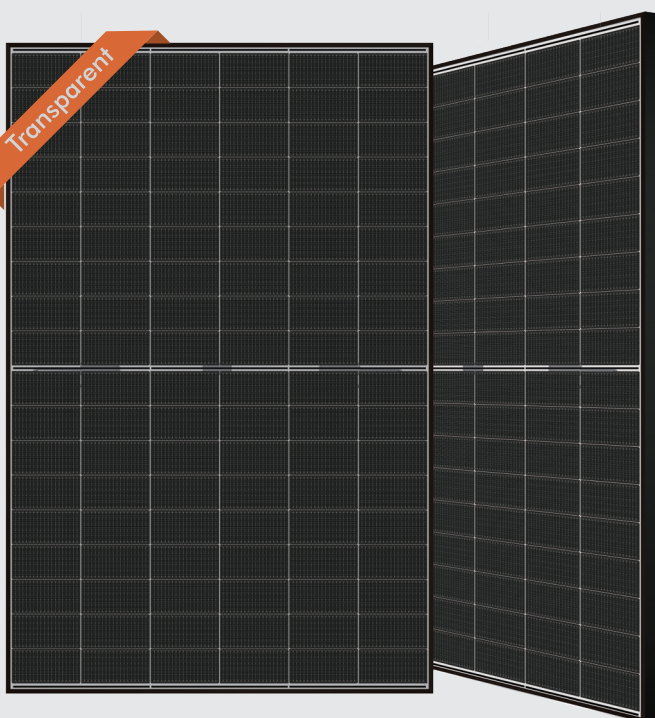


ONYX HJT G10 Black Series

430-450W

108-cell Bifacial Half Cell
Double-glass Solar Module



WARRANTY

Product
Warranty **30**
years

Linear
Power
Warranty **30**
years



HJT 3.0

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



-0.26%/C Pmax temperature coefficient

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



Small Chamfer Design

Bigger power generation area on the solar cell, increasing 1% cell power of single piece.



SMBB design with Half-Cut Technology

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



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 residential rooftop

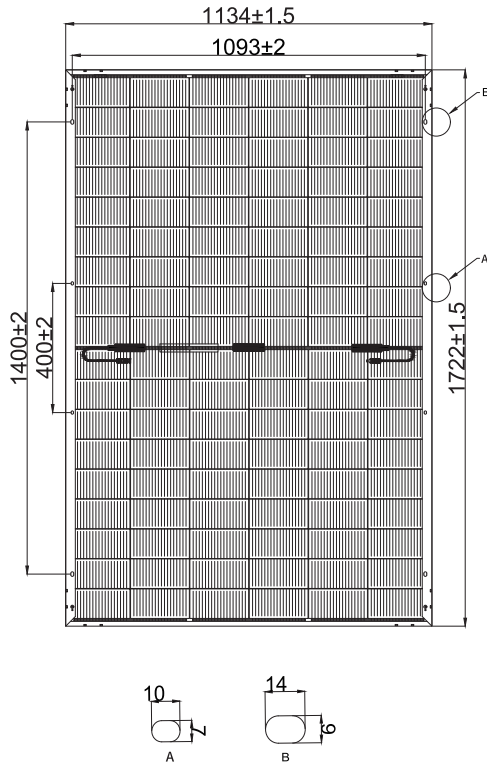


ONYX HJT G12 Series 430-450W

108-cell Bifacial HJT HCC Solar Module



Engineering Drawings Unit: mm



Electrical Characteristics (STC*)

Part Number	HJ430	HJ435	HJ440	HJ445	HJ450
Maximum Power (P _{max})	430W	435W	440W	445W	450W
Module Efficiency (%)	22.02%	22.28%	22.53%	22.79%	23.04%
Optimum Operating Voltage (V _{mp})	34.60V	34.86V	35.12V	35.38V	35.63V
Optimum Operating Current (I _{mp})	12.43A	12.48A	12.53A	12.58A	12.63A
Open Circuit Voltage (V _{oc})	40.87V	41.14V	41.41V	41.68V	41.94V
Short Circuit Current (I _{sc})	12.95A	13.00A	13.05A	13.10A	13.15A
Operating Module Temperature	-40 to +85 °C				
Maximum System Voltage	DC1500V (IEC)				
Maximum Series Fuse	25A				
Power Tolerance	0~+5W				
Bifaciality	90% ± 5%				

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

BSTC**

	HJ430	HJ435	HJ440	HJ445	HJ450
Maximum Power (P _{max})	480W	485W	490W	495W	500W
Optimum Operating Voltage (V _{mp})	34.60V	34.86V	35.12V	35.38V	35.63V
Optimum Operating Current (I _{mp})	13.88A	13.92A	13.96A	14.00A	14.04A
Open Circuit Voltage (V _{oc})	40.87V	41.14V	41.41V	41.68V	41.94V
Short Circuit Current (I _{sc})	14.46A	14.49A	14.53A	14.57A	14.61A

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

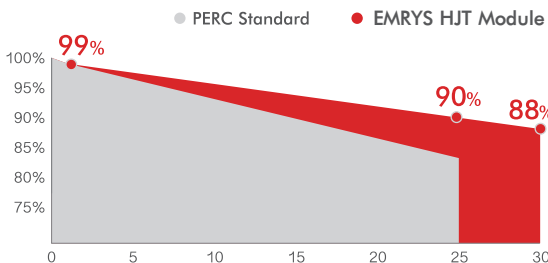
Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ± 2 °C
Temperature Coefficient of P _{max}	-0.26%/°C
Temperature Coefficient of V _{oc}	-0.24%/°C
Temperature Coefficient of I _{sc}	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 EMRYS standard warranty for details

Mechanical Characteristics

Cell Type	HJT Mono 182 × 91.75mm
Cell Connection	108 (6 × 18)
Module Dimension	1722 × 1134 × 30 mm
Weight	26 kg
Junction Box	IP68
Output Cable	4mm ² , 1200mm in length, length can be customized / UV resistant
Connectors Type	MC4 original
Frame	Anodised aluminum alloy (Black)
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

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