




Haitai TaiHe2.0 ⁽¹⁸²⁾




HTM620~640DMH5-78NT TOPCon Bifacial high efficiency PV module

22.90%

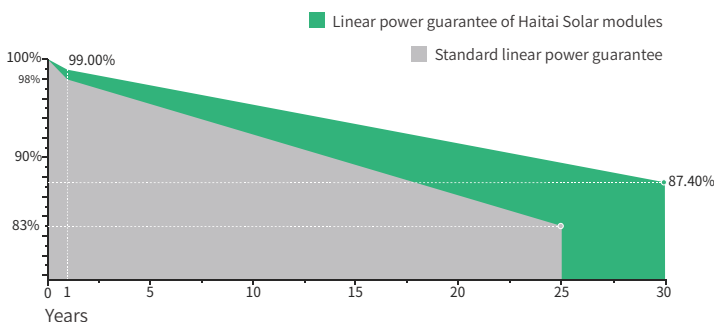
Module Efficiency 22.90%

PRODUCT FEATURES


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High Power Output
 N-type MBB half cut technology, improve energy density, bring higher power output.
 High Bifacial Factor, up to 25% extra power generation
- 
High Durability
 Passed TUV Salt & Ammonia corrosion test, and 2400Pa wind load, 5400Pa snow load test, higher reliability
- 
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-LID
 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
- IEC62941:2019 Photovoltaic Module Manufacturer Quality Management System



Electrical Data (STC)

Maximum Power (Pmax/W)	620	625	630	635	640
Open Circuit Voltage (Voc/V)	56.28	56.43	56.58	56.73	56.88
Short Circuit Current (Isc/A)	13.77	13.84	13.92	13.99	14.06
Voltage at Maximum Power (Vmp/V)	47.32	47.47	47.62	47.77	47.92
Current at Maximum Power (Imp/A)	13.11	13.17	13.23	13.30	13.36
Module Efficiency (%)	22.18	22.36	22.54	22.72	22.90
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)	466	470	474	478	482
Open Circuit Voltage (Voc/V)	53.51	53.66	53.81	53.96	54.11
Short Circuit Current (Isc/A)	11.24	11.3	11.37	11.43	11.49
Voltage at Maximum Power (Vmp/V)	43.82	43.97	44.12	44.27	44.42
Current at Maximum Power (Imp/A)	10.64	10.69	10.75	10.8	10.86

NMOT (Nominal Module Operating Temperature): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Bifacial Power Generation Parameters (Backside Gains)

5%	Maximum Power (Pmax/W)	651	656	662	667	672
	Module Efficiency (%)	23.29	23.48	23.66	23.85	24.04
15%	Maximum Power (Pmax/W)	713	719	725	730	736
	Module Efficiency (%)	25.51	25.71	25.92	26.12	26.33
25%	Maximum Power (Pmax/W)	775	781	788	794	800
	Module Efficiency (%)	27.73	27.95	28.17	28.40	28.62

Mechanical Data

Cell Type	182×91mm Mono
Cell Orientation	156(6×26)
Module Dimensions	2465×1134×30mm
Weight	34.5kg
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

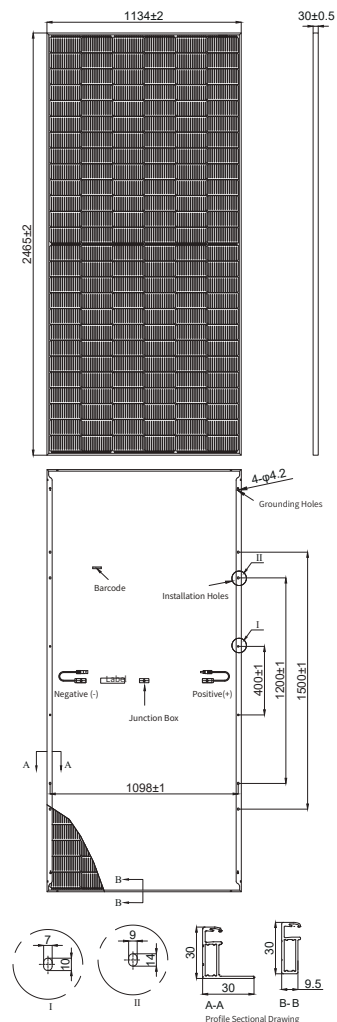
Temperature Coefficients

Temperature Coefficient (Pm)	-0.300%/°C
Temperature Coefficient (Voc)	-0.250%/°C
Temperature Coefficient (Isc)	0.046%/°C
NMOT (Nominal Module Operating Temperature)	41±3°C

Packaging

Transportation methods	Number of modules per cabinet	Number of modules per pallet
40HQ container	576pcs	36pcs +36pcs

Module Dimensions (mm)



I-V Curve

