

Tier1

BloombergNEF



ISO 9001 ISO 14001 SA 8000
ISO 45001 OHSAS 18001



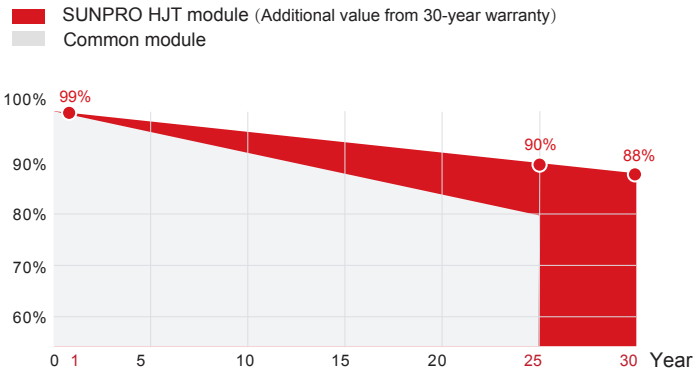
M12 HI-EFF TWIN MONO (HJT)

SP-210-132DSXXX

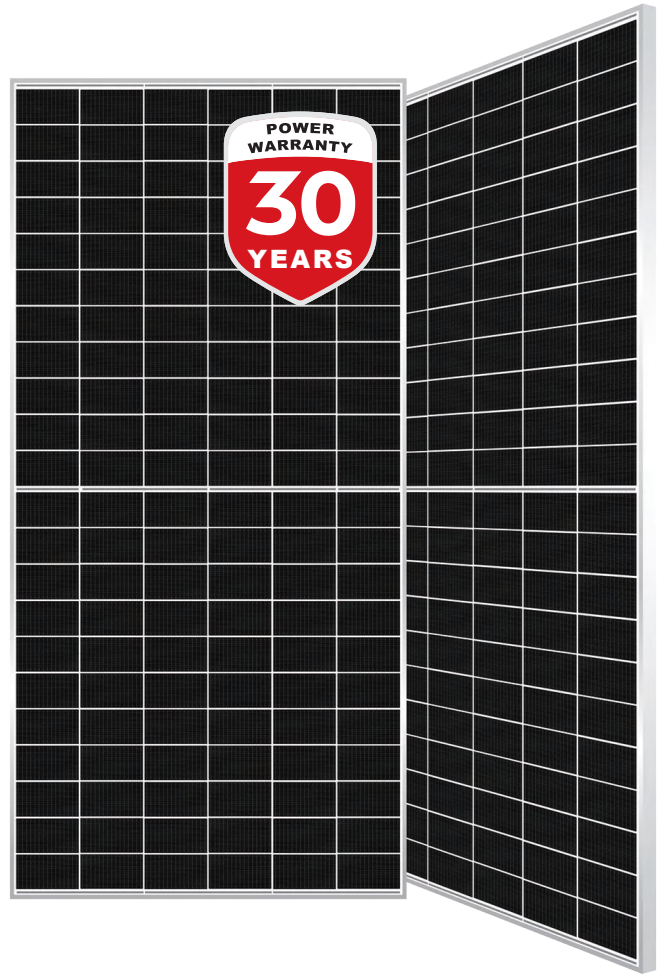
670~700W

- Double glass
- Silver frame
- Black frame

· 15 Yr quality guarantee | 30Yr power warranty



*SUNPRO Standard tiered warranty



WARRANTY & GUARANTEE

Linear output power guarantee
25 years: 90% power output
30 years: 88% power output



WITHSTAND STRONG

Snow load 5400Pa
Wind load 2400Pa



ADVANCED BIFACIAL EFFICIENCY

Bifaciality > 95%, effectively improves backside power generation. A bifacial cell design that generates energy from both sides, capturing and converting more sunlight into power.



R&D AND PRODUCTION

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



HIGH ENERGY YIELD

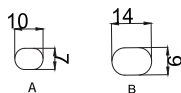
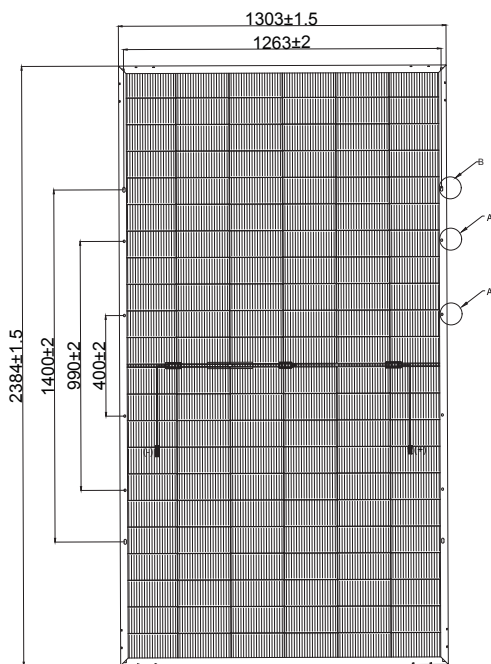
Efficiency can reach 22.53%. Excellent weak light performance and better performance in hot climate. Leading temperature coefficient for more production when the sun shines strongest, Or under the cloudy, haze condition

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

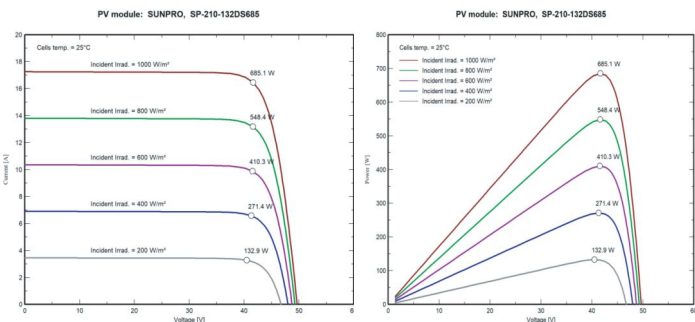
Typical type

	670W	675W	680W	685W	690W	695W	700W
Max power(Pmax)	670	675	680	685	690	695	700
Max power voltage(Vmp)	41.19	41.34	41.49	41.65	41.8	41.95	42.1
Max power current(Imp)	16.27	16.33	16.39	16.45	16.51	16.57	16.63
Open circuit voltage(Voc)	49.18	49.34	49.5	49.66	49.82	49.98	50.13
Short circuit current(Isc)	17.07	17.13	17.19	17.25	17.31	17.37	17.43
Module Efficiency(%)	21.57	21.73	21.89	22.05	22.21	22.37	22.53
Max system voltage	DC 1500V(TÜV)						
Maximum Series Fuse Rating	30A						

DIMENSIONS AND STRUCTURE



I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Electrical Characteristics with 15% Rear Side Power Gain

Front power Pmax/W	670W	675W	680W	685W	690W	695W	700W
Total power Pmax/W	770.5	776.25	782	787.75	793.5	799.25	805
Vmp/V(Total)	41.19	41.34	41.49	41.65	41.8	41.95	42.1
Imp/A(Total)	18.71	18.78	18.85	18.91	18.98	19.05	19.12
Voc/V(Total)	49.18	49.34	49.5	49.66	49.82	49.98	50.13
Isc/A(Total)	19.63	19.70	19.77	19.83	19.90	19.97	20.04

Mechanical Data

Dimensions	2384×1303×35mm
Weight	38.7 kg
Glass	(F) 2.0mm ultra clear embossed semi-tempered coated glass (B) 2.0mm semi-tempered glass
Output cables	4mm ² , 1300mm in length, length can be customized / UV Resistant
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline ,Bifacial HJT, 210x105mm
Number of cells	132cells (Half-Cell)

Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.04%/°C
Temp.Coeff.of Voc(TK Voc)	-0.24%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.26%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	44±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	62
Pallets per container	9
Pieces per container	558

Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV,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 88% of power