

Haitai TaiHe 182

HTM400~420DMH5-54

Bifacial high efficiency mono PV module

21.51%

Module Efficiency 21.51%

PRODUCT FEATURES

High Efficiency
 Power can be generated on both sides to support additional output gains of up to 25%.
 The multi-busbar half-cut technology can boost energy density to deliver higher output.

High Reliability
 Certified in TUV salt spray, ammonia corrosion, 2400Pa wind load and 5400Pa snow load testing. Highly reliable.

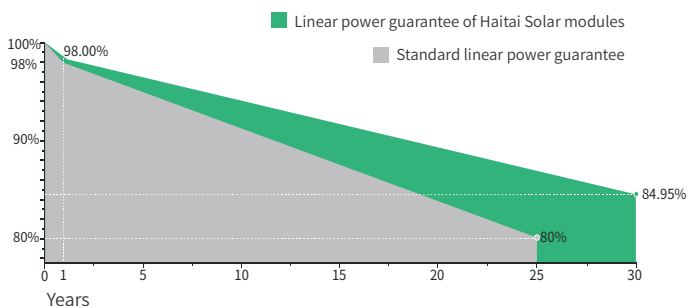
High ROI
 Effectively reducing BOS costs to achieve lower LCOE and enhanced project profitability.

Low Degradation
 First-year degradation is less than 2.0%, with linear degradation of 0.45% per year for 30 years.

Low Risk of Hot Spot
 The next-generation cell technology and optimized circuit design adopted can support improved temperature coefficient and better hotspot resistance.

Low Risk of Micro-Crack
 The multi-busbar technology contributes to more effective prevention of Micro crack and broken busbars.

LINEAR PERFORMANCE WARRANTY



12 YEARS product warranty

30 YEARS linear power warranty

0.45% Linear attenuation of 0.45% 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)	400	405	410	415	420
Open Circuit Voltage (Voc/V)	36.96	37.11	37.26	37.41	37.56
Short Circuit Current (Isc/A)	13.60	13.70	13.79	13.89	13.98
Voltage at Maximum Power (Vmp/V)	31.00	31.15	31.30	31.45	31.60
Current at Maximum Power (Imp/A)	12.91	13.01	13.10	13.20	13.30
Module Efficiency (%)	20.48	20.74	21.00	21.25	21.51
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)	300	304	308	312	316
Open Circuit Voltage (Voc/V)	33.97	34.12	34.27	34.42	34.57
Short Circuit Current (Isc/A)	11.10	11.18	11.27	11.35	11.43
Voltage at Maximum Power (Vmp/V)	28.19	28.34	28.49	28.64	28.79
Current at Maximum Power (Imp/A)	10.65	10.73	10.82	10.90	10.98
NMOT (组件标称工作温度): 光照强度: 800W/m ² , 环境温度: 20° C, 大气质量: AM1.5, 风速: 1m/s					

Bifacial Power Generation Parameters (Backside Gains)

5%	Maximum Power (Pmax/W)	420	425	431	436	441
	Module Efficiency (%)	21.51	21.78	22.05	22.31	22.58
15%	Maximum Power (Pmax/W)	460	466	472	477	483
	Module Efficiency (%)	23.56	23.85	24.15	24.44	24.73
25%	Maximum Power (Pmax/W)	500	506	513	519	525
	Module Efficiency (%)	25.60	25.93	26.25	26.57	26.89

Mechanical Data

Cell Type	182×91mmMono
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

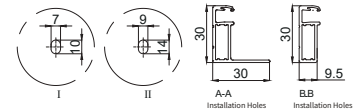
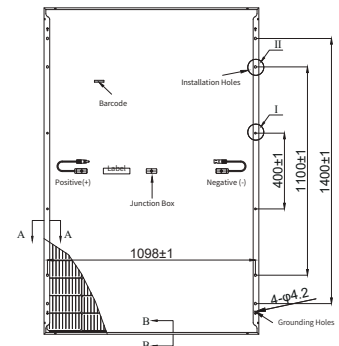
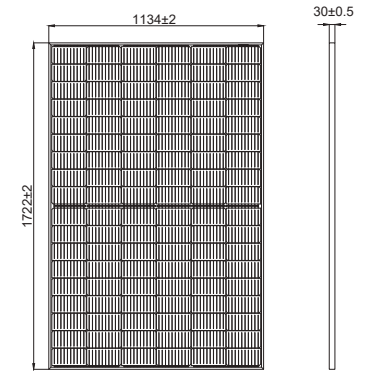
Temperature Coefficients

Temperature Coefficient (Pm)	-0.340%/°C
Temperature Coefficient (Voc)	-0.270%/°C
Temperature Coefficient (Isc)	0.048%/°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

