

730~750W

Half Cell High Efficiency PV Module

2384x1303x35mm

210
mm

Advanced HJT Solar Cells

Half
Cell

High Efficiency

0~+5
W

Positive Tolerance



More Power Generation

Big size with highest power,
higher module conversion efficiency



Higher Power Gains and Lower Losses

Excellent low irradiance performance and low shadow loss



Stable Generation Performance

Guaranteed 0~+5W positive tolerance and slower power
attenuation: first years $\leq 1\%$, 0.45% per year from 2-30 years



Process Optimized and Upgraded

Lower risk of hot spot and stronger anti-PID ability

WARRANTY

★ **25**^{yr} ★

Materials Warranty

★ **30**^{yr} ★

Power Warranty

SPECIFICATION

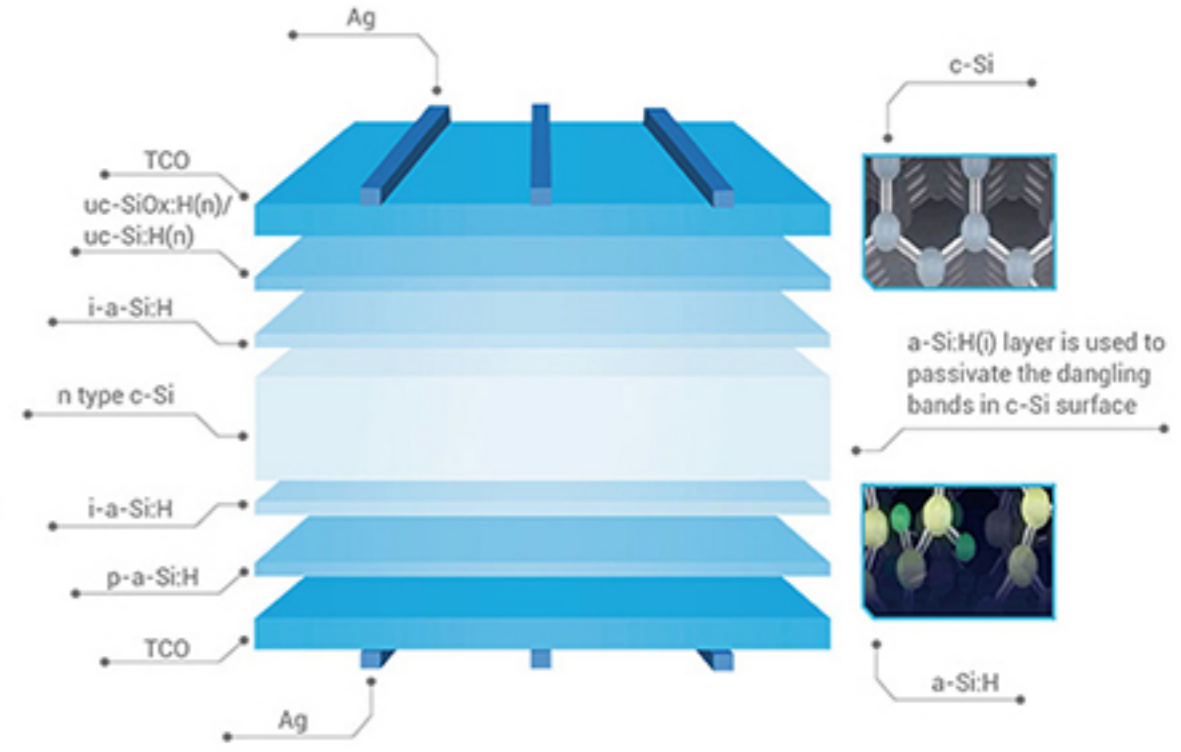
Module Type	HS730H-66HC12B		HS740H-66HC11B		HS750H-66HC12B	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power(Pmax/W)	730	557	740	565	750	573
Operating Voltage(Vmp/V)	42.32	40.41	42.5	40.58	42.68	40.74
Operating Current(Imp/A)	17.26	13.79	17.42	13.92	17.58	14.07
Open-Circuit Voltage(Voc/V)	50.37	48.08	50.57	48.27	50.77	48.45
Short-Circuit Current(Isc/A)	18.35	14.67	18.53	14.81	18.71	14.95
Module Efficiency	23.5		23.82		24.15	
Nominal Module Operating Temperature(NMOT)	45 ± 2 °C					
Temperature Coefficient of Pmax	-0.25%/°C					
Temperature Coefficient of Voc	-0.29%/°C					
Temperature Coefficient of Isc	+0.045%/°C					

BENEFITS OF HJT MODULE

Introduction of HJT

What is HJT technology? Heterojunction technology (HJT) is a N-type bifacial solar cell technology, by leveraging N-type monocrystalline silicon as a substratum and depositing silicon-based thin films with different characteristics and transparent conductive films on the front and rear surfaces respectively.

Combining with the benefits of crystalline silicon and amorphous silicon thin-film technologies, HJT technology has excellent photoabsorption and passivation effects, as well as outstanding efficiency and performance. HJT panels are one of the technologies to improve the conversion rate and power output to the highest level, also represent the trend of the new generation of solar cell platform technology.



Advantages of HJT Technology

Higher Conversion Efficiency

HJT solar cells use α -Si-film as passivation materials to reduce the loss caused by the migration, which could increase the open circuit voltage to 750mV and guarantee the efficiency up to 24% at beginning.

More Energy Yield

Due to the natural bifacial symmetrical structure, bifaciality of HJT solar module could be up to 97%. And the energy yield gains can reach more than 30% benefiting from the power generation on back side.

Lower Degradation Rate

HJT solar cells are made of n-type wafer which does not have B-O bond, resulting in no LID. TCO film on HJT solar cell is conductive, so the charge won't polarize on the surface, which can avoid PID from the structure.

Better Weak Light Performance

The minority carrier lifetime of n-type solar cells is longer, leading a better power generation under weak-light, which is about 0.5%~1% higher than that of bifacial PERC solar cell per watt

Thinner Wafer Adapted

HJT solar cell can realize 90 μ m wafer application while ensuring the quality, and can be superimposed with OBB and shingle technology to improve the efficiency and save the cost

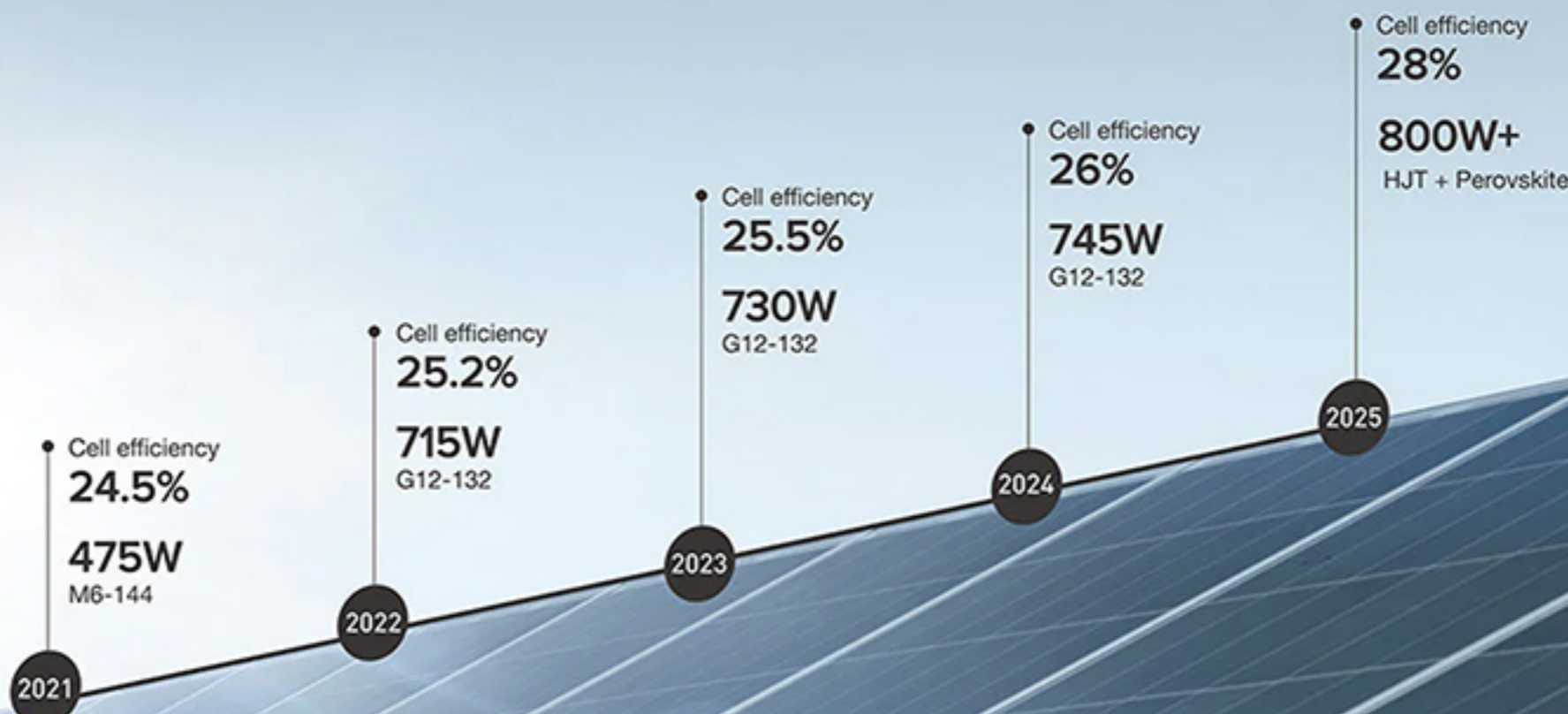
Ultra-low Carbon Footprint

By the end of 2023, Higon will achieve an estimated carbon footprint of HJT solar module manufacturing as low as 300g/W through ongoing technological research and industrialization.

Infinite future of HJT

Roadmap of HJT solar cell

- HJT + Perovskite
- Copper plating technology
- ultra-thin wafer mass production (210mm wafer in 120 μ m)
- High-precision printing technology with low silver consumption
- TCO optimization process technology
- Passivation technology
- Nano silicon technology
- Amorphous composite film technology
- Annealing process



Roadmap of HJT solar module

- Curved encapsulation technology
- Flexible encapsulation technology
- Highly-reliable encapsulation technology
- SMBB multiple busbar soldering technology
- Half cutting technology with low power loss
- Zero-busbar technology

QUALITY CONTROL

Stringent quality control is the cornerstone of Homesun's manufacturing. Our customers have come to expect uncompromising quality standards in our products. To meet this expectation of high quality, we continue to invest in state-of-the-art equipment and professional training of our employees. We are proud of our product quality and their reliable performance even in the most extreme conditions. Higon has received certifications for Quality Management System (ISO 9001:2015), Environment Management System (ISO 14001:2015) and Occupational Health and Safety Management System (ISO45001:2018) from both DNV GL and GZCC.

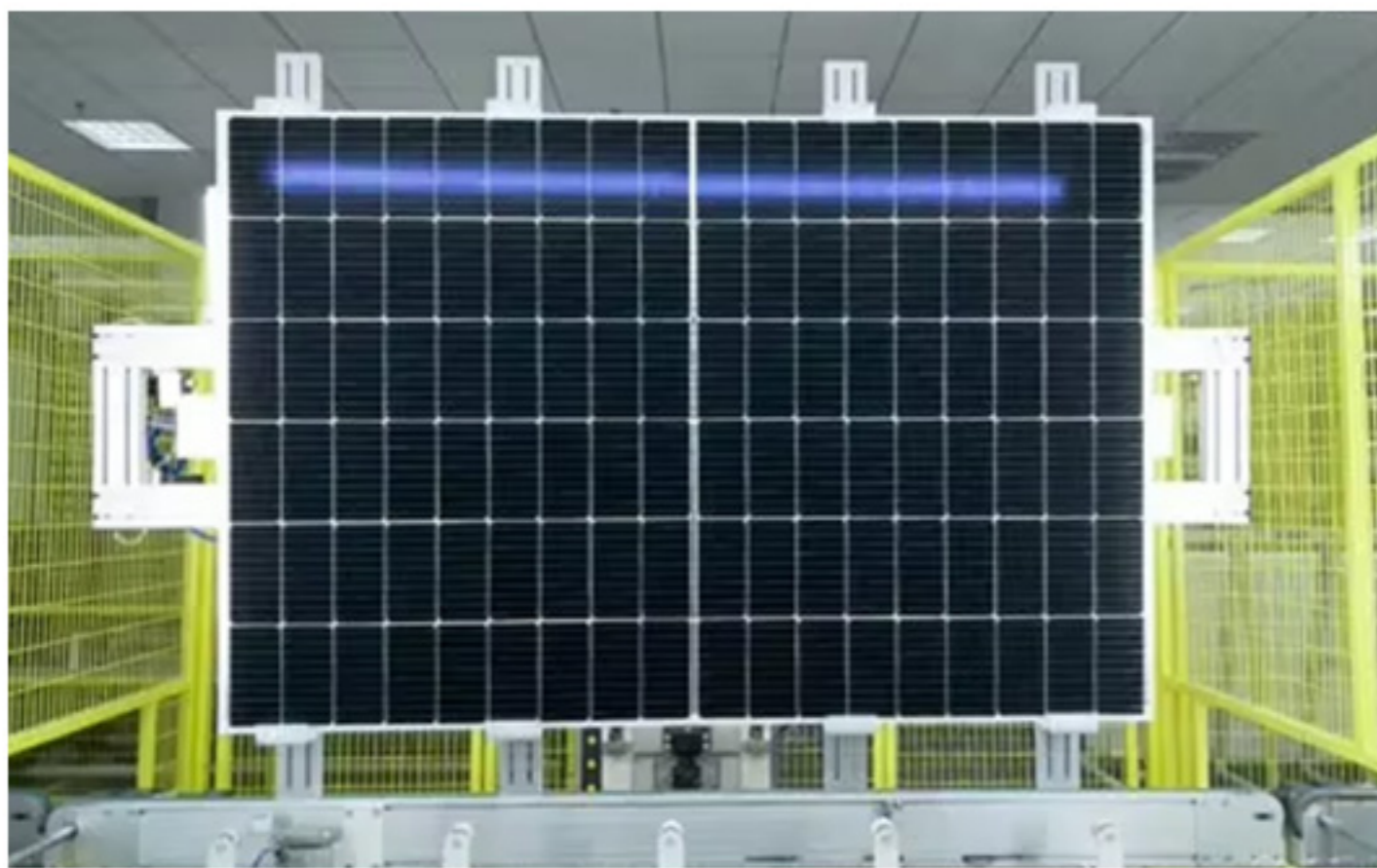


Solar Cell String EL Testing

Each solar PV cell string must be tested by EL machine to ensure every single solar cell is perfect.

EL Testing Before Lamination

Each Solar Module must be tested by EL machine before lamination to ensure every solar cell string is perfect.

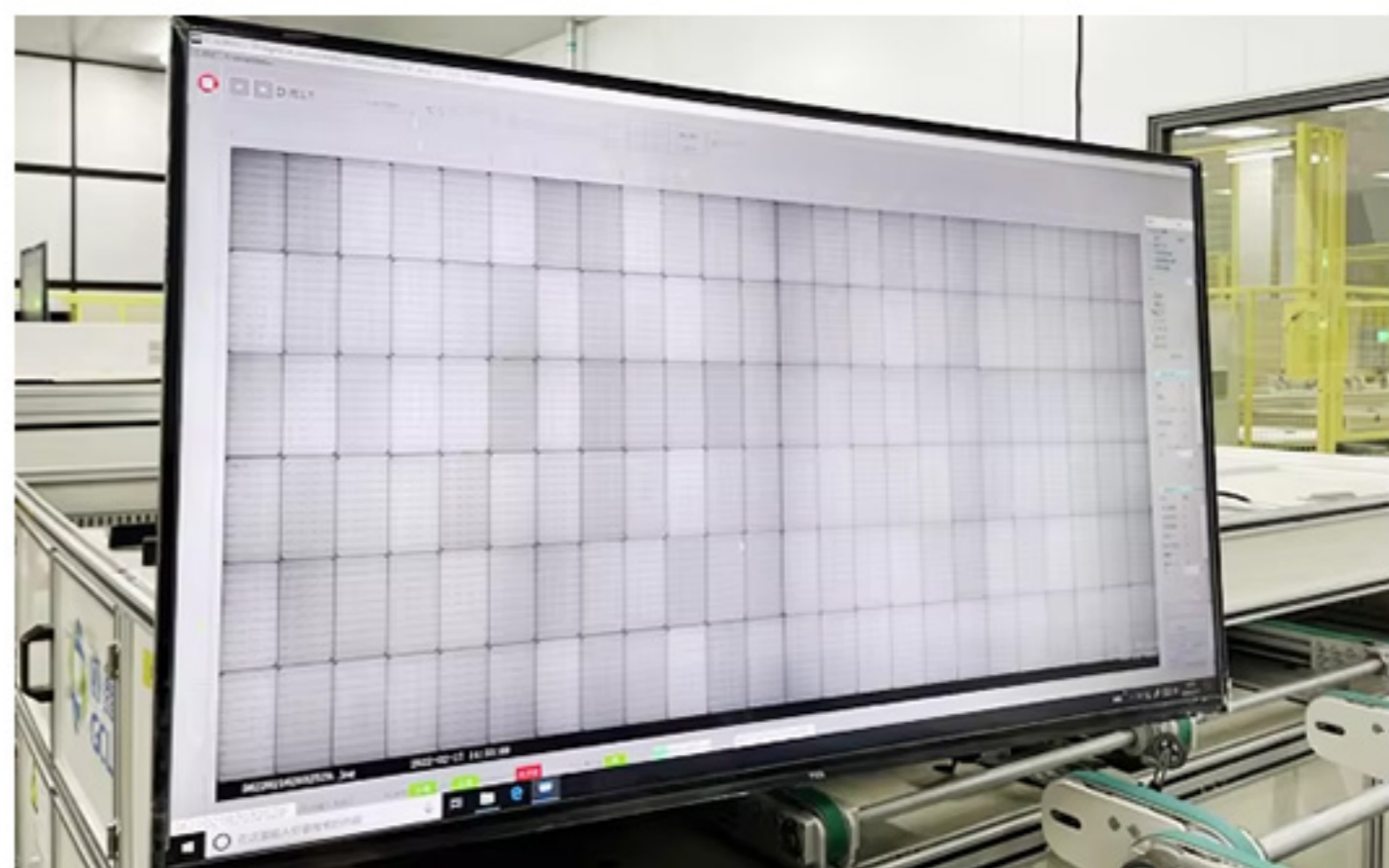


Appearance Inspection After Lamination

Each Solar Module must be inspected by QC after lamination to ensure there is no defect during lamination.

Final EL Testing

Final EL Testing 100% ensure zero internal electric defect for each solar module



Output Power Testing

Output power testing ensure 100% positive power tolerance and excellent power performance

Final Appearance Inspection

Each Solar Module must be inspected by QC before packaging to ensure there is no defect during production process.



SMART MANUFACTURING

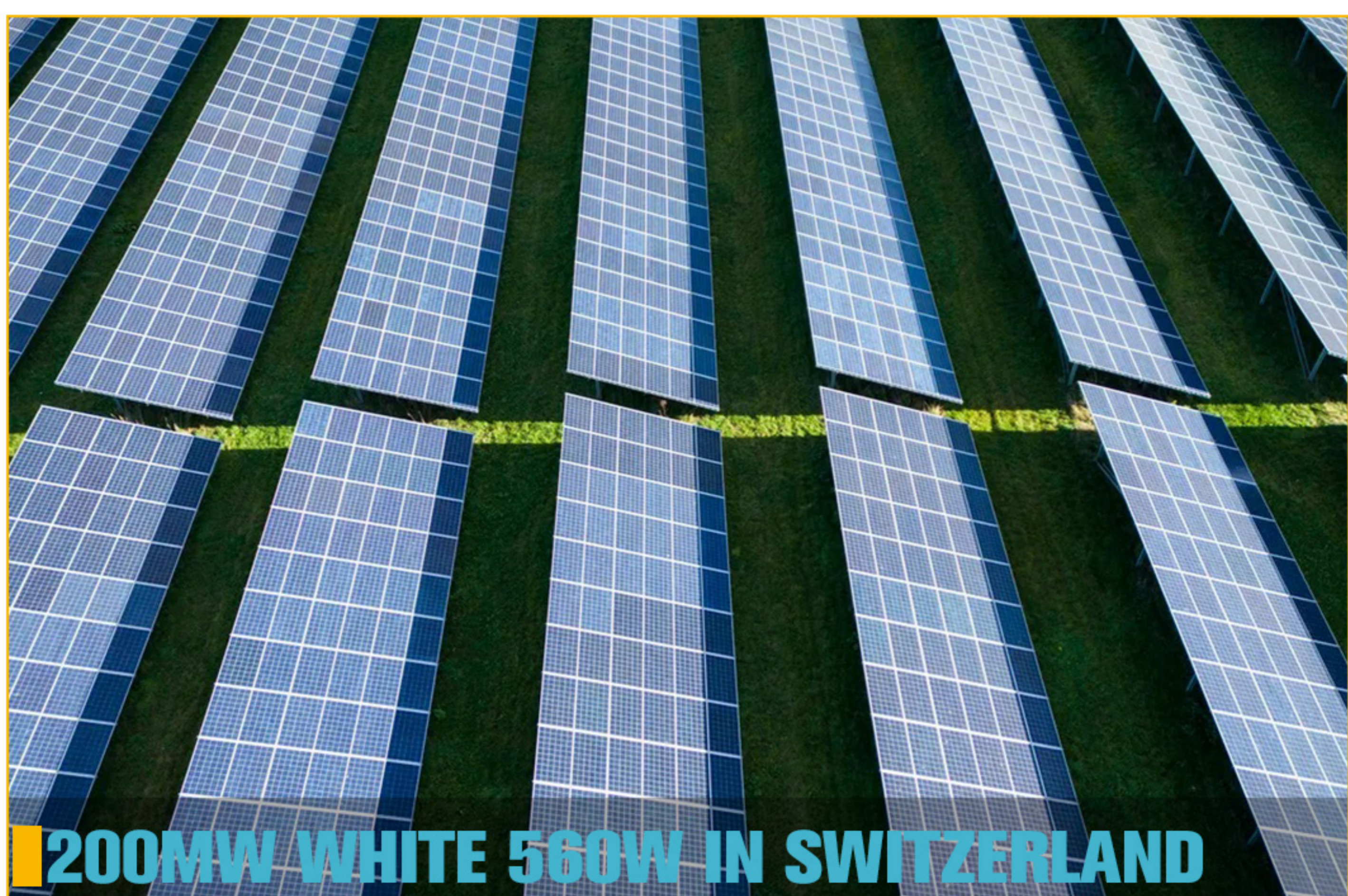
Modularized fully automated production lines enable fast delivery and cost savings. To achieve high utilization rate and efficiency, Higon divided the whole production chain into separate but closely united automated production sectors. Over 40 patents are applied on production process optimization, which could effectively avoid manual errors and make sure all the production processes from raw material inspection to packing are all monitored online and saved for later use. This system ensures that the materials from the beginning of production to the packaging is all monitored online.



PROJECT SHOW



2MW WHITE 560W IN USA



200MW WHITE 560W IN SWITZERLAND



50KW MODULE BLACK IN POLAND



30KW MODULE BLACK IN AUSTRIA