

Kunlun G12R Series **Ultra-high bifaciality** **480-510W**

108-cell vertical installation
HJT module



HJT-0BB Technology

Shorter current transport path, better low-light performance and higher power generation.



Ultra-high bifacial rate

Nearly 100% bifacial rate.



Unique product design

Special patented circuit design makes system installation more convenient.



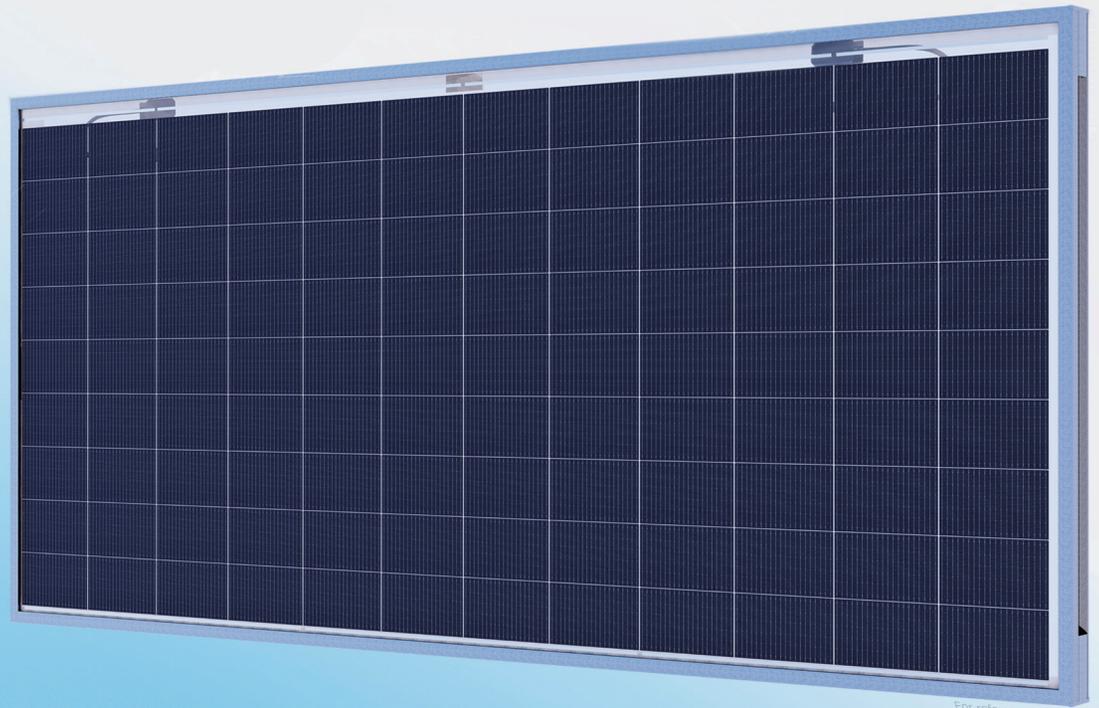
Preferred for vertical installation scenario

Extremely small projection area, suitable for agricultural and transportation scenarios.



Ultra-low operation and maintenance costs

Vertical installation ensures no snow or dust accumulation, significantly reducing operation and maintenance costs.

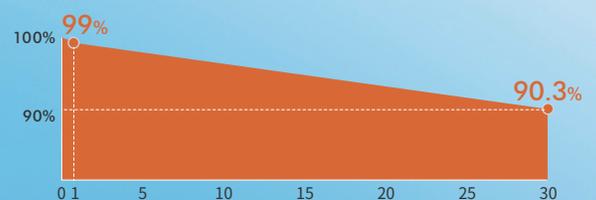


For reference only



Complete System and Product Certifications:

- IEC61215, IEC61730
- ISO9001:2015 Quality Management System
- ISO14001:2015 Environment Management System
- ISO45001:2018 Occupational Health and Safety
- IEC62941:2019 Terrestrial photovoltaic (PV) modules- Quality system for PV module manufacturing
- IEC/TS62994: 2019 Photovoltaic (PV) Modules Through the Life Cycle-environmental Health and Safety (EH&S) Risk Assessment-general Principles and Nomenclature



* First year power degradation $\leq 1\%$
 * Annual power degradation (2-30 year) $\leq 0.3\%$
 * Power output until the 30th year $\geq 90.3\%$

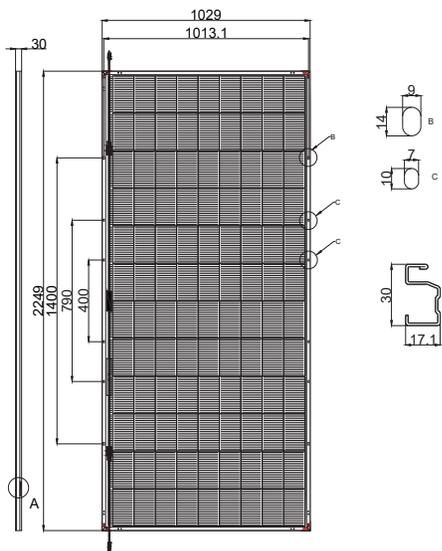
HSN-210R-B108 480-510W

108-Half-Cell-vertical installation HJT module

- BloombergNEF Tier 1 PV module manufacturer
- Reinsurance underwritten by Ariel Re

Engineering Drawings

Unit: mm



Mechanical Characteristics

Cell Type	HJT
No. of Cells	108 (9x12)
Dimensions	2249 x 1029 x 30 mm
Weight	30kg
Junction Box	IP68
Cable	4mm ² ; +450/-500mm or customized; UV resistant
Connector	PV-H1 / MC4-Evo 2 / Others
Frame	Alloy steel frame
Max Static Load (front side/rear side)	3600Pa / 3600Pa
Glass	Dual glass, 2.0mm

Electrical Characteristics

STC

HSN-210R-B108	DSV480	DSV485	DSV490	DSV495	DSV500	DSV505	DSV510
Maximum Power (Pmax/W)	480	485	490	495	500	505	510
Module Efficiency (%)	20.7	21.0	21.2	21.4	21.6	21.8	22.0
Voltage at Pmax (Vmp/V)	33.72	33.83	33.94	34.05	34.16	34.27	34.38
Current at Pmax (Imp/A)	14.24	14.34	14.44	14.54	14.64	14.74	14.84
Open Circuit Voltage (Voc/V)	40.32	40.43	40.54	40.65	40.76	40.87	40.98
Short Circuit Current (Isc/A)	15.04	15.15	15.26	15.37	15.48	15.59	15.70

STC: AM1.5, 1000W/m², 25°C.

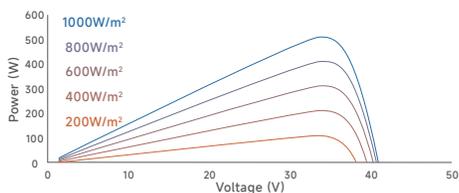
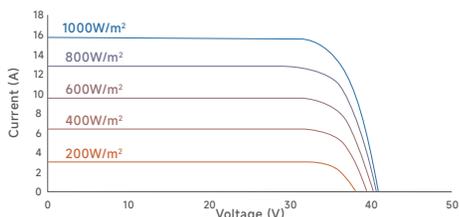
BNPI

Maximum Power (Pmax/W)	541	547	552	558	564	569	575
Voltage at Pmax (Vmp/V)	33.84	33.95	34.06	34.17	34.28	34.39	34.50
Current at Pmax (Imp/A)	16.00	16.12	16.23	16.35	16.46	16.57	16.68
Open Circuit Voltage (Voc/V)	40.46	40.57	40.68	40.79	40.90	41.01	41.12
Short Circuit Current (Isc/A)	16.97	17.09	17.22	17.34	17.47	17.59	17.71

BNPI: AM1.5, 1000W/m², 135W/m², 25°C.

I-V Curve

(HSN-210R-B108DSV510)



Temperature Characteristics

Temperature Coefficient of Pmax	-0.24%/°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	+0.04%/°C

Operating Conditions

Nominal Operating Cell Temp.	44±2°C
Operating Temperature	-40~+85°C
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Tolerance of Pmax	0~+3%
Power Selection	0~+5W
Bifaciality	97±3%
Safety Class	Class II

NOCT

Maximum Power (Pmax/W)	366	370	374	377	381	385	389
Voltage at Pmax (Vmp/V)	32.20	32.31	32.42	32.53	32.63	32.73	32.83
Current at Pmax (Imp/A)	11.38	11.46	11.54	11.62	11.70	11.78	11.86
Open Circuit Voltage (Voc/V)	38.48	38.59	38.69	38.80	38.90	39.01	39.11
Short Circuit Current (Isc/A)	12.02	12.11	12.20	12.28	12.37	12.46	12.55

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Packaging

	40'HQ
Modules Per Pallet	35
Pallets Per Container	20
Modules Per Container	700



ANHUI HUASUN ENERGY CO., LTD. All rights reserved © 2020-2025

NO.99 Qingliu Road, Economic and Technological Development Zone, Xuancheng, Anhui, China
 Tel: 0086-563-3318095 www.huasunsolar.com
 sales@huasunsolar.com customerservice@huasunsolar.com

With the development of technology and the iterative updating of products, the technical specification of products released by HUASUN in the future may differ from those listed in this datasheet. HUASUN reserves the right to change the technical specification of the products at any time without prior notice, and the technical specification of the products ordered by the customers are subject to the technical specification agreed upon in the legally binding contract signed by both parties. The final interpretation of the datasheet is reserved by HUASUN.

2.0_20250814