



未来光能  
FUTURE ENERGY

# FUTURE210 Series

## 120 Half-piece Bifacial Dual Glass HJT Module

# 640~660W



### OBB Technology

Less light obstruction and stronger current collection ability



### Up to 90% Bifaciality

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



### Better temperature coefficient

-0.24%/°C, More stable power generation



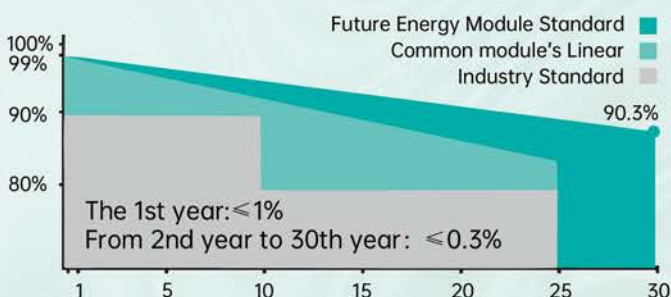
### High Reliability

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



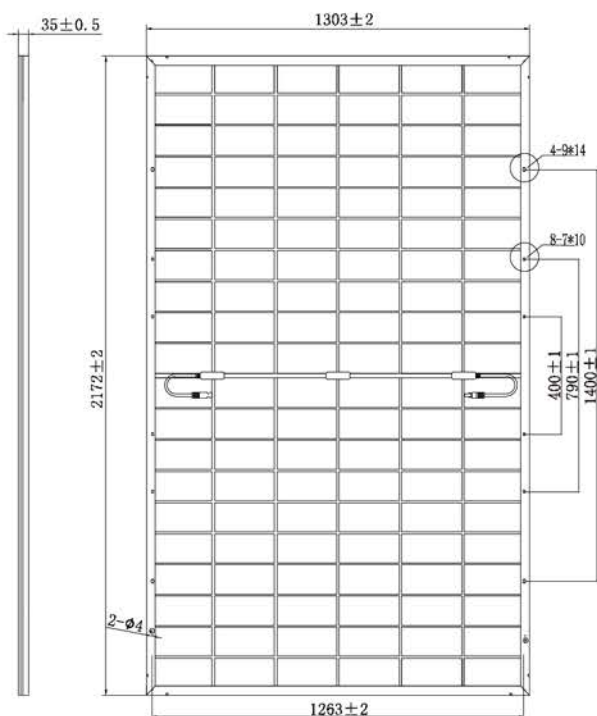
### Suitable for Utility Solar projects

Lower BOS cost, lower LCOE



15<sup>y</sup> Product Warranty

30<sup>y</sup> Linear Power Warranty

**Engineering Drawings** Unit: mm

**ELECTRICAL DATA (STC\*)**

Rated Power in Watts-Pmax(Wp)	640	645	650	655	660
Maximum Power Voltage-Vmpp(V)	38.35	38.51	38.67	38.83	38.99
Maximum Power Current-Imp(A)	16.69	16.75	16.83	16.89	16.95
Open Circuit Voltage-Voc(V)	45.66	45.84	46.02	46.18	46.36
Short Circuit Current-Isc(A)	17.49	17.55	17.61	17.77	17.83
Module Efficiency (%)	22.62	22.80	22.98	23.16	23.34

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

**Electrical characteristics with 10% rear side power gain**

Total Equivalent power -Pmax(Wp)	704	710	715	721	726
Maximum Power Voltage-Vmpp(V)	38.35	38.51	38.67	38.83	38.99
Maximum Power Current-Imp(A)	18.36	18.43	18.51	18.58	18.65
Open Circuit Voltage-Voc(V)	45.66	45.84	46.02	46.18	46.36
Short Circuit Current-Isc(A)	19.24	19.31	19.37	19.55	19.61

**Mechanical Characteristics**

Solar cells	n-type HJT
Cell configuration	120cells (6×20)
Module dimensions	2172×1303×35mm
Weight	35.3kg
Superstrate	2.0mm,High Transmission,AR Coated Heat Strengthened Glass
Substrate	2.0mm,Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68
Cables	4.0mm <sup>2</sup> ,300mm, or customized length
Connector	MC4-EVO 2A
Packing Configuration	31PCS per pallet , 558PCS per 40ft(HQ)

**Application Environment&Temperature Characteristics**

Operating Module Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse	35A
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

