

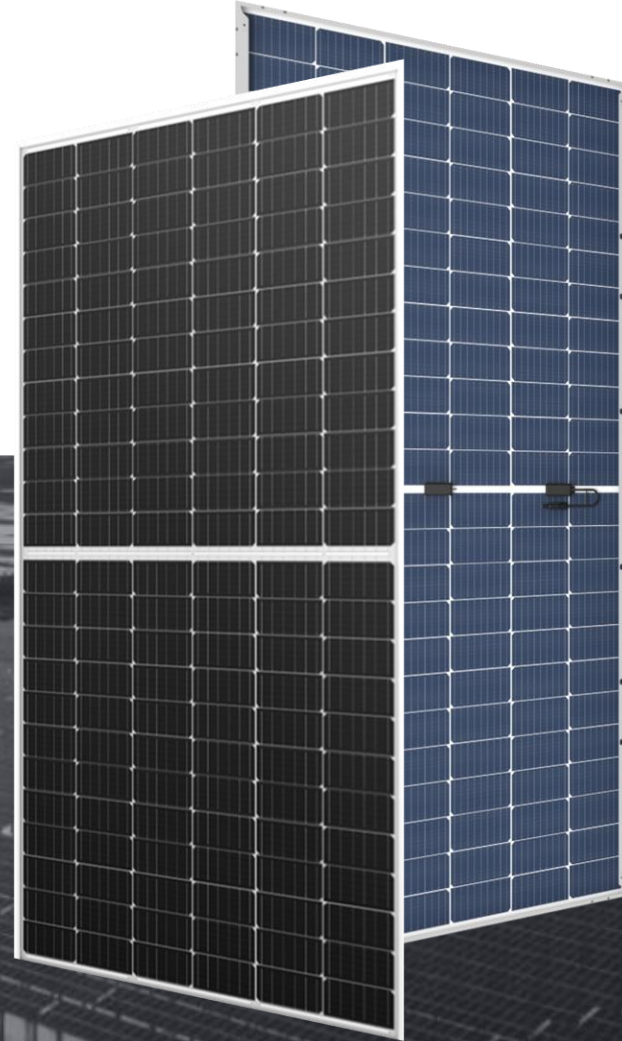


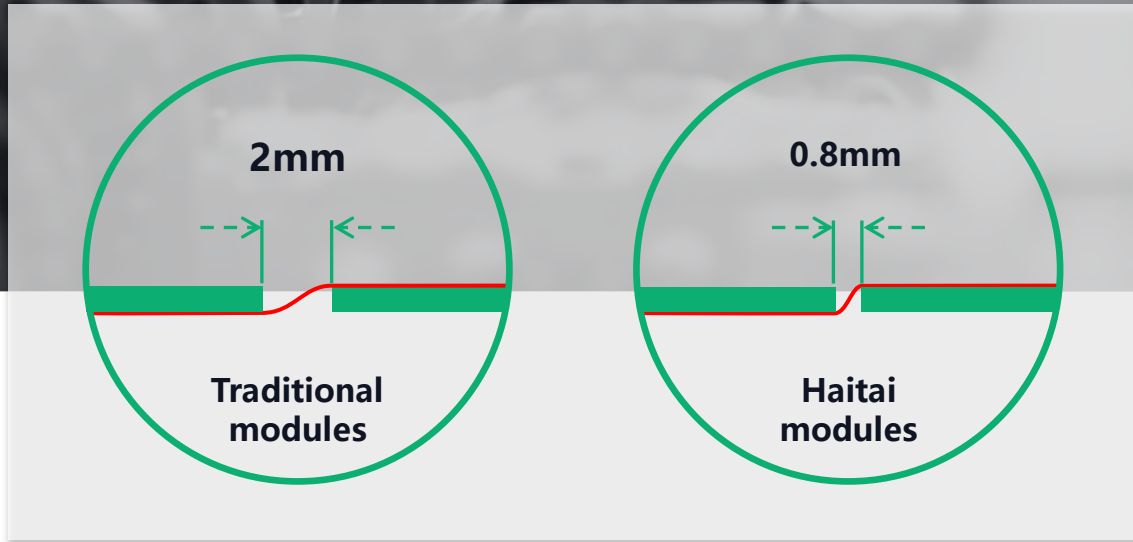
210 series

QUALITY CASTING VALUE

Production Distribution

Haitai Solar has been constantly innovating in the design of its products. Its reliable and efficient 210mm modules integrate mainstream cell efficiency technologies to meet the demands of different markets and customers.





Small spacing

- ◆ small spacing technology can enhance module capacity with a 0.2-0.3% increase in efficiency gain

Technical Features



Multi-busbar

MBB technology can mitigate the risk of invisible fissures and broken busbars and enhance optical gains and current collecting, enabling a 0.4-0.6% increase in module efficiency.



Non-destructive cutting

Non-destructive cutting can improve the mechanical strength of cells, limit the risk of invisible fissures and enhance module reliability.



Optimized design

Stiffener is added to significantly increase module loading.

Product Warranty

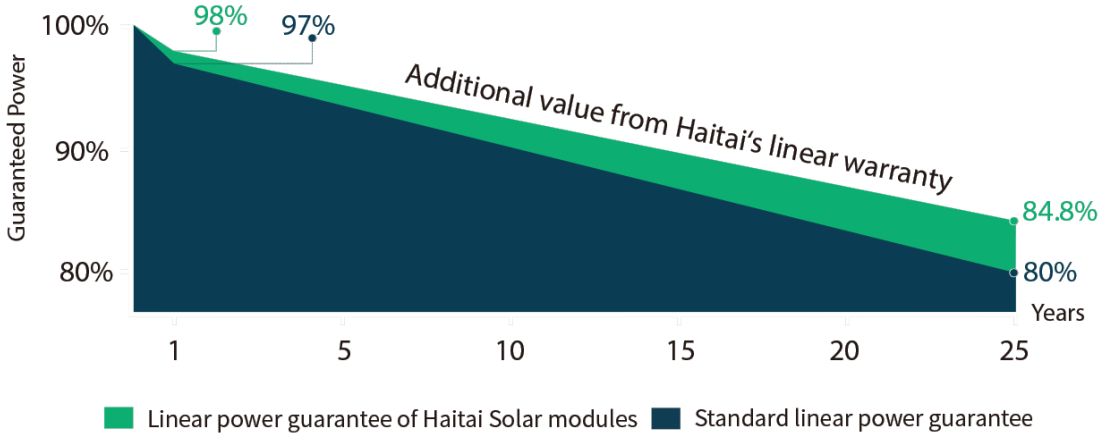


2.0%

Degradation of 2%
in the first year

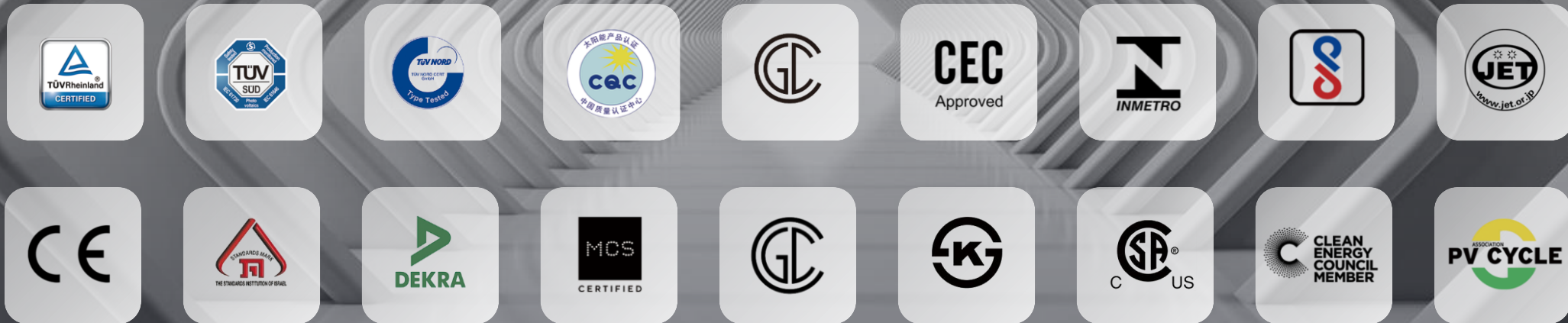
0.55%

Subsequently 0.55%
year on year



Product Certification

All Haitai' s product series have been placed on the list of 'Enterprises with Regulated Conditions in the PV Industry' released by the Ministry of Industry and Information Technology, and all its products have achieved certification from global entities such as TÜV, CQC, UL, CSA, CEC, BIS, KS, INMETRO, SII, and MCS. Adhering to its operational philosophy of "focusing on quality and seeking technology-driven development," the company has been creative in product design in order to address the needs of various markets and customers.

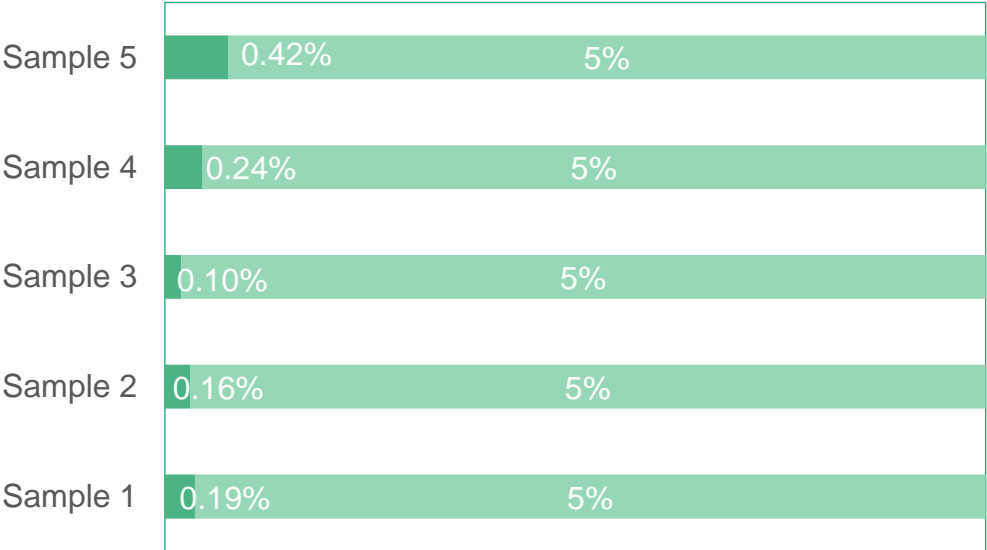


Product Quality Assurance - PID test

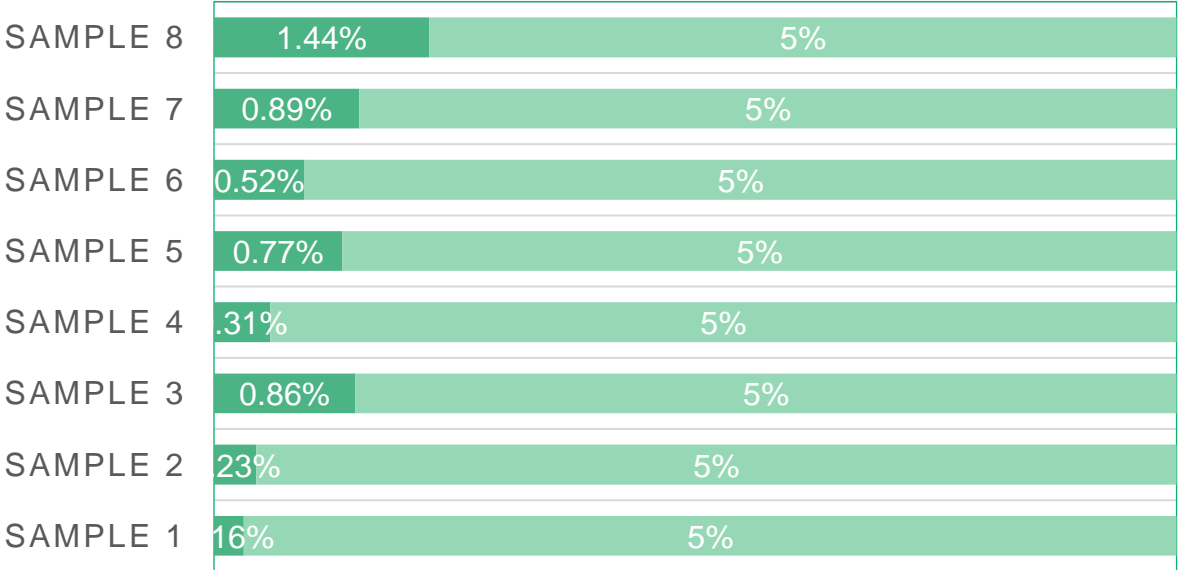


Monofacial and bifacial products all performed very well in TUV's PID96h test. Upon test completion, the average module degradation rate is shown to be 0.22% (monofacial) and 0.65% (bifacial), far exceeding IEC standards.

PID testing for monofacial mono products



PID TESTING FOR BIFACIAL MONO PRODUCTS



System Application-BOS savings

Modules	Mainstream Output	Number of Strings	Power of String	String Power Gains
210	660W	28	18.48 kW	58%
166	450W	26	11.7 kW	Baseline

16%
Pile foundation

12%
Mounting system

16%
Cabling

53%
Combiner box

32%
Labour cost

3%
Land

Single string capacity increase (58%), BOS reduction (10.59 cents/W)

Inventory of Products Available



Modules	158.75-72	163.75-78	166-72	210-66
Maximum Power (W)	410	470	450	660
Module Efficiency (%)	20.38	20.93	20.7	21.25
Module Dimensions (mm)	2008*1002	2182*1029	2094*1038	2384*1303
Voltage at Maximum Power (V)	49.48	52.14	49.48	45.69
Serial number	24	24	26	28
Imp (A)	9.86	10.86	11.0	17.47
BOS reduction (Cents/W)	Baseline	-2.56	-3.2	-13.78

System Application - Inverters

210mm module-inverter compatibility is mainly governed by current. DC input current exceeding 20A can support string inverter operation.

Current at Maximum Power: **17.45A**
Short Circuit Current: **18.53A**



Current at Maximum Power: **17.47A**
Short Circuit Current: **18.52A**

Inverter Type	Inverter Brand	Inverter Model	Number of MPPT	MPPT Input Current
Centralized	The 210mm module can be accommodated by the string design of the combiner box.			
String	Sungrow	SG320HX	2	40 A
	Huawei	SUN2000-196KTL-H3	4/5/5	100 A
	Sineng	SP-250K-H	2	40 A

System Application - Mounting System



Different regions have different ways of grouping due to varying temperatures and space available. Different mounting systems are chosen for different projects in design to avoid incompatibility.

Module Dimensions: 2172*1303*35

600W

670W

Module Dimensions: 2384*1303*35

Mounting System Type	Illustration
Fixed	All fixed mounting systems are designed to be compatible with 210mm modules.
Tracking	The tracking systems are available in various lengths. There are 72m,110m and extended lengths (up to 240m) for 1P. The most suitable tracking system models need to be selected to fit specific string arrangements in different regions.

210 泰极

主流功率: 600-605/660-665W

尺寸: 2172*1303*35/2384*1303*35mm

重量: 31kg/34kg

载荷: +5400Pa, -2400Pa

应用场景



地面电站

泰合 210

主流功率: 600-605/660-665W

尺寸: 2172*1303*35/2384*1303*35mm

重量: 35.5kg/39kg

载荷: +5400Pa, -2400Pa

应用场景



地面电站等背面增益较高的场景

Intelligent Quality Made



6S

MES

ERP

The use of digital, systematic, standardized manufacturing and leading-edge technology and advanced manufacturing process control ensure excellent quality of products



Haitai products meet ISO9001, 1400 and 45001 standards



High-efficiency crystalline silicon solar cells and modules – inspected and certified by Hebei Engineering Laboratory



Comprehensive smart management system to stringently control the whole manufacturing cycle



Fully automated modular manufacturing enhances product reliability, with the use of digital, systematic and standardized leading-edge technology and advanced process control ensuring excellent product quality



Full service

01

Pre-sales support

professional pre-sales support, comprehensive support from product technology to system solution

02

After-sales service

dedicated service, customer first, professional 7x24h after-sales service

03

High quality standards

strict monitoring of production lines and product quality control to meet the demands of different customers.

04

Flexible response

In addition to its latest products, Haitai can also offer tailored versions of previous products, according to customers' special requests.

Comprehensive Service and Efficient Operation



Resource integration, quick response to customer requests, sound pre-sales support and after-sales service to speed up signing and shipment cycles.

Professional team

Sales

Marketing

Technical support/after-sales service

Operation management

Different customer needs

Distributors

EPCs

Installers

Developers


Retailers

IPPs

Utility Projects




240MW

 Cangzhou, Hebei Province



Utility Projects

130MW

 Ruicheng, Shanxi Province



Utility Projects



Utility Projects



100MW  Baicheng, Jilin Province



100MW  Golmud, Qinghai Province



Utility Projects

50MW  Zhangjiakou, Hebei province



20MW  Tangshan, Hebei

C&I Projects



4MW

📍 Jiangsu Kanion Pharmaceutical

QUALITY CASTING VALUE

www.haitai-solar.cn

C&I Projects

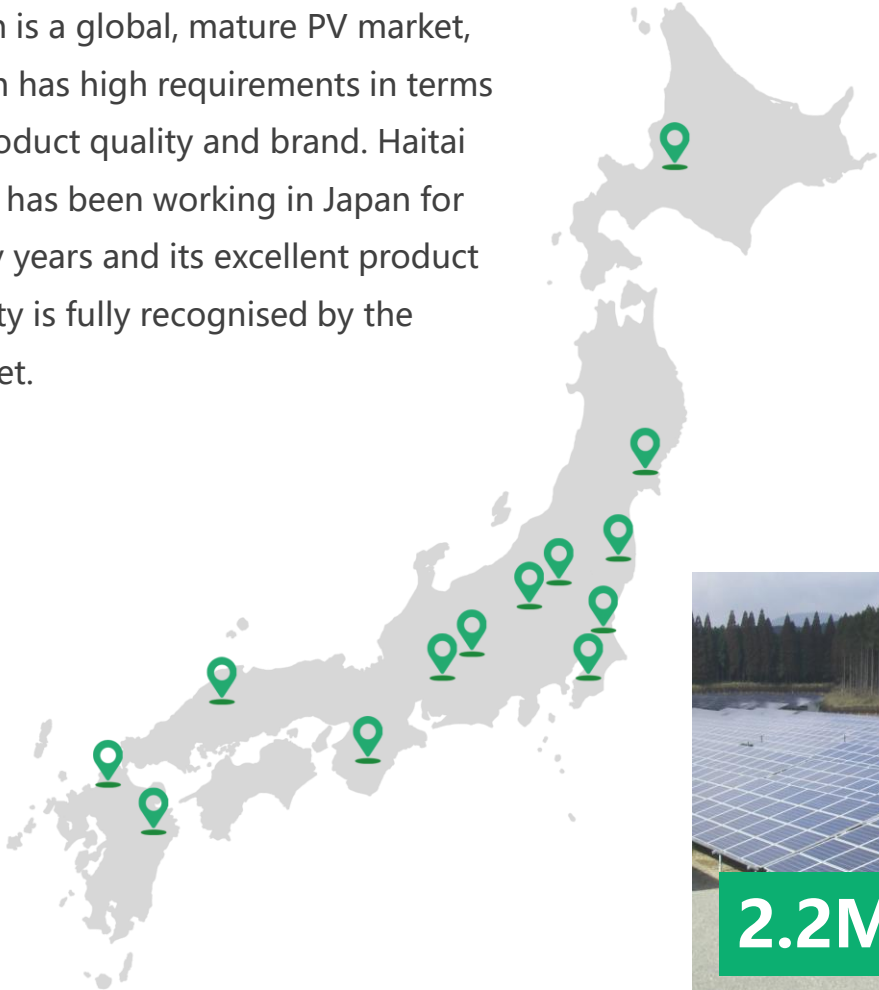


C&I Projects



Projects in Japan

Japan is a global, mature PV market, which has high requirements in terms of product quality and brand. Haitai Solar has been working in Japan for many years and its excellent product quality is fully recognised by the market.





Thanks