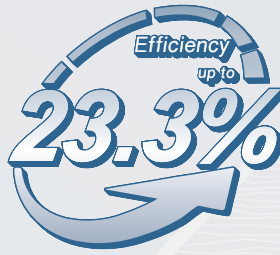


Everest G12R Series 440-465W

96-cell HJT Half-cell Solar Module



HJT 3.0 HJT-0BB Technology
Shorter current transmission distance, better low-light performance, and higher power generation.



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



Ideal Choice for Residential Roofs
Designed with aesthetics in mind, Ideal choice for residential rooftop projects.

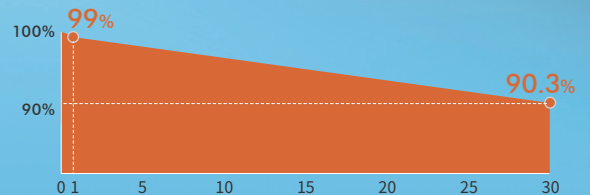
Aesthetic Black



*Refer to Limited Warranty for Heterojunction Photovoltaic Modules

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



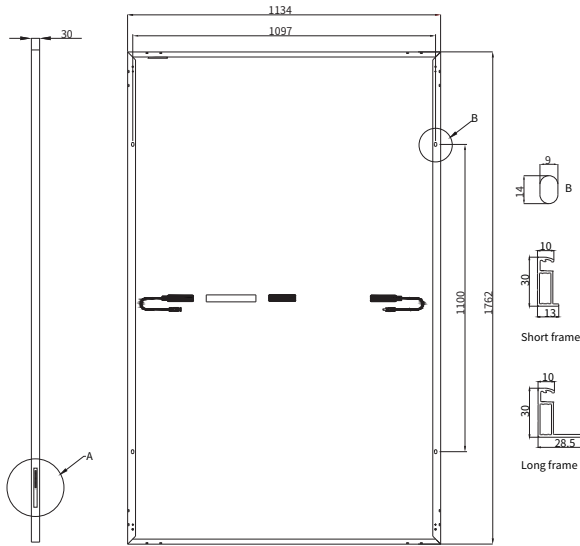
* First year power degradation < 1%
* Annual power degradation (2-30 year) < 0.3%
* Power output until the 30th year > 90.3%

For reference only

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

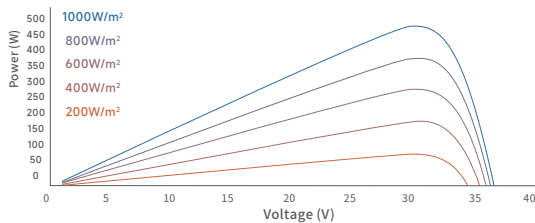
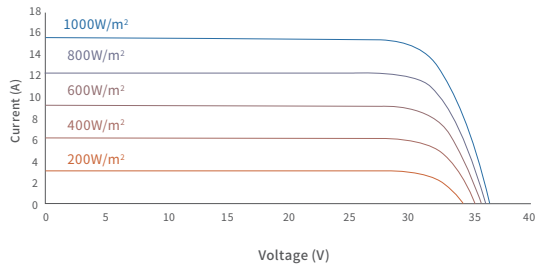
Engineering Drawings

Unit: mm



I-V Curve

(HSN-210R-S96DSB450)



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
Safety Class	Class II
Fire Safety Class	Class C according to UL790

Mechanical Characteristics

Cell Type	HJT
No. of Cells	96 (6x16)
Dimensions	1762x1134x30mm
Weight	21.8 kg
Junction Box	IP68
Cable	4mm²; 1250mm or customized; UV resistant
Connector	MC4 / MC4-Evo2 / MC4-Evo2A / PV-H4 / Z4S-abcd / PV-ZH202
Connector Manufacturer	Stäubli/huayu/Zerun/Zhonghuan
Frame	Anodized aluminum alloy frame
Max Static Load (front side/rear side)	5400Pa / 2400Pa
Glass	Dual glass, 1.6mm

Electrical Characteristics

STC

HSN-210R-S96	DSB440	DSB445	DSB450	DSB455	DSB460	DSB465
Maximum Power (Pmax/W)	440	445	450	455	460	465
Module Efficiency (%)	22.0	22.3	22.5	22.8	23.0	23.3
Maximum Power Voltage (Vmp/V)	30.61	30.72	30.83	30.94	31.05	31.16
Maximum Power Current (Imp/A)	14.38	14.49	14.60	14.71	14.82	14.93
Open Circuit Voltage (Voc/V)	36.52	36.62	36.72	36.82	36.92	37.02
Short Circuit Current (Isc/A)	15.31	15.42	15.53	15.64	15.75	15.86

STC: AM1.5, 1000W/m², 25°C.

NOCT

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

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Temperature Coefficients

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

Packaging

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



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