pmax)	-0.34%/°C	Pallets per container	10
Operating temperature	-40~+85°C	Pieces per container	620
Normal operating cell temperature	44±2°C		

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, UL, INMETRO, CEC, 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	15 years product warranty and 30 years 82.1% of power