

Kunlun G12R Series **Ultra-high bifaciality** **590-615W**

132-cell Bifacial HJT Half-cell
Double-glass Solar Module



HJT-0BB Technology

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



Ultra-low operation and maintenance costs

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



Preferred for vertical installation scenario

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



Ultra-high bifacial rate

Nearly 100% bifacial rate.

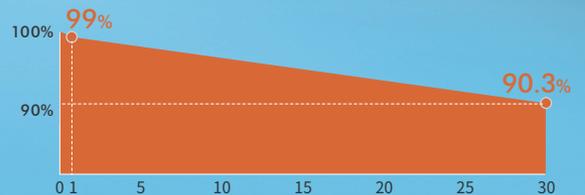


For reference only



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 < 1%
* Annual power degradation (2-30 year) < 0.3%
* Power output until the 30th year > 90.3%

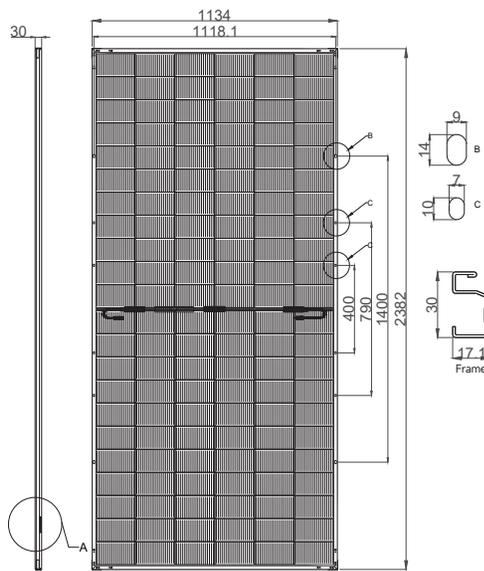
HSN-210R-B132 590-615W

132-Half-Cell Bifacial HJT Solar Half Cell Module

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

Engineering Drawings

Unit: mm



Mechanical Characteristics

Cell Type	HJT
No. of Cells	132 (6x22)
Dimensions	2382 x 1134 x 30 mm
Weight	35.3kg
Junction Box	IP68
Cable	4mm ² ; +350/-250mm or customized; UV resistant
Connector	PV-H1 / MC4-Evo 2 / Others
Frame	Alloy steel frame
Max Static Load (front side/rear side)	±3000Pa (vertical installation manual)
Glass	Dual glass, 2.0mm

Electrical Characteristics

STC

HSN-210R-B132	DSU590	DSU595	DSU600	DSU605	DSU610	DSU615
Maximum Power (P _{max} /W)	590	595	600	605	610	615
Module Efficiency (%)	21.8	22.0	22.2	22.4	22.6	22.8
Voltage at P _{max} (V _{mp} /V)	40.51	40.60	40.69	40.78	40.85	40.96
Current at P _{max} (I _{mp} /A)	14.58	14.67	14.76	14.85	14.95	15.03
Open Circuit Voltage (V _{oc} /V)	48.56	48.65	48.75	48.85	48.94	49.05
Short Circuit Current (I _{sc} /A)	15.36	15.46	15.56	15.66	15.76	15.86

STC: AM1.5, 1000W/m², 25°C.

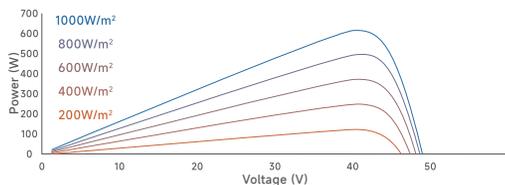
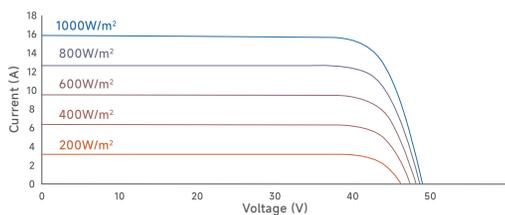
BNPI

HSN-210R-B132	DSU590	DSU595	DSU600	DSU605	DSU610	DSU615
Maximum Power (P _{max} /W)	665	671	676	682	688	693
Voltage at P _{max} (V _{mp} /V)	40.65	40.74	40.83	40.92	40.99	41.10
Current at P _{max} (I _{mp} /A)	16.38	16.48	16.58	16.68	16.79	16.88
Open Circuit Voltage (V _{oc} /V)	48.73	48.82	48.92	49.02	49.11	49.22
Short Circuit Current (I _{sc} /A)	17.33	17.44	17.56	17.67	17.78	17.89

BNPI: AM1.5, 1000W/m², 135W/m², 25°C.

I-V Curve

(HSN-210R-B132DSU615)



Temperature Coefficients

Temperature Coefficient of P _{max}	-0.24%/°C
Temperature Coefficient of V _{oc}	-0.22%/°C
Temperature Coefficient of I _{sc}	+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 P _{max}	0~+3%
Power Selection	0~+5W
Bifaciality	97±3%
Safety Class	Class II

NOCT

HSN-210R-B132	DSU590	DSU595	DSU600	DSU605	DSU610	DSU615
Maximum Power (P _{max} /W)	450	454	458	461	465	469
Voltage at P _{max} (V _{mp} /V)	38.66	38.75	38.84	38.92	38.98	39.09
Current at P _{max} (I _{mp} /A)	11.65	11.72	11.80	11.87	11.95	12.01
Open Circuit Voltage (V _{oc} /V)	46.35	46.43	46.53	46.62	46.71	46.82
Short Circuit Current (I _{sc} /A)	12.28	12.36	12.44	12.52	12.60	12.68

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Packaging

	40'HQ
Modules Per Pallet	35
Pallets Per Container	18
Modules Per Container	630



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