

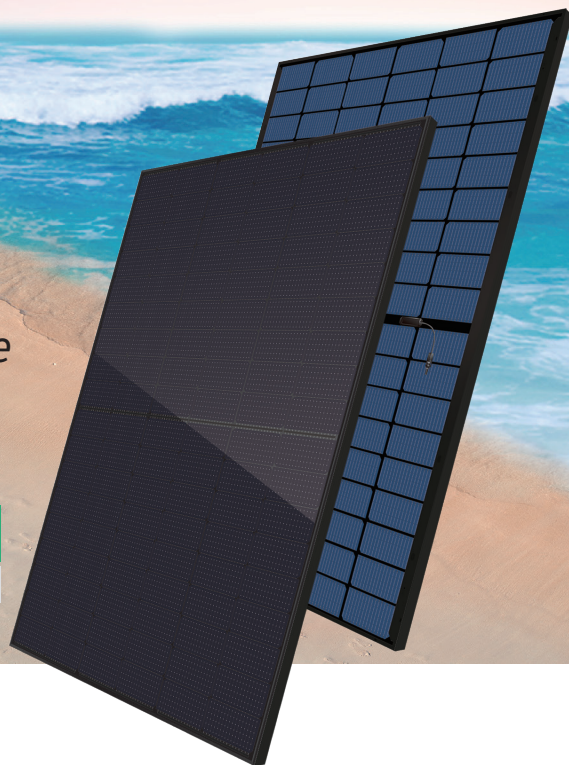
Haitai TaiHe2.0 (182)

HTM410~430DMH5-54NT

TOPCon Bifacial high efficiency PV module

22.02%

Module Efficiency 22.02%

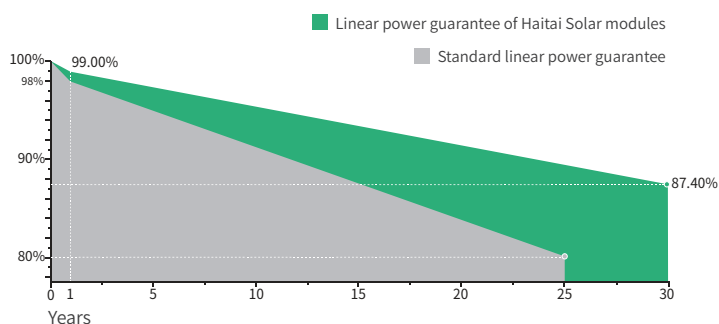


PRODUCT FEATURES

-  **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-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



Figure 10 consists of two graphs. The top graph is the Current-Voltage (I-V) Curve for a 430W solar panel. The y-axis is Current (A) ranging from 0 to 14, and the x-axis is Voltage (V) ranging from 0 to 50. Five curves are shown for different irradiance levels: 1000W/m² (black), 800W/m² (green), 600W/m² (orange), 400W/m² (grey), and 200W/m² (light grey). The curves show that as irradiance decreases, the short-circuit current decreases linearly, while the open-circuit voltage remains relatively constant around 38V. The bottom graph is the Power-Voltage (P-V) Curve for the same panel. The y-axis is Power (W) ranging from 0 to 500, and the x-axis is Voltage (V) ranging from 0 to 50. The same five irradiance levels are shown. The curves show that the maximum power point (MPP) voltage is relatively constant around 31V, while the maximum power decreases as irradiance decreases. The peak power values are approximately 430W for 1000W/m², 320W for 800W/m², 240W for 600W/m², 170W for 400W/m², and 80W for 200W/m².