

# Everest G12R Series 445-460W

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

Transparent

Power up to  
**460W**



### HJT 3.0

Combining gettering process and double-sided  $\mu\text{-Si}$  to maximize cell efficiency and module power.



### Up to 95% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside.



### Sealing with PIB based sealant

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



### Higher reliability

Industrial leading product and performance warranty, ensuring modules' consistent outstanding performance.



### Ideal choice for solar rooftop system

Suitable for various rooftop projects.

## WARRANTY

Product  
Warranty **15**  
years

Linear  
Power  
Warranty **30**  
years



ANHUI HUASUN ENERGY CO., LTD.

All rights reserved © 2020-2024  
File No. HS-T2-SM-0018 Ver. 2.0 Page 1 of 2



The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Anhui Huasun reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the latest version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

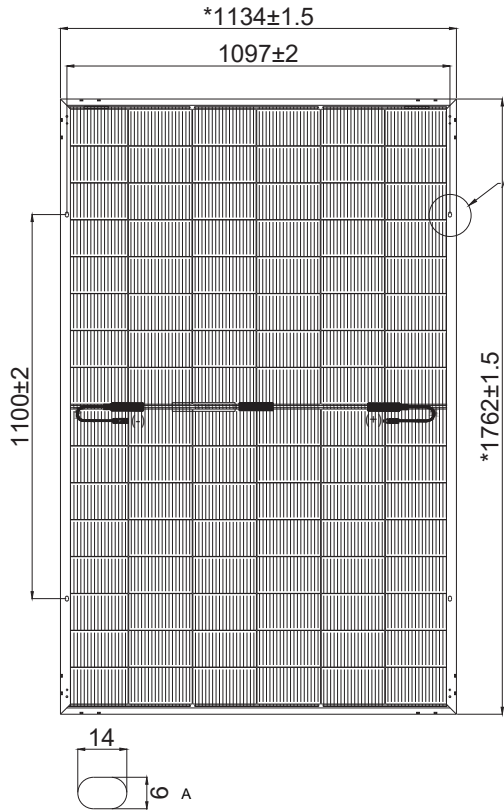
# Everest G12R Series 445-460W

## 96-cell Bifacial HJT Half Cell Solar Module

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

### Engineering Drawings

Unit: mm



### Electrical Characteristics (STC\*)

HS-210R-B96	DSN445	DSN450	DSN455	DSN460
Maximum Power (Pmax)	445W	450W	455W	460W
Module Efficiency (%)	22.27%	22.52%	22.77%	23.02%
Optimum Operating Voltage (Vmp)	30.61V	30.76V	30.90V	31.05V
Optimum Operating Current (Imp)	14.54A	14.64A	14.73A	14.82A
Open Circuit Voltage (Voc)	36.45V	36.61V	36.77V	36.93V
Short Circuit Current (Isc)	15.24A	15.34A	15.43A	15.52A
Operating Module Temperature	-40 to +85 °C			
Maximum System Voltage	DC1500V (IEC)			
Maximum Series Fuse	30A			
Power Tolerance	0~+5W			
Bifaciality	90% ± 5%			

\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

### BSTC\*\*/NOCT\*\*

Maximum Power (Pmax)	496W	501W	507W	512W
Optimum Operating Voltage (Vmp)	30.72V	30.86V	31.01V	31.16V
Optimum Operating Current (Imp)	16.15A	16.25A	16.36A	16.46A
Open Circuit Voltage (Voc)	36.58V	36.74V	36.90V	37.06V
Short Circuit Current (Isc)	16.99A	17.10A	17.20A	17.30A

\*\*BSTC: Front side irradiation 1000W/m<sup>2</sup>, back side reflection irradiation 135W/m<sup>2</sup>, AM=1.5, ambient temperature 25 °C.

Maximum Power (Pmax)	338W	342W	346W	349W
Optimum Operating Voltage (Vmp)	29.12V	29.26V	29.40V	29.54V
Optimum Operating Current (Imp)	11.62A	11.70A	11.77A	11.84A
Open Circuit Voltage (Voc)	34.79V	34.94V	35.09V	35.25V
Short Circuit Current (Isc)	12.18A	12.26A	12.33A	12.40A

\*\*NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 °C, Wind Speed 1m/s.

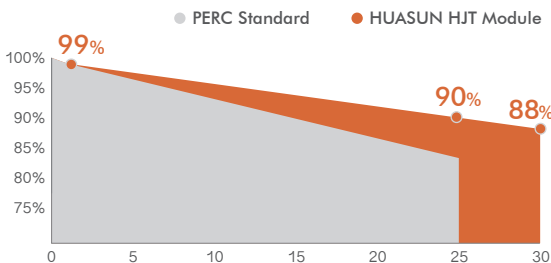
### Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature Coefficient of Pmax	-0.24%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

### Safety & Warranty

Safety Class	Class II
Product Warranty	15 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty*

\* Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.



\* Refer to HUASUN standard warranty for details

### Mechanical Characteristics

Cell Type	HJT Mono 182 × 105mm
Cell Connection	96 (6 × 16)
Module Dimension	1762 x 1134 x 30 mm
Weight	23 kg
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized / UV resistant
Connectors Type	MC4-Evo 2
Frame	Anodised aluminum alloy(Black)
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	Double glass, 1.6mm

### Shipping Configurations

Container Size	40'HQ
Pallets Per Container (pcs)	26
Modules Per Pallet (pcs)	36
Modules Per Container	936