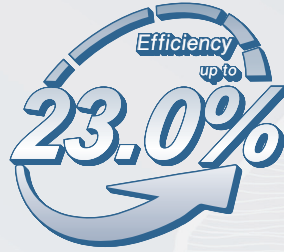


Everest G12R Series 435-460W

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



HJT-0BB Technology

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



Sealing with PIB

Stronger moisture resistance, greater air impermeability to extend module lifespan.



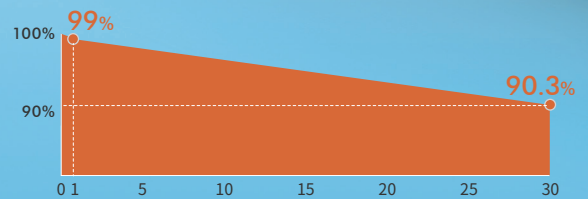
Ideal Choice for Rooftop System

Suitable for various rooftop projects.



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

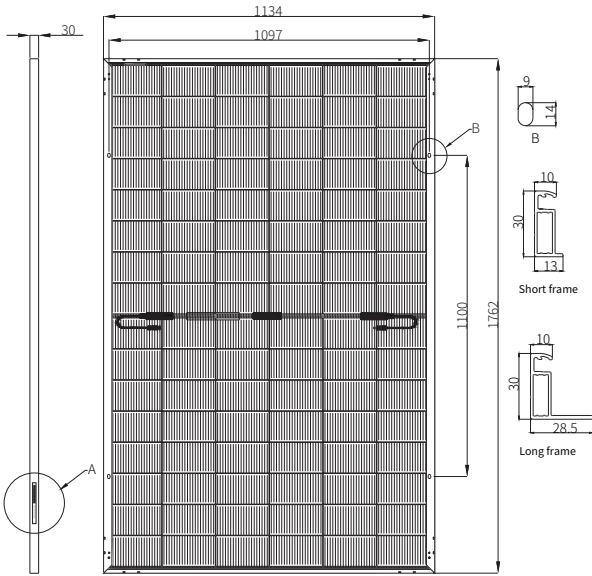


* First year power degradation $\leq 1\%$
 * Annual power degradation (2-30 year) $\leq 0.3\%$
 * Power output until the 30th year $\geq 90.3\%$

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

Engineering Drawings

Unit: mm



Mechanical Characteristics

Cell Type	HJT
No. of Cells	96 (6x16)
Dimensions	1762x1134x30mm
Weight	21.6 kg
Junction Box	IP68
Cable	4mm ² ; 1250mm or customized; UV resistant
Connector	MC4 / MC4-Evo2 / MC4-Evo2A / PV-H4 / Z4S-abcd / PV-ZH202B
Frame	Anodized aluminum alloy frame
Max Static Load (front side/rear side)	5400Pa / 2400Pa
Glass	Dual glass, 1.6mm

Electrical Characteristics

STC

HSN-210R-B96	DSN435	DSN440	DSN445	DSN450	DSN455	DSN460
Maximum Power (Pmax/W)	435	440	445	450	455	460
Module Efficiency (%)	21.8	22.0	22.3	22.5	22.8	23.0
Voltage at Pmax (Vmp/V)	30.50	30.61	30.72	30.83	30.94	31.05
Current at Pmax (Imp/A)	14.27	14.38	14.49	14.60	14.71	14.82
Open Circuit Voltage (Voc/V)	36.42	36.52	36.62	36.72	36.82	36.92
Short Circuit Current (Isc/A)	15.20	15.31	15.42	15.53	15.64	15.75

STC: AM1.5, 1000W/m², 25°C.

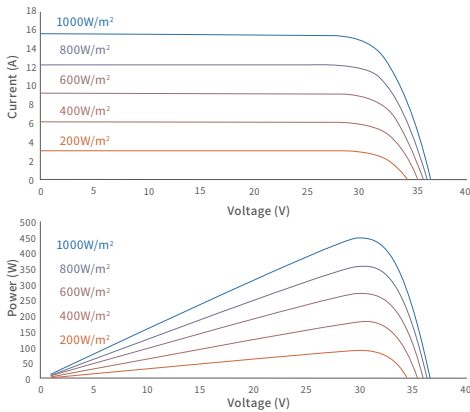
BNPI

Maximum Power (Pmax/W)	488	493	499	505	510	515
Voltage at Pmax (Vmp/V)	30.61	30.72	30.83	30.94	31.05	31.16
Current at Pmax (Imp/A)	15.94	16.07	16.19	16.31	16.44	16.56
Open Circuit Voltage (Voc/V)	36.55	36.65	36.75	36.85	36.95	37.05
Short Circuit Current (Isc/A)	17.05	17.17	17.29	17.42	17.54	17.66

BNPI: AM1.5, 1000W/m², 135W/m², 25°C.

I-V Curve

(HSN-210R-B96DSN445)



Temperature Coefficients

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	90±5%
Safety Class	Class II

NOCT

Maximum Power (Pmax/W)	332	336	340	344	347	351
Voltage at Pmax (Vmp/V)	29.12	29.23	29.34	29.45	29.55	29.65
Current at Pmax (Imp/A)	11.40	11.49	11.58	11.67	11.76	11.84
Open Circuit Voltage (Voc/V)	34.76	34.86	34.95	35.05	35.14	35.24
Short Circuit Current (Isc/A)	12.15	12.24	12.32	12.41	12.50	12.59

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Packaging

	40HQ
Modules Per Pallet	36
Pallets Per Container	26
Modules Per Container	936



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