

Tier1

BloombergNEF



ISO 9001
ISO 45001

ISO 14001
OHSAS 18001

SA 8000

210R HI-EFF TWIN MONO (HJT)

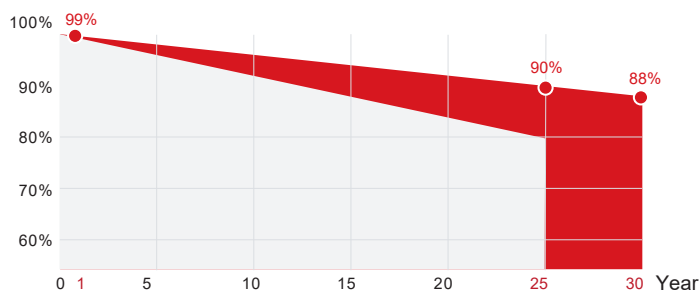
SP-210R-108DSxxx

490~515W

- Double glass
- Silver frame
- White mesh

15 Yr quality guarantee | 30 Yr power warranty

 SUNPRO HJT module (Additional value from 30-year warranty)
 Common module



*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>90%, 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

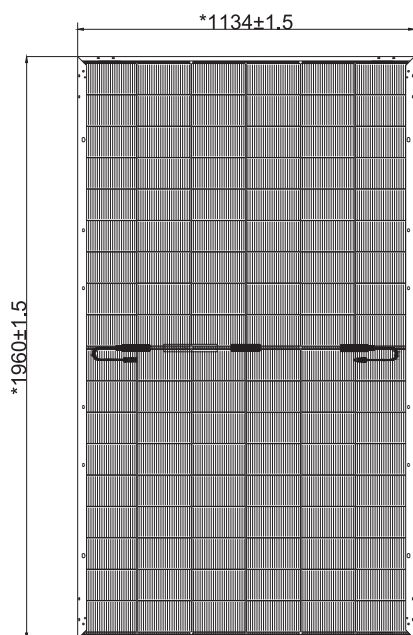
Efficiency can reach **23.17%**. Excellent weak light performance and better performance in hot climate. Leading temperature coefficient for more production when the sun shines strongest, Or under the cloudy, haze condition

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

Typical type

	490W	495W	500W	505W	510W	515W
Max power(Pmax)	490	495	500	505	510	515
Max power voltage(Vmp)	33.94	34.05	34.16	34.27	34.38	34.49
Max power current(Imp)	14.44	14.54	14.64	14.74	14.84	14.94
Open circuit voltage(Voc)	40.54	40.65	40.76	40.87	40.98	41.09
Short circuit current(Isc)	15.26	15.37	15.48	15.59	15.7	15.81
Module Efficiency(%)	22.05	22.27	22.50	22.72	22.95	23.17
Max system voltage	DC 1500V(TÜV)					
Maximum Series Fuse Rating	30A					

DIMENSIONS AND STRUCTURE



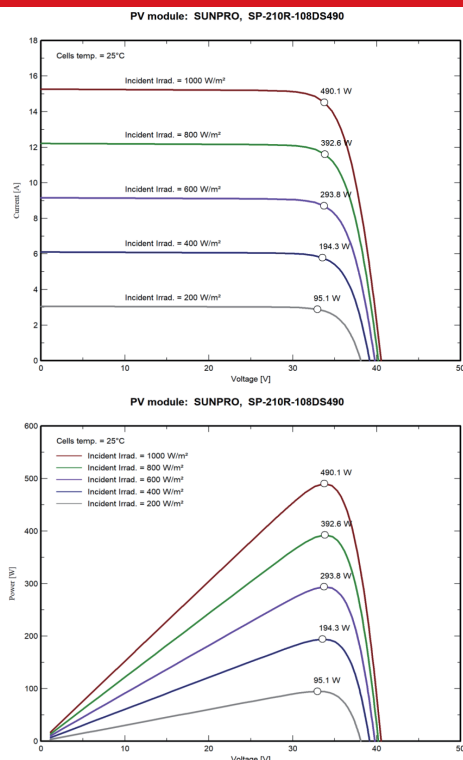
Electrical Characteristics with 15% Rear Side Power Gain

Front power Pmax/W	490W	495W	500W	505W	510W	515W
Total power Pmax/W	563.5	569.25	575	580.75	586.5	592.25
Vmp/V(Total)	33.94	34.05	34.16	34.27	34.38	34.49
Imp/A(Total)	16.6	16.72	16.83	16.95	17.06	17.17
Voc/V(Total)	40.54	40.65	40.76	40.87	40.98	41.09
Isc/A(Total)	17.55	17.67	17.80	17.92	18.05	18.17

Mechanical Data

Dimensions	1960x1134x30mm
Weight	27.4 kg
Glass	(F) 2.0mm ultra clear embossed semi-tempered coated glass (B) 2.0mm white mesh glazed tempered glass
Output cables	4mm ² , 1100mm in length, length can be customized / UV Resistant
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline ,Bifacial HJT, 182x105mm
Number of cells	108 cells (Half-Cell)

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



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)	-0.24%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	44±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	36
Pallets per container	24
Pieces per container	864

Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+5W
Junction box	IP 68
Warranties	15 years product warranty and 30 years 88% of power