

# Haitai TaiHe2.0 (210R)

## HTM435~455DMH6-48NT

TOPCon Bifacial high efficiency PV module

22.77%

Module Efficiency



### PRODUCT FEATURES



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

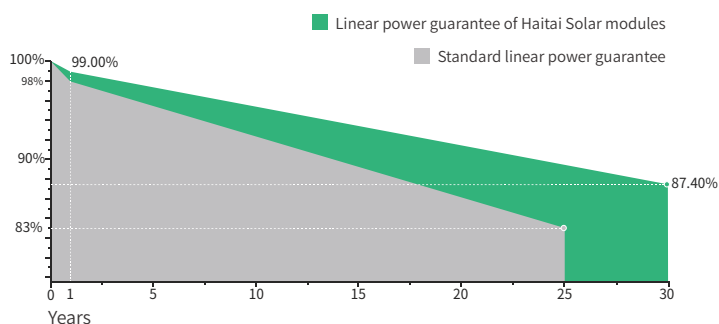


**Low Temperature coefficient**  
Passivated contact cell technology for higher power generation in operating



**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)	435	440	445	450	455
Open Circuit Voltage (Voc/V)	34.69	34.84	34.99	35.14	35.29
Short Circuit Current (Isc/A)	15.68	15.79	15.9	16.01	16.12
Voltage at Maximum Power (Vmp/V)	28.69	28.84	28.99	29.14	29.29
Current at Maximum Power (Imp/A)	15.17	15.26	15.36	15.45	15.54
Module Efficiency (%)	21.77	22.02	22.27	22.52	22.77
Operating Temperature	-40° C~+85° C				
Maximum System Voltage	1000/1500V				
STC (Standard Testing Conditions): Irradiance 1000W/m <sup>2</sup> , Cell Temperature 25°C, AM1.5					

## Electrical Data (NMOT)

Maximum Power (Pmax/W)	327	331	335	339	343
Open Circuit Voltage (Voc/V)	32.92	33.07	33.22	33.37	33.52
Short Circuit Current (Isc/A)	12.82	12.92	13.01	13.11	13.21
Voltage at Maximum Power (Vmp/V)	26.99	27.14	27.29	27.44	27.59
Current at Maximum Power (Imp/A)	12.12	12.2	12.28	12.36	12.44
NMOT (Nominal Module Operating Temperature): Irradiance 800W/m <sup>2</sup> , Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.					

## Bifacial Power Generation Parameters (Backside Gains)

5%	Maximum Power (Pmax/W)	457	462	467	473	478
	Module Efficiency (%)	22.86	23.12	23.38	23.65	23.91
15%	Maximum Power (Pmax/W)	500	506	512	518	523
	Module Efficiency (%)	25.04	25.32	25.61	25.90	26.19
25%	Maximum Power (Pmax/W)	544	550	556	563	569
	Module Efficiency (%)	27.21	27.53	27.84	28.15	28.46

## Mechanical Data

Cell Type	182×105mm Mono
Cell Orientation	96(6×16)
Module Dimensions	1762×1134×30mm
Weight	24.5kg
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 <sup>2</sup> positive pole: 1200 mm negative pole: 1200 mm wire length can be customized
Connector	MC4 compatible / Staübli Evo 2 connectors

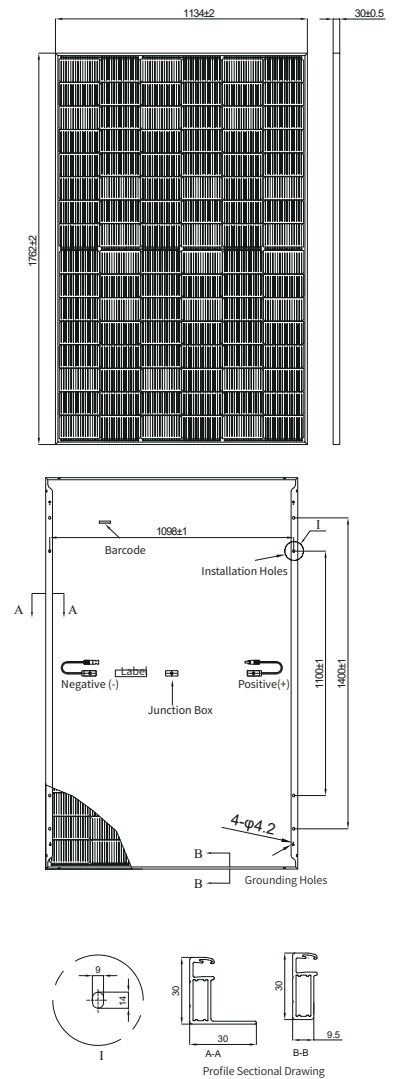
## Temperature Coefficients

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	936pcs	36pcs +36pcs

## Module Dimensions (mm)



## I-V Curve

