

Haitai TaiHe2.0 (182)

HTM570~595DMH5-72NT
TOPCon Bifacial high efficiency PV module

23.03%

Module Efficiency 23.03%



PRODUCT FEATURES

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

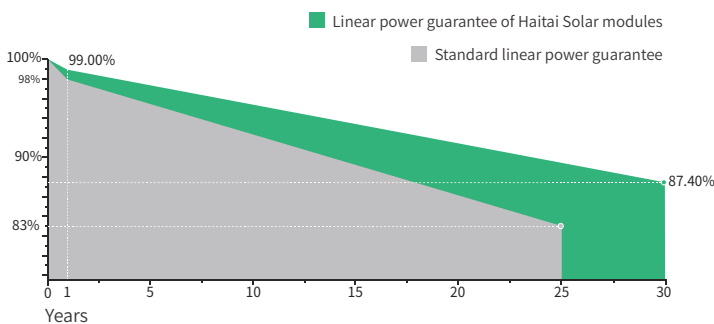
Better Low Light Performance
Higher power generation compare with standard module in cloudy, foggy and low light condition

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) | 570 | 575 | 580 | 585 | 590 | 595 |
| Open Circuit Voltage (Voc/V) | 51.89 | 52.04 | 52.19 | 52.34 | 52.49 | 52.64 |
| Short Circuit Current (Isc/A) | 13.73 | 13.81 | 13.89 | 13.97 | 14.05 | 14.13 |
| Voltage at Maximum Power (Vmp/V) | 43.61 | 43.76 | 43.91 | 44.06 | 44.21 | 44.36 |
| Current at Maximum Power (Imp/A) | 13.08 | 13.14 | 13.21 | 13.28 | 13.35 | 13.42 |
| Module Efficiency (%) | 22.07 | 22.26 | 22.45 | 22.65 | 22.84 | 23.03 |
| 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) | 429 | 433 | 437 | 441 | 445 | 449 |
| Open Circuit Voltage (Voc/V) | 49.29 | 49.44 | 49.59 | 49.72 | 49.81 | 49.90 |
| Short Circuit Current (Isc/A) | 11.23 | 11.3 | 11.37 | 11.45 | 11.53 | 11.61 |
| Voltage at Maximum Power (Vmp/V) | 40.54 | 40.69 | 40.84 | 40.92 | 41.01 | 41.10 |
| Current at Maximum Power (Imp/A) | 10.59 | 10.65 | 10.71 | 10.78 | 10.86 | 10.93 |

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) | 599 | 604 | 609 | 614 | 620 | 625 |
| | Module Efficiency (%) | 23.17 | 23.37 | 23.57 | 23.78 | 23.98 | 24.18 |
| 15% | Maximum Power (Pmax/W) | 656 | 661 | 667 | 673 | 679 | 684 |
| | Module Efficiency (%) | 25.37 | 25.60 | 25.82 | 26.04 | 26.27 | 26.49 |
| 25% | Maximum Power (Pmax/W) | 713 | 719 | 725 | 731 | 738 | 744 |
| | Module Efficiency (%) | 27.58 | 27.82 | 28.07 | 28.31 | 28.55 | 28.79 |

Mechanical Data

| | |
|-------------------|---|
| Cell Type | 182×91mm Mono |
| Cell Orientation | 144(6×24) |
| Module Dimensions | 2278×1134×30mm |
| Weight | 32.0kg |
| 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 |

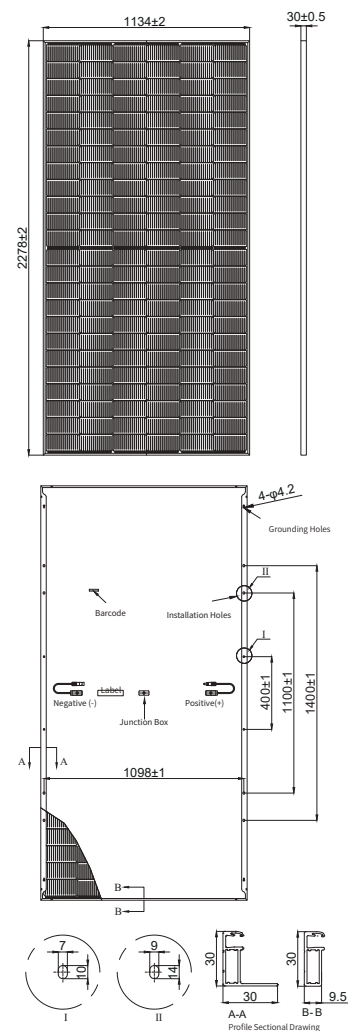
Temperature Coefficients

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

Packaging

| | | |
|------------------------|-------------------------------|------------------------------|
| Transportation methods | Number of modules per cabinet | Number of modules per pallet |
| 40HQ container | 720 pcs | 36 pcs +36 pcs |

Module Dimensions (mm)



I-V Curve

