

Haitai TaiHe2.0 (182)




HTM410~430DMH5-54NT TOPCon Bifacial high efficiency PV module




22.02%

Module Efficiency 22.02%

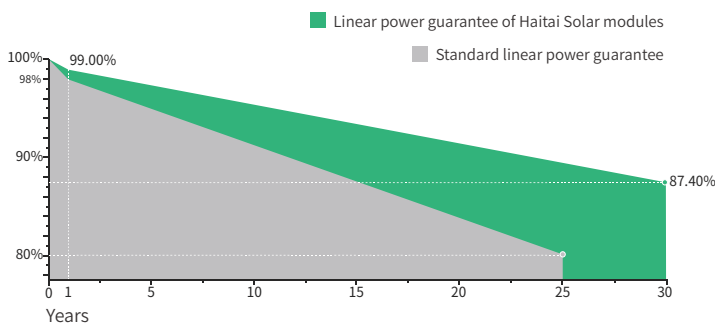


PRODUCT FEATURES


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Hi Power Output
 N-type MBB half cut technology, improve energy density, bring higher power output.
 High Bifacial Factor, up to 25% extra power generation
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High Durability
 Passed TUV Salt & Ammonia corrosion test, and 2400Pa wind load, 5400Pa snow load test, higher reliability
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Better Low Light Performance
 Higher power generation compare with standard module in cloudy, foggy and low light condition


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Low Power Degradation
 First year power degradation <1.0%, year 2-30 power degradation <0.40% each year
- 
Low Temperature coefficient
 Passivated contact cell technology for higher power generation in operating
- 
Better Anti-PID
 N-type cells with boron-oxide-free composite LID to increase module power generation

LINEAR PERFORMANCE WARRANTY



 12 YEARS product warranty

 30 YEARS linear power warranty

 0.40% Linear attenuation of 0.40% per year within 30 years

CERTIFICATES

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational health and safety management systems



Electrical Data (STC)

Maximum Power (Pmax/W)	410	415	420	425	430
Open Circuit Voltage (Voc/V)	37.90	38.05	38.20	38.35	38.50
Short Circuit Current (Isc/A)	13.52	13.63	13.74	13.85	13.96
Voltage at Maximum Power (Vmp/V)	31.35	31.50	31.65	31.80	31.95
Current at Maximum Power (Imp/A)	13.08	13.18	13.28	13.37	13.46
Module Efficiency (%)	21.00	21.25	21.51	21.76	22.02
Operating Temperature	-40° C~+85° C				
Maximum System Voltage	1000/1500V				
STC (Standard Testing Conditions): Irradiance 1000W/m ² , Cell Temperature 25°C, AM1.5					

Electrical Data (NMOT)

Maximum Power (Pmax/W)	308	312	316	320	324
Open Circuit Voltage (Voc/V)	35.97	36.12	36.27	36.42	36.57
Short Circuit Current (Isc/A)	11.06	11.15	11.25	11.34	11.44
Voltage at Maximum Power (Vmp/V)	29.50	29.65	29.80	29.95	30.10
Current at Maximum Power (Imp/A)	10.45	10.53	10.61	10.69	10.77
NMOT (Nominal Module Operating Temperature): Irradiance 800W/m ² , Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.					

Bifacial Power Generation Parameters (Backside Gains)

5%	Maximum Power (Pmax/W)	431	436	441	446	452
	Module Efficiency (%)	22.05	22.31	22.58	22.85	23.12
15%	Maximum Power (Pmax/W)	472	477	483	489	495
	Module Efficiency (%)	24.15	24.44	24.73	25.03	25.32
25%	Maximum Power (Pmax/W)	513	519	525	531	538
	Module Efficiency (%)	26.25	26.57	26.89	27.21	27.53

Mechanical Data

Cell Type	182×91mm Mono
Cell Orientation	108(6×18)
Module Dimensions	1722×1134×30mm
Weight	25.0kg
Glass	2.0mm high transmittance, reinforced glass
Backsheet	2.0mm part of the structure is grid-like white ceramic glass
Frame Material	Anodized aluminum alloy
Junction Box	Protection class IP68
Cable	4.0 mm ² positive pole: 200 mm negative pole: 250 mm wire length can be customized
Connector	MC4 compatible connector

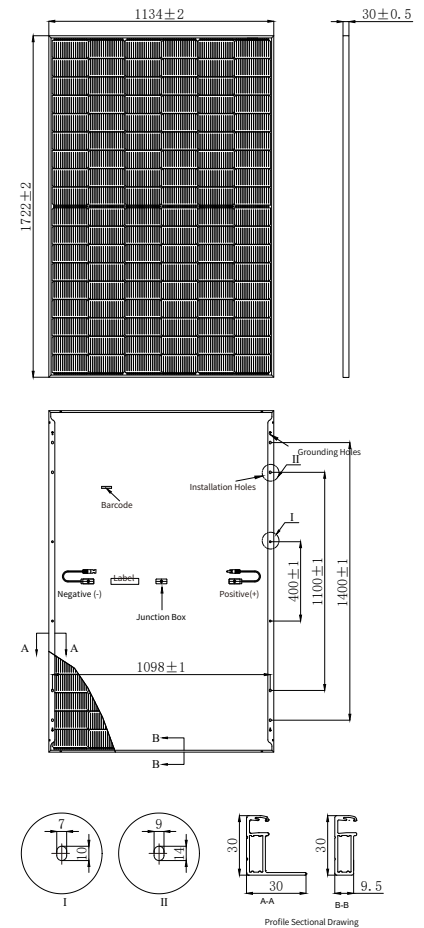
Temperature Coefficients

Temperature Coefficient (Pm)	-0.300%/°C
Temperature Coefficient (Voc)	-0.250%/°C
Temperature Coefficient (Isc)	0.045%/°C
NMOT (Nominal Module Operating Temperature)	41±3°C

Packaging

Transportation methods	Number of modules per cabinet	Number of modules per pallet
40HQ container	936 pcs	36 pcs +36 pcs

Module Dimensions (mm)



I-V Curve

