HUASUN | HETEROJUNCTION TECHNOLOGY

Everest G12R Series

440-470W

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 extent module lifespan.

Ideal Choice for Rooftop Photovoltaic Systems

Bifacial power generation, suitable for residential, industrial and commercial rooftop projects.

15 YEARS PRODUCT WARRANTY

30 YEARS POWER WARRANTY

Complete System and Product Certfications:

IEC61215, IEC61730

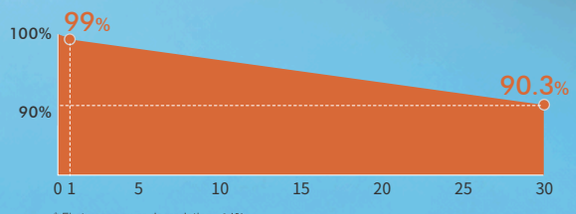
ISO9001: 2015 Quality Management System

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%

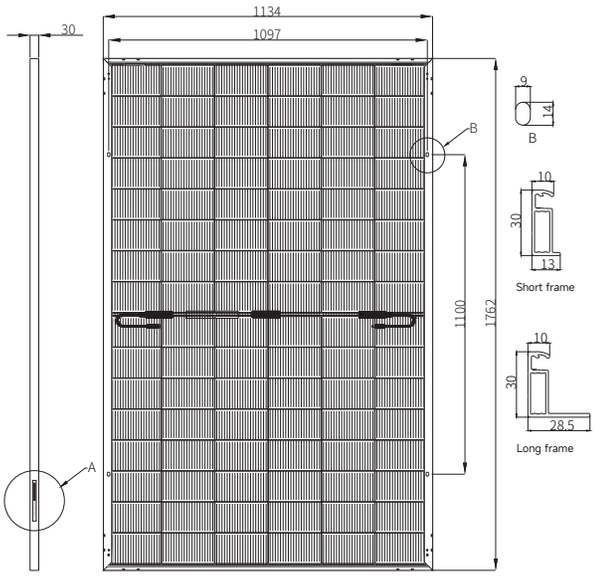
HSN-210R-B96 440-470W

96-Half-Cell Bifacial HJT Module

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

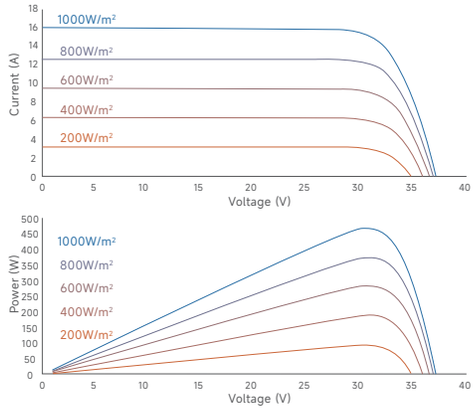
Engineering Drawings

Unit: mm



I-V Curve

(HSN-210R-B96DS470)



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

Mechanical Characteristics

Cell Type	HJT
No. of Cells	96 (6x16)
Dimensions	1762x1134x30mm
Weight	21.6 kg
Junction Box	IP68
Cable	4mm²; ±1250mm or customized; UV resistant
Connector	PV-H1 / MC4-Evo 2 / Others
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	DS440	DS445	DS450	DS455	DS460	DS465	DS470
Maximum Power (Pmax/W)	440	445	450	455	460	465	470
Module Efficiency (%)	22.0	22.3	22.5	22.8	23.0	23.3	23.5
Voltage at Pmax (Vmp/V)	30.61	30.72	30.83	30.94	31.05	31.16	31.27
Current at Pmax (Imp/A)	14.38	14.49	14.60	14.71	14.82	14.93	15.04
Open Circuit Voltage (Voc/V)	36.52	36.62	36.72	36.82	36.92	37.02	37.12
Short Circuit Current (Isc/A)	15.31	15.42	15.53	15.64	15.75	15.86	15.97

STC: AM1.5, 1000W/m², 25°C.

BNPI

Maximum Power (Pmax/W)	493	499	504	510	515	521	527
Voltage at Pmax (Vmp/V)	30.72	30.83	30.94	31.05	31.16	31.27	31.38
Current at Pmax (Imp/A)	16.07	16.19	16.31	16.44	16.56	16.68	16.80
Open Circuit Voltage (Voc/V)	36.65	36.75	36.85	36.95	37.05	37.15	37.25
Short Circuit Current (Isc/A)	17.17	17.29	17.42	17.54	17.66	17.79	17.91

BNPI: AM1.5, 1000W/m², 135W/m², 25°C.

NOCT

Maximum Power (Pmax/W)	335	339	343	347	351	355	358
Voltage at Pmax (Vmp/V)	29.23	29.34	29.45	29.55	29.65	29.76	29.86
Current at Pmax (Imp/A)	11.49	11.58	11.67	11.76	11.84	11.93	12.02
Open Circuit Voltage (Voc/V)	34.86	34.95	35.05	35.14	35.24	35.33	35.43
Short Circuit Current (Isc/A)	12.24	12.32	12.41	12.50	12.59	12.68	12.76

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Packaging

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

ANHUI HUASUN ENERGY CO., LTD.
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

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