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SHANGHAI ELECTRIC

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About the Company

Shanghai Electric Hency Solar Technology Co., Ltd. was established in 2023 and belongs to Shanghai Electric Group (referred to as "Shanghai Electric").Shanghai Electric Hency Solar Technology Co., Ltd. focuses on providing efficient and clean photovoltaic products and services for the world, and is committed to becoming a global clean energy provider in many fields.

Parent company： Shanghai Electric Hency Solar Technology Co., Ltd.
Located in Minhang District of Shanghai
Subsidiary： Shanghai Electric Group Hency Solar Technology (Nantong) Co., Ltd.
Located in Nantong City, Jiangsu Province

20GW
Capacity Plan

In the early years of the company's establishment, the company planned the production capacity of 20GW and gradually implemented the production capacity landing.

25.5%
Cell Efficiency

The efficiency of the first HJT cell can reach 25.5%, the efficiency level is the forefront of the industry, and it can fully participate in market competition.

30%
Target Efficiency

The company will improve the target efficiency through continuous iterative updates of technical routes such as lamination and copper plating, and plans to increase the cell efficiency to 30% within 5 years.

Focus on core equipment products

Relying on Shanghai Electric's profound technical reserve, strong research and development strength and rich supply experience in the field of new energy, Shanghai Electric Hency Solar Technology Co., Ltd. builds efficient and reliable photovoltaic cells, photovoltaic modules and intelligent photovoltaic tracking support production capacity through independent research and development, and constantly actively expands domestic and foreign markets. We will continue to contribute to building a green, low-carbon and sustainable energy system.

Provide full scenario solutions

With its profound energy equipment manufacturing strength and excellent innovation ability,Shanghai Electric has been constantly innovating and making breakthroughs in the whole field of scenery fire hydrogen storage and realizing the application across scenes. It not only keeps improving in the traditional energy equipment manufacturing, but also actively arranges in the new energy field. According to different application scenarios and requirements, Shanghai Electric Hency Solar Technology Co., Ltd. provides customized "PV +"solutions to ensure that customers get the maximum benefit from the whole lifecycle investment in the energy field.

Large ground PV ・solar-plus-agriculture ・PV sandcontrol・ Mountain PV・ Thermal power +PV ・ PV+ coal mine

Distributed industry and commerce ・ BIPV ・PV green park ・PV transportation ・Whole county PV ・ PV+ sewagetreatment

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上海电气
SHANGHAI ELECTRIC

MISSION
Empower Global Industry　Make Life Smarter

VISION
To Be a World-class Manufacturer　Leading in Industrial Development

CORE VALUES
Strive for excellence　Seek value innovation
Pursue win-win cooperation　Put customer success first

BRAND POSITIONING
A Provider of Green Smart Industrial System Solutions

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http: /www.shanghai-electric.com

Core Products

Products

1 High efficent HJT cell — **Creator** — Cell product

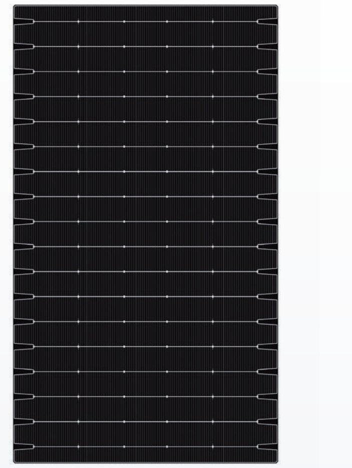
1 High efficent HJT module — **Creator1.0** series — N-type module

2 High efficent TOPCon module — **Pioneer2.0** series — N-type module

N Specific scene — **Edgeless Menditator** — and so on

PV CELL • Creator Series HJT Cell

Type: SEC111821R18



Advantages:

SMBB
High cell efficiency

Rectangular silicon wafer
Fully meet the needs of a variety of application scenarios

Lower temperature coefficient
More power output in extreme environments

Low (LID) and (PID)
High power reliability

High Bifaciality
More efficient back generation gain

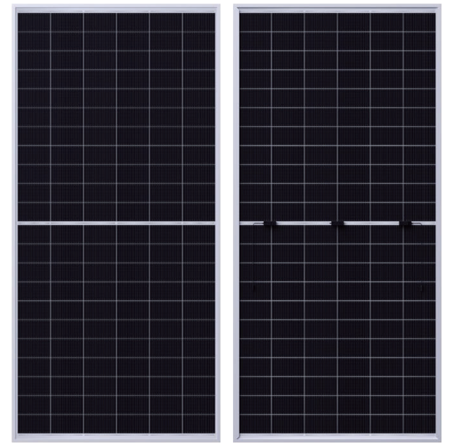
Sterling silver SMBB technology
High conductivity and high stability

Excellent light absorption & passivation performance
Excellent attenuation performance and low light performance, ensure higher output power, effectively solve the problem of low light power generation below 600W/m2

Leading double-sided
Using the industry's leading double-sided microcrystal process, the HJT cell is microcrystalline with amorphoussilicon to improve the conductivity

Excellent power generation performance
The natural double-sided structure of the HJT cell can increase the double-sided ratio of the module to more than 90%, ensuring higher power output

Solar Module • Creator 1.0 series HJT



Advantages:

SMBB Technology
Cell light trapping and current collection, less optical and resistance losses, effectively improving module power output and reliability.

Low Temperature Coefficients
Better temperature coefficient more stable power generation

>85% Bifaciality
Greater backside generation gain with significantly LCOE reduced.

Anti PID
Attenuation caused by PID is minimized through cell process optimization.

High reliability
Industry-leading process and power warranty ensure long-term efficient performance.

High reliability
Lower LID/LETID attenuation.

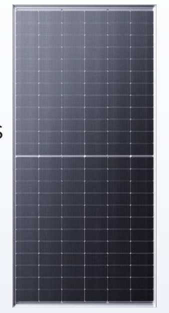
First year power degradation ≤1% | Liner power degradation ≤0.3% | **15** years Product Warranty | **30** years Power Warranty

Product Overvier:

Type	Cell Size	Cell Orientation	Glass	Frame Color	Size(mm)	Power Range
SEC1-144D-xxxYS, xxx=590-610	G10	144	dual-glass	silver	2278*1134	590-610W
SEC2-132D-xxxYS, xxx=615-635	210R	132	dual-glass	silver	2382*1134	615-635W
SEC2-96D-xxxYS, xxx=440-460	210R	96	dual-glass	silver	1762*1134	440-460W
SEC2-96D-xxxYB, xxx=435-455	210R	96	dual-glass	black	1762*1134	435-455W
SEC1-132D-xxxYS, xxx=710-730	G12	132	dual-glass	silver	2384*1303	710-730W

Edgeless series

- **Full-screen** design
- **Anti-dust, Anti-snow**
- Power generation gain **2-6%**
- Operation,maintenance cost savings
- Higher **anti-wind load**
- Reducing hotspot risks
- Special clamp design, integrated installation solutions

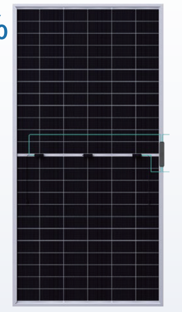


"Edgeless" Design
Infinite Possibilitieseen

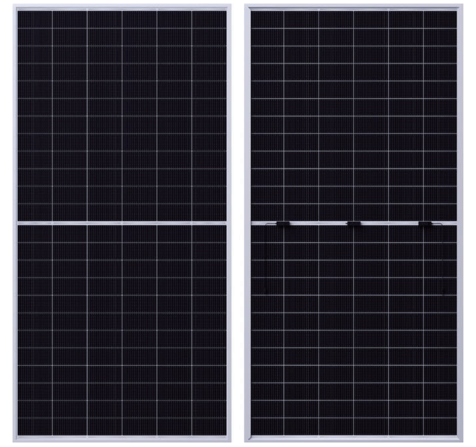
Meditator series

A module that thinks

- Power generation gain **10%-20%**
- Exceptional cost-effectiveness intelligent module costing only **0.1 RMB/W**
- Unique structure design more suitable for bifacial dual glass module
- Intelligent shutdown safe and reliable
- Smart platform for real-time diagnostic
- Intelligent positioning: onvenient operation and maintenance



Solar Module • Pioneer 2.0 series TOPCon



Advantages:

SMBB Technology
Better light utilization and shorter current transmission distance less optical and resistance loss.

Anti PID
Attenuation caused by PID is minimized through cell process optimization.

>80% Bifaciality
Greater backside generation gain with significantly LCOE reduced.

Anti LID
N-type modules have higher reliability and lower LID/LETID

Low temperature coefficient
Better temperature coefficient more stable power generation

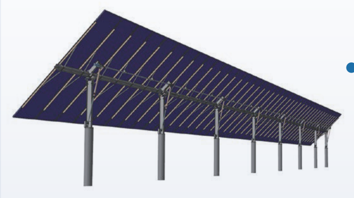
First year power degradation ≤1% | Liner power degradation ≤0.375% | **12** years Product Warranty | **30** years Power Warranty

Product Overview:

Type	Cell Size	Cell Orientation	Glass	Frame Color	Size(mm)	Power Range
SEP2-156D-xxxYS, xxx=620-640	G10	156	dual-glass	silver	2465*1134	620-640W
SEP2-144D-xxxYS, xxx=580-600	G10	144	dual-glass	silver	2278*1134	580-600W
SEP2-144S-xxxYS, xxx=580-600	G10	144	single-glass	silver	2278*1134	580-600W
SEP2-108D-xxxYS, xxx=425-445	G10	108	dual-glass	silver	1722*1134	425-445W
SEP2-108D-xxxYB, xxx=420-440	G10	108	dual-glass	black	1722*1134	420-440W
SEP3-132D-xxxYS, xxx=605-625	210R	132	dual-glass	silver	2382*1134	605-625W
SEP2-132D-xxxYS, xxx=700-720	G12	132	dual-glass	silver	2384*1303	700-720W

PV Tracker

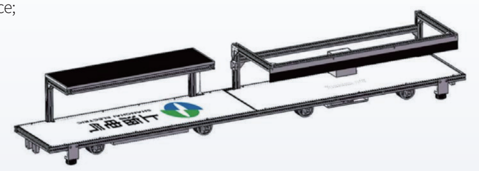
SEC Tracker 2P



- **Higher power generation revenue**
  Compared with the fixed angle mounting, the tracker can increase the power generation revenue by 9%-15%, especially the revenue at the time of peak electricity price; The optional Shanghai Electric AI intelligent tracking controller can increase the power generation of the system by 1%~6%.
- **Stronger wind resistance**
  To solve the problem of torsional stability, damper (for 1P) and multi-push rod synchronous drive technology (for 2P) are used to improve the damping and torsional rigidity of the system, increase the natural vibration frequency and critical wind speed of the structure, reduce the dynamic wind load of the structure, and improve the wind resistance of the structure.
- **Lower system cost**
  Based on the wind tunnel test data, the structural depth optimization design was carried out. Synchronous drive technology increases structural torsional constraints, also provides opportunities for structural optimization, and makes torque distribution more uniform, which can help customers reduce the size and number of pile foundations and reduce system costs.

Cleaning robot

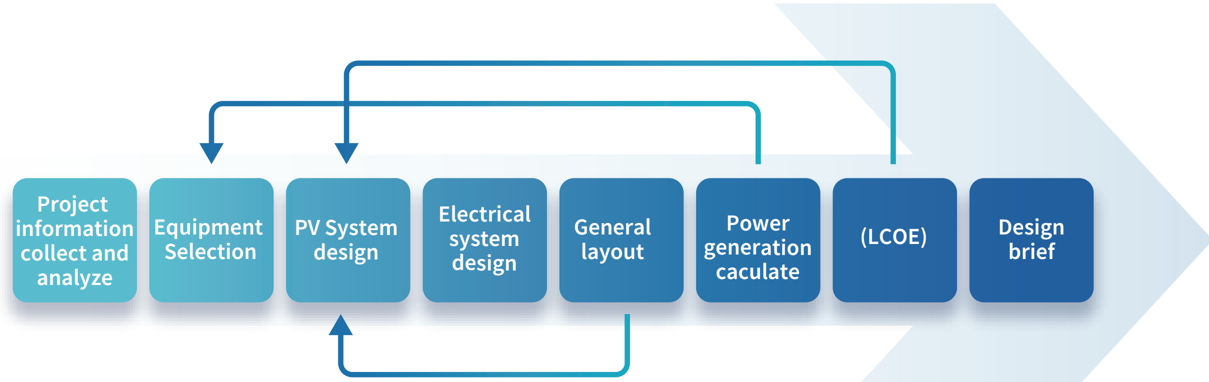
PV system cleaning robot+ straddle carrier



- High postion accuracy
- Intelligent scheduling
- Joint operation and control
- Wide communication mode
- Modular design
- Compatible with multiple PSCRS

Full scenario solutions

Progress



Project example

绍兴嵊州250kWp光伏项目
Shaoxing Shengzhou
250KW PV project

上海汽轮机厂1.554MW光伏项目
Shanghai Electric Power Generation Equipment Co.,Ltd.
Turbine Plant 1.554MW PV project

上海振华轴承厂一期0.9366MW光伏项目
Shanghai Zhenhua Bearing Works Co.,Ltd.
0.9366MW PV project I

广东蔚盈科技1.2MW光伏项目
Guangdong Weiying Technology
1.2MW PV project