

# HJTM6480W

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



## Heterojunction Technology

The next generation mainstream high-efficiency solar cell technology.



## -0.26%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.



## SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.



## Up to 90% 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.

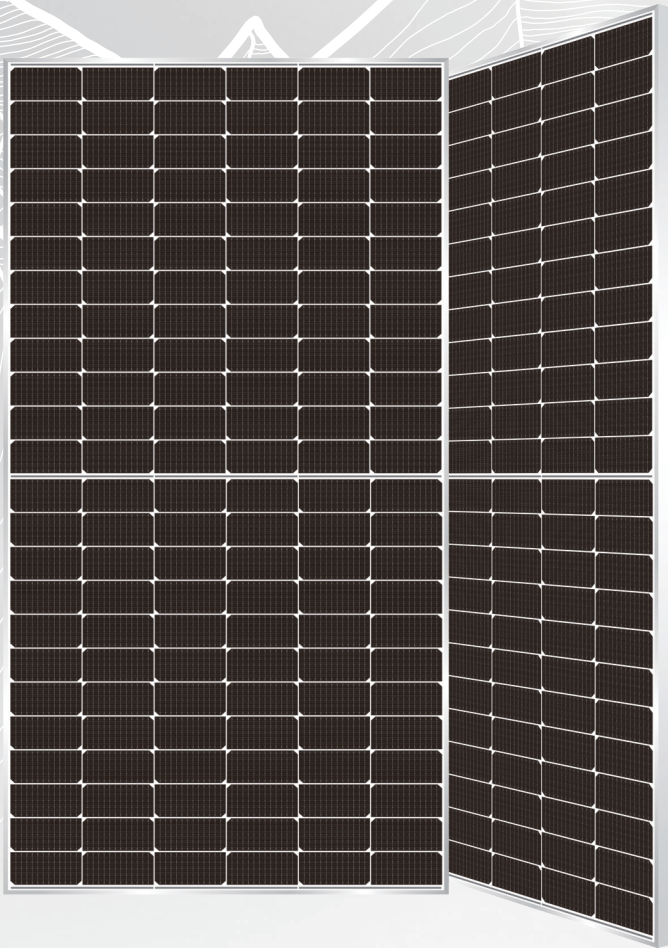


## High reliability

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



## Suitable for Commercial rooftops and Utility projects



## WARRANTY

Product  
Warranty **15**  
years

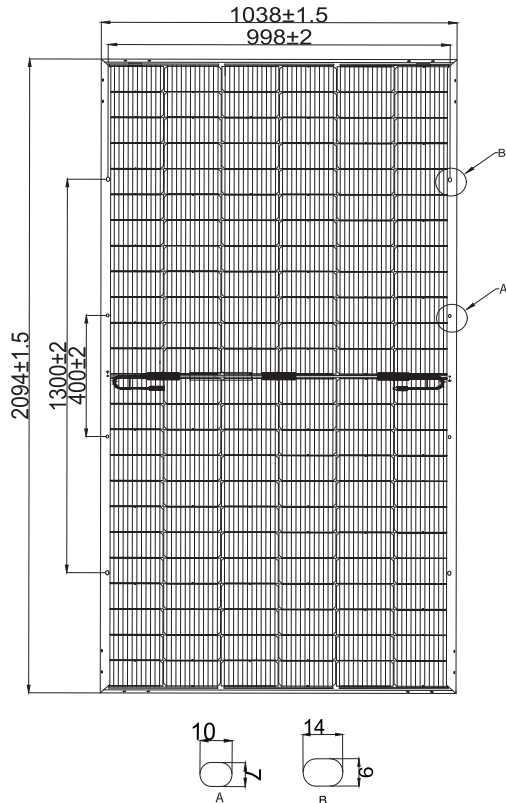
Linear  
Power  
Warranty **30**  
years



The specification and key features described in this datasheet may deviate slightly and are guaranteed. Tengying serves 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.

### Engineering Drawings

Unit: mm



### Electrical Characteristics (STC\*)

HJTM6480W	TG460	TG465	TG470	TG475	TG480
Maximum Power (P <sub>max</sub> )	460W	465W	470W	475W	480W
Module Efficiency (%)	21.16%	21.39%	21.62%	21.85%	22.08%
Optimum Operating Voltage (V <sub>mp</sub> )	45.24V	45.44V	45.66V	45.86V	46.08V
Optimum Operating Current (I <sub>mp</sub> )	10.18A	10.24A	10.30A	10.36A	10.43A
Open Circuit Voltage (V <sub>oc</sub> )	53.22V	53.35V	53.48V	53.61V	53.74V
Short Circuit Current (I <sub>sc</sub> )	10.58A	10.64A	10.70A	10.76A	10.82A
Operating Module Temperature	-40 to +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	20A				
Power Tolerance	0~+5W				
Bifaciality	80% ± 5%				

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

### BSTC\*\*

	510W	515W	520W	525W	530W
Maximum Power (P <sub>max</sub> )	510W	515W	520W	525W	530W
Optimum Operating Voltage (V <sub>mp</sub> )	46.20V	46.40V	46.60V	46.80V	47.00V
Optimum Operating Current (I <sub>mp</sub> )	11.14A	11.19A	11.24A	11.29A	11.34A
Open Circuit Voltage (V <sub>oc</sub> )	54.33V	54.73V	55.33V	55.93V	56.53V
Short Circuit Current (I <sub>sc</sub> )	11.53A	11.57A	11.61A	11.65A	11.69A

\*\*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.

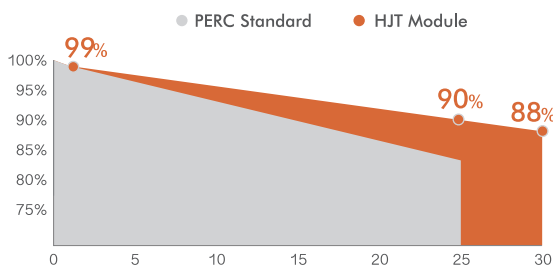
### Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature Coefficient of P <sub>max</sub>	-0.26%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.24%/°C
Temperature Coefficient of I <sub>sc</sub>	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.



### Mechanical Characteristics

Cell Type	HJT Mono 166 × 83mm
Cell Connection	144 (6 × 24)
Module Dimension	2094 × 1038 × 30 mm
Weight	27.5 kg
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized / UV resistant
Connectors Type	MC4 original / MC4 compatible
Frame	Anodised aluminum alloy
Encapsulant	EPE
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	(F) 2.0mm anti-reflective solar glass   (B) 2.0mm solar glass

### Shipping Configurations

	HC	GP
Container Size	40'	20'
Pallets Per Container	22	5
Modules Per Pallet (pcs)	36	36
Modules Per Container (pcs)	792	180