未来光能
FUTURE ENERGY

FUTURE210R Series

96 Half-piece Bifacial Dual Glass HJT Module

445~465W

0BB Technology

Less light obstruction and stronger current collection ability

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bring-ing more energy yield from the backside.

Better temperature coefficient

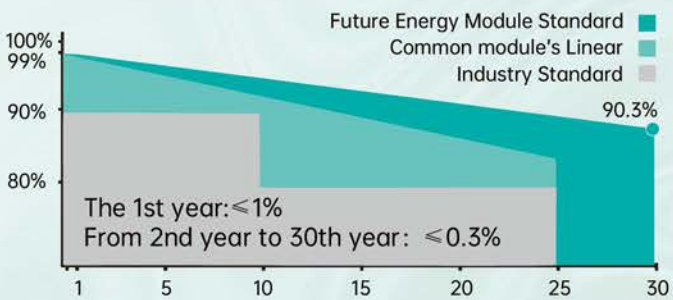
-0.24%/℃, More stable power generation

High Reliability

Excellent anti-LID & anti-PID performance,Sealing with PIB based sealant,Stronger water resistance, greater air impermeability to extentmodule lifespan.

Ideal choice for solar rooftop system

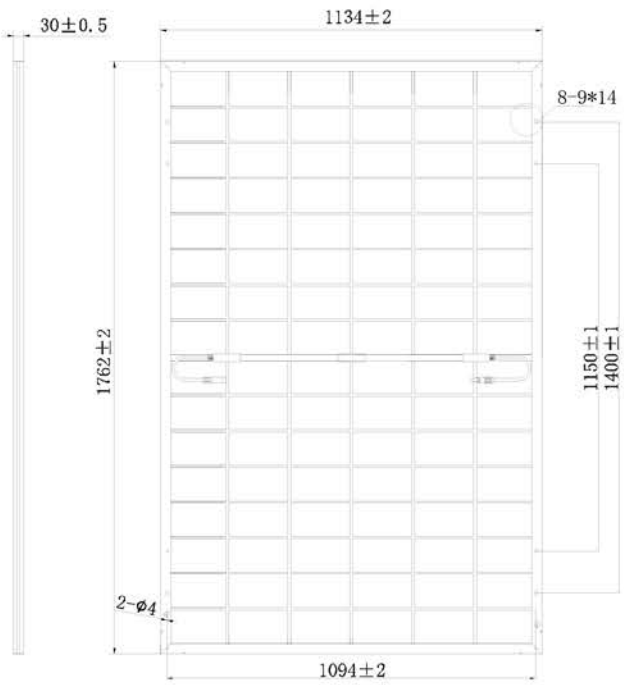
Suitable for various rooftop projects.



15y Product Warranty

30y Linear Power Warranty

Engineering Drawings Unit: mm



ELECTRICAL DATA (STC*)

Rated Power in Watts-Pmax(Wp)	445	450	455	460	465
Maximum Power Voltage-Vmpp(V)	30.66	30.88	31.10	31.30	31.44
Maximum Power Current-Impp(A)	14.53	14.60	14.66	14.72	14.79
Open Circuit Voltage-Voc(V)	36.95	37.22	37.47	37.72	37.97
Short Circuit Current-Isc(A)	15.30	15.36	15.41	15.45	15.49
Module Efficiency (%)	22.27	22.52	22.77	23.02	23.27

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

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax(Wp)	490	495	501	506	512
Maximum Power Voltage-Vmpp(V)	30.66	30.88	31.10	31.30	31.44
Maximum Power Current-Impp(A)	15.98	16.06	16.13	16.19	16.27
Open Circuit Voltage-Voc(V)	36.95	37.22	37.47	37.72	37.97
Short Circuit Current-Isc(A)	16.83	16.90	16.95	17.00	17.04

Mechanical Characteristics

Solar cells	n-type HJT
Cell configuration	96cells（6×16）
Module dimensions	1762×1134×30mm
Weight	23kg
Superstrate	1.6mm,High Transmission,AR Coated Heat Strengthened Glass
Substrate	1.6mm,Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68
Cables	4.0mm²,300mm, or customized length
Connector	MC4-EVO 2A
Packing Configuration	
36PCS per pallet , 936PCS per 40ft(HQ)	

Application Environment&Temperature Characteristics

Operating Module Temperature	-40~+85°C
Maximum System Voltage	1500V DC（IEC）
Maximum Series Fuse	30A
Power Tolerance	0~+5W
Bifaciality	85%±5%
Safety Class	Class Ⅱ
Nominal Operating Cell Temp.(NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.24%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

与光同行 未来已来
WALKING WITH LIGHT THE FUTURE HAS ARRIVED
未来光能有限公司
FUTURE ENERGY Co., Ltd.
400-829-7666
ROOM 3707,EAST TOWER,RAFFLES CITY,DONGDAMING ROAD NO.1089,HONGKOU DISTRICT,SHANGHAI,CHUINA