

HJTG10520R



500-520W

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



HJT 3.0

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



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.



Higher reliability

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



Suitable for Utility Solar projects

WARRANTY

Product
Warranty **15**
years

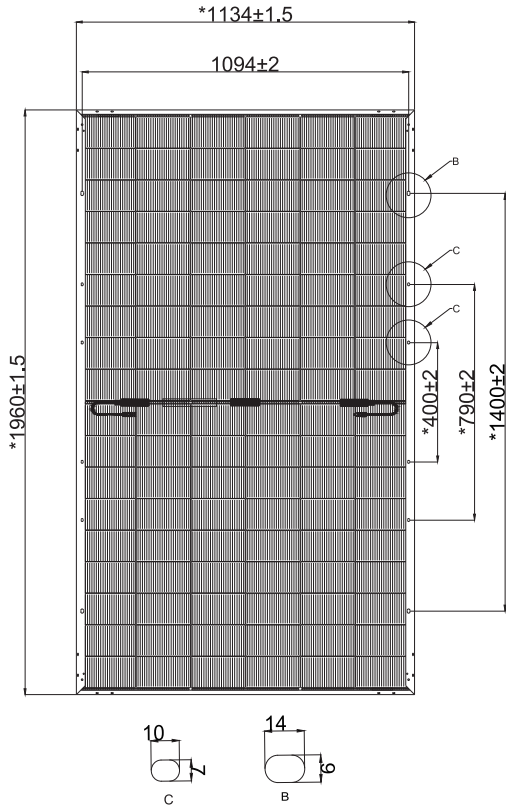
Linear
Power
Warranty **30**
years



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*)

HJTG10520R	TS500	TS505	TS510	TS515	TS520
Maximum Power (Pmax)	500W	505W	510W	515W	520W
Module Efficiency (%)	22.50%	22.72%	22.95%	23.17%	23.40%
Optimum Operating Voltage (Vmp)	34.36V	34.49V	34.61V	34.74V	34.87V
Optimum Operating Current (Imp)	14.56A	14.65A	14.74A	14.83A	14.92A
Open Circuit Voltage (Voc)	41.67V	41.82V	41.97V	42.12V	42.16V
Short Circuit Current (Isc)	15.42A	15.47A	15.52A	15.57A	16.02A
Operating Module Temperature	-40 to +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	30A				
Power Tolerance	0~+5W				
Bifaciality	85% ± 5%				

*STC: Irradiance 1000 W/m², cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

NOTC**/BSTC**

Maximum Power (Pmax)	560W	565W	570W	575W	580W
Optimum Operating Voltage (Vmp)	34.36V	34.49V	34.61V	34.74V	34.87V
Optimum Operating Current (Imp)	16.30A	16.39A	16.47A	16.56A	16.64A
Open Circuit Voltage (Voc)	41.67V	41.82V	41.97V	42.12V	42.16V
Short Circuit Current (Isc)	17.19A	17.25A	17.30A	17.36A	17.86A
Maximum Power (Pmax)	380W	384W	388W	392W	395W
Optimum Operating Voltage (Vmp)	32.65V	32.77V	32.89V	33.01V	33.13V
Optimum Operating Current (Imp)	11.65A	11.72A	11.79A	11.86A	11.94A
Open Circuit Voltage (Voc)	39.77V	39.91V	40.06V	40.20V	40.24V
Short Circuit Current (Isc)	12.34A	12.38A	12.42A	12.46A	12.82A

**BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25 °C.

**NOCT: Irradiance 800W/m², Ambient Temperature 20 °C, Wind Speed 1m/s.

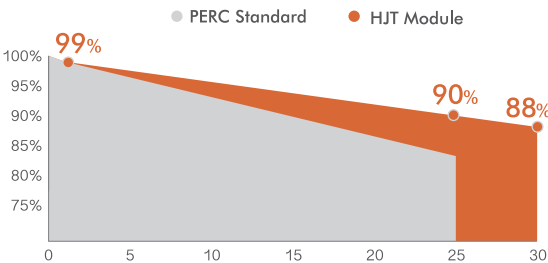
Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature Coefficient of Pmax	-0.26%/°C
Temperature Coefficient of Voc	-0.22%/°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 TENGYING standard warranty for details

Mechanical Characteristics

Cell Type	HJT Mono 182 × 105mm
Cell Connection	108 (6 × 18)
Module Dimension	1960 x 1134 x 30 mm
Weight	27.6 kg
Junction Box	IP68
Output Cable	4mm ² , 300mm in length, length can be customized / UV resistant
Connectors Type	MC4 original / MC4 compatible
Frame	Anodised aluminum alloy
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	Double glass, 2.0mm

Shipping Configurations

Container Size	40'HC
Pallets Per Container (pcs)	22
Modules Per Pallet (pcs)	36
Modules Per Container	792