

WHY CHOOSE HJT?

Bigger Capacity

By using HJT modules, one can achieve a bigger installed capacity with the same area. Therefore, HJT products are a better choice for distributed projects with limited area like commercial and residential rooftops.

Module Type	Regular Poly	Bifacial PERC Mono	HJT
	395	440	470
Project Capacity (kW)	145	162	173

Longer Service Life

HJT modules have lower degradation and longer service life. Its power generation lasts five years longer than regular modules.

Module Type	Regular Poly	Bifacial PERC Mono	HJT
	395	440	470
25-year Power Generation (MWh)	462.1 ⚡⚡⚡⚡⚡	536.5 ⚡⚡⚡⚡⚡⚡	665.3 ⚡⚡⚡⚡⚡⚡⚡
30-year Power Generation (MWh)		634.6 ⚡⚡⚡⚡⚡⚡⚡	789.9 ⚡⚡⚡⚡⚡⚡⚡⚡

More Income

In the long term, HJT solar projects have bigger capacity and longer service life, and therefore can bring larger overall return on investment than regular solar projects.

Module Type	Regular Poly	Bifacial PERC Mono	HJT
	395	440	470
25-year generation income (thousand USD)	364 💰💰💰	422 💰💰💰💰	524 💰💰💰💰💰
30-year generation income (thousand USD)		499 💰💰💰💰	622 💰💰💰💰💰

*Electricity generation revenue is calculated based on the following assumptions: 825m² commercial rooftop solar project located in Beijing, with reflectivity around 30%, and current subsidy policy.



Water-surface solar project installed with super-high-efficiency HJT modules in Anhui, China



JINERGY experimental power project

About Jinery

Founded on December 31, 2013, Jinneng Clean Energy Technology Ltd. (Jinery) is a global leading PV manufacturer and clean energy provider incorporated under Jinneng Group's clean energy sector.

Consisting of PV experts from home and abroad, Jinery's management and R&D teams follows the core strategy of technology iterations. And through continuous technological innovation and lean production, Jinery has reached the goal of edging into global top 5% most advanced and cost-effective cell & module production capacity. With commitment to global coverage, Jinery extends business in China, India, Japan, Pakistan, Mexico, Argentina, Australia, Ukraine, etc. and supplies customers with high quality and reliable Poly C-Si, PERC Mono C-Si and HJT modules. Under technological innovation for industrial progress, Jinery is bringing advanced PV manufacturing technology to the world and driving global energy structure transformation.

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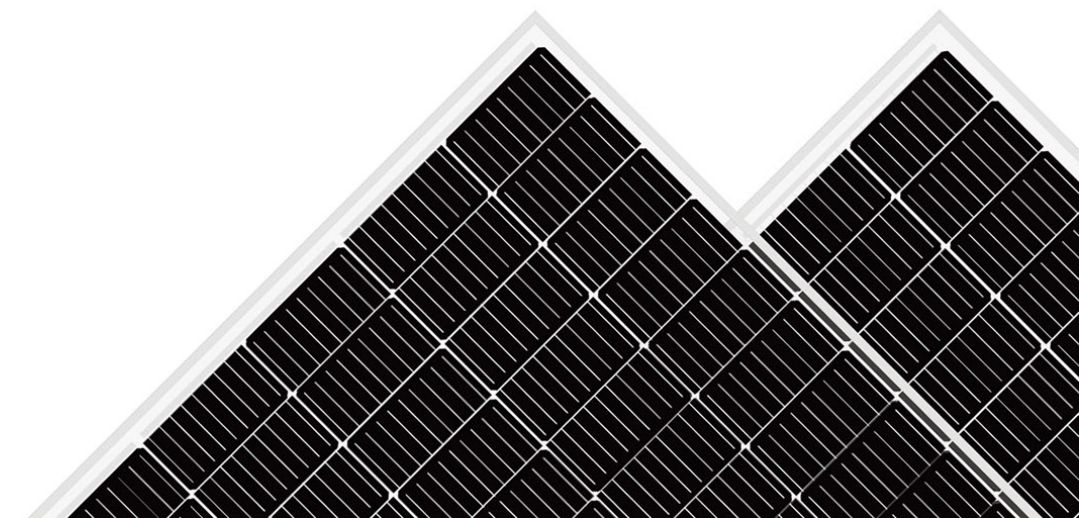


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SUPER
HIGH EFFICIENCY
HJT
MONO C-SI MODULE

44% EXTRA POWER

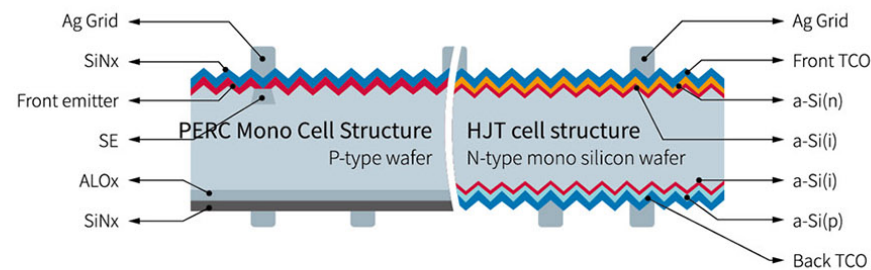


What is Hetero-Junction intrinsic Technology?

Heterojunction cells are different from homo-junction cells. Its PN junction's p-type substrate is a-Si, n-type substrate is c-Si, and that's why it is called heterojunction.

HJT CELL'S PROPERTY

The minority carriers life time of a-Si passivated HJT cells obviously exceeds that of silicon nitride and aluminum oxide passivated mono silicon cells. It directly makes the Voc of HJT cells around 60mV higher than regular cells, and therefore making the average conversion efficiency of HJT cells in mass production around 2% higher than regular mono silicon cells, and that is around 20W lift in module's power.



	PERC Mono	HJT
Way of Passivation	Aluminum Oxide	a-Si
Minority Carriers Life Time	≈120μs	4000μs
Voc	682mV	>740mV
Isc	11.05A	10.66A
FF	81%	>80%
Average Efficiency	22.30%	23.70%

CHARACTERISTICS OF JINERGY'S HJT MONO MODULE

- Combination of thin film and crystalline silicon technology
- Low temperature coefficient
- N-type bifacial cell structure
- Better low light performance
- Highly reliable double-glass encapsulation
- Low power degradation
- Combination of half-cut and MBB technology
- Super high extra power generation from backside

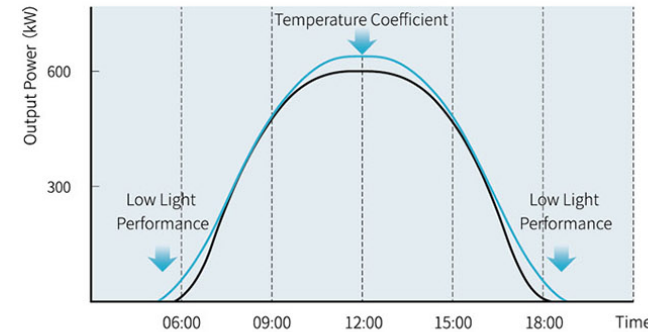
Power Temperature Coefficient Reached -0.25%/°C

	TC Pmax	25°C	50°C	75°C	Power Decrease
Bifacial PERC Mono	-0.38%	470W	425.4W	380.7W	89.3W
HJT	-0.25%	470W	440.6W	411.3W	58.8W

Compared with bifacial PERC mono modules, HJT modules can save 34.2% power loss under 75°C working temperature.

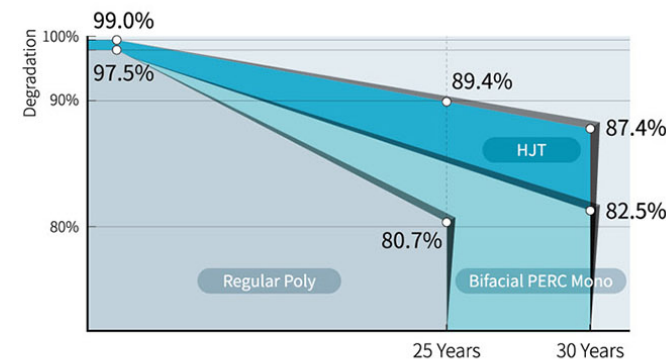
Excellent Low Light Performance

Adopting n-type wafer, HJT modules are featured with excellent low light performance, yielding higher power during morning, dusk and cloudy days.

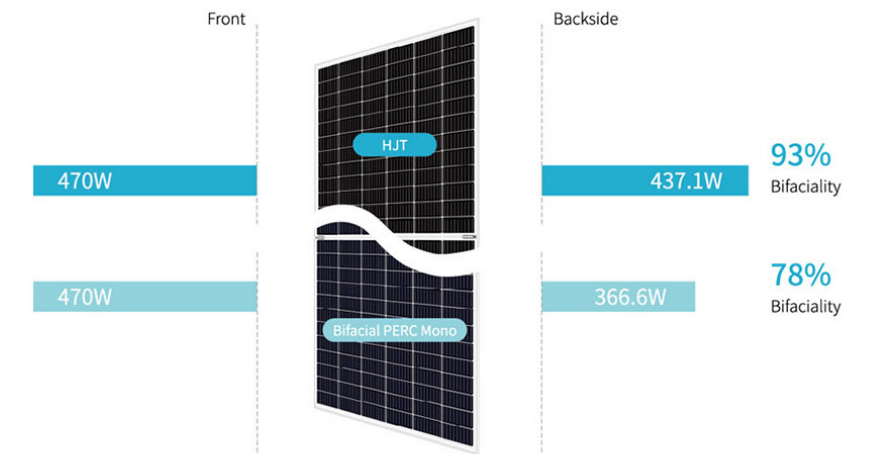


Ultra-low Degradation

By adopting n-type wafer, HJT modules are free from PID and LID, resulting in low power degradation.



Bifaciality Up to 93%, with 10%-35% extra power generated from backside



10%-35% more power generated from backside under different installation conditions.



44% EXTRA POWER GENERATED BY HJT MODULE

Power Generation per Watt × Power Generation Efficiency per Unit Area = Relative Power Generation per Unit Area

	Regular Poly	Bifacial PERC Mono	HJT
Front Side Power (W)	395	440	470
Power Temperature Coefficient	-0.39%/°C	-0.38%/°C	-0.25%/°C
Bifacial Power Generation Gain	0	8%	16%
Degradation in First Year	2.5%	3.0%	1.0%
Annual Degradation in Following Years	0.70%	0.50%	0.40%

	Regular Poly	Bifacial PERC Mono	HJT
25-year Relative Power Generation	100%	107%	116%
Power Generation Efficiency per Unit Area	100%	109%	116%
Relative Power Generation per Unit Area	100%	124%	144%