



Solargiga Energy Holdings Limited | Advanced Productivity

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Solargiga Energy

About Solargiga 1

Make the World a Better Place

Founded in 2000, Solargiga Energy is a well-known photovoltaic company. Listed in HKEX in 2008 (00757.HK), Solargiga Energy integrates R&D, production, sales&marketing and system application of PV modules. We employ more than 3,000 staff worldwide and have production bases in Jinzhou (Liaoning), Yancheng (Jiangsu). Our Marketing&Operation Center located in Suzhou (Jiangsu), and set up Beijing Office. Our business footprint covers major PV markets around the globe. We are committed to providing global customers with high-quality PV products, technical support, after-sales services&solutions, and promoting the development of the clean energy industry.



Solargiga Energy

23 Year's Journey

still forging ahead...

2000

2000

Solargiga Energy was officially established

2005

2005

Founding of Jinzhou Yangguang Energy Co., Ltd.

2006

Start of PV cell manufacturing

2007

Start of PV system integration business

2008

2008

Listing of Solargiga Energy Holdings Limited in HKEX Stock Code 00757.HK

2009

Start of PV module manufacturing

2015

2015

One of the initial suppliers of National Top Runner projects

2016

Set-up of Japan Office

2018

2018

Certified as National Green Factory

2019

Founding of Jiangsu Yueyang Photovoltaic Technology Co., Ltd.

Scaling up of advanced module productivity

2022

2021

Set-up of Suzhou Office
Amplifying the Sales & Marketing framework
Advanced productivity takes up 90% of all

2022

The module capacity is increasing year by year
The module shipment of 2022 has reached over 5GW
Certified as National Pioneer Enterprise of Smart Photovoltaic

2023

2023

Set-up of Beijing Office
Set-up of Australia Office



Productivity Layout 2

Productivity Layout

1 + 1 > 2



Module

2022
10GW

2023-2024

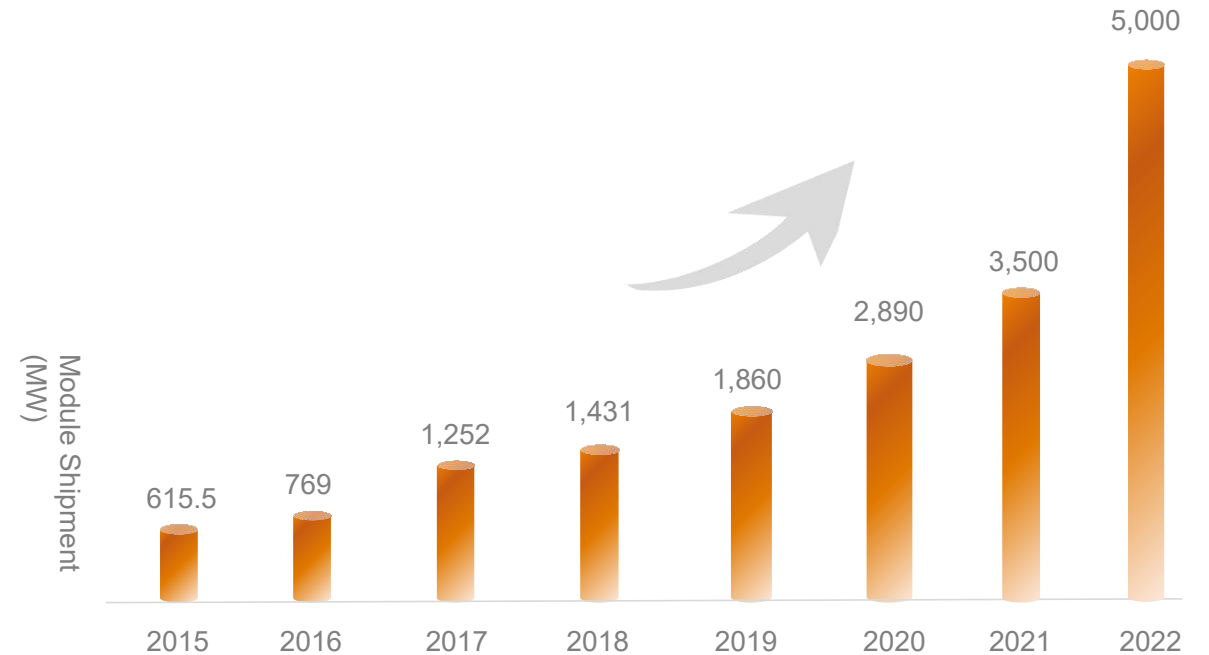
20GW 

Measurable Performance

never stop climbing...

5GW

The shipment of module is in constant rising year by year since its mass production in 2009, with a witnessed proliferation in recent years. The module shipment of 2022 has reached over 5GW.



Jinzhou, LIAONING

PV module specialized

ANNUAL CAPACITY: 2GW

Phase 1 - 0.4GW annual

4 production lines for customized orders including BS, Tile, BIPV modules mainly.

Phase 2 - 1.6GW annual

4 production lines, 2 for M6 sized and 2 for M10 sized. Possible to switch into a full-scale workshop of an annual capacity 1.6GW for M10 sized module.



Jianhu, JIANGSU

PV module specialized

ANNUAL CAPACITY: 18GW (by 2024)

Phase 1 - 2GW annual

Consists of 4 highly roboticized module production lines of an international leading level.

Phase 2 - 6GW annual

The biggest workshop in the industry in terms of unit capacity, with 7 intelligent module production lines integrated.

Phase 3 - 10GW annual expected

Construction begins in the end of 2022 and in service in 2024.





**Manufacturing
Archive**

3



Automated Processing

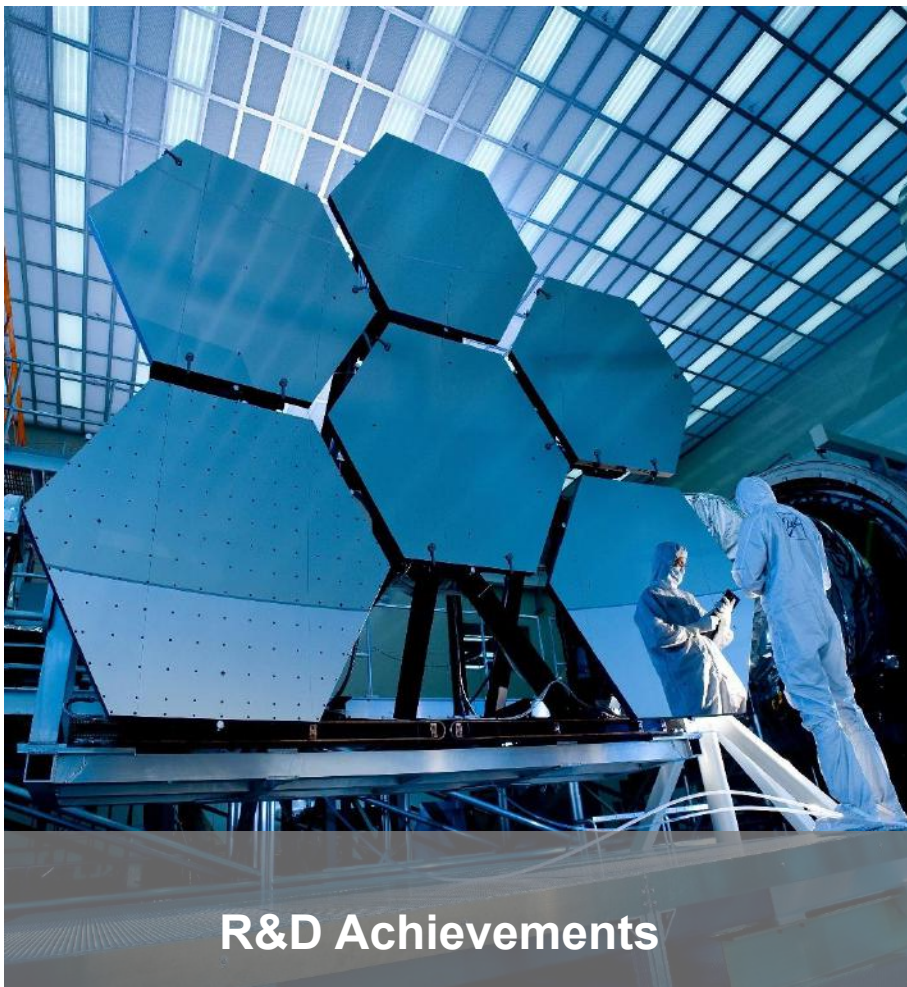
Solargiga Energy has set up fully-automated production lines adapting to kinds of requests for production set forward by advanced technologies. Our production lines can be flexibly adjusted to modules of wafer sized from M6, M10 to G12. Automatic testing technology is embedded to realize a leap from simple manufacturing to an intelligent one.

Real-time Data Management

Our ERP platform integrates real-time interaction, planning, implementation and instant report-forming and analysis, offering continuous protection of innovative processes. A CNAS-certified laboratory realizes data sharing of test processes and mutual recognition of test results.

End-to-end Quality Control

Our end-to-end quality control system is certified by ISO9001, ISO14001, and ISO45001, ensuring an overall coverage of every link related to product quality in the system supervising the module design and processing. A Solargiga-tailored QC system is already in place.



Committed to Innovation

Solargiga Energy is committed to innovation, investing about 5% of its operating revenue in R&D and innovation every year on average. We have won 300+ national patents, 50+ science and technology awards.

Industry-University-Research Cooperation

Solargiga Energy and Shenyang Jianzhu University jointly developed BIPV series products. Solargiga Energy is also collaborating with Dr. Rui Wang's team at Westlake University on photovoltaic perovskite technology.

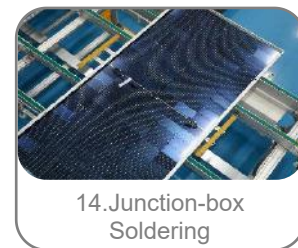
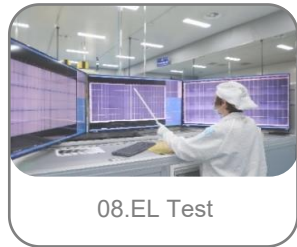
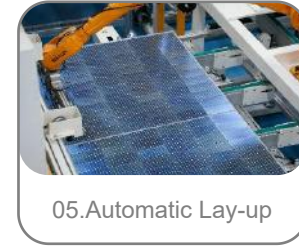
Constantly Upgrading Technology

Solargiga Energy has successively accelerated the innovation of M10 and G12 module. N-type bifacial cell, and N-type bifacial module. We own the most cutting-edge N-type IBC cell technology and FPC module sealing technology.

CNAS Certified Laboratory

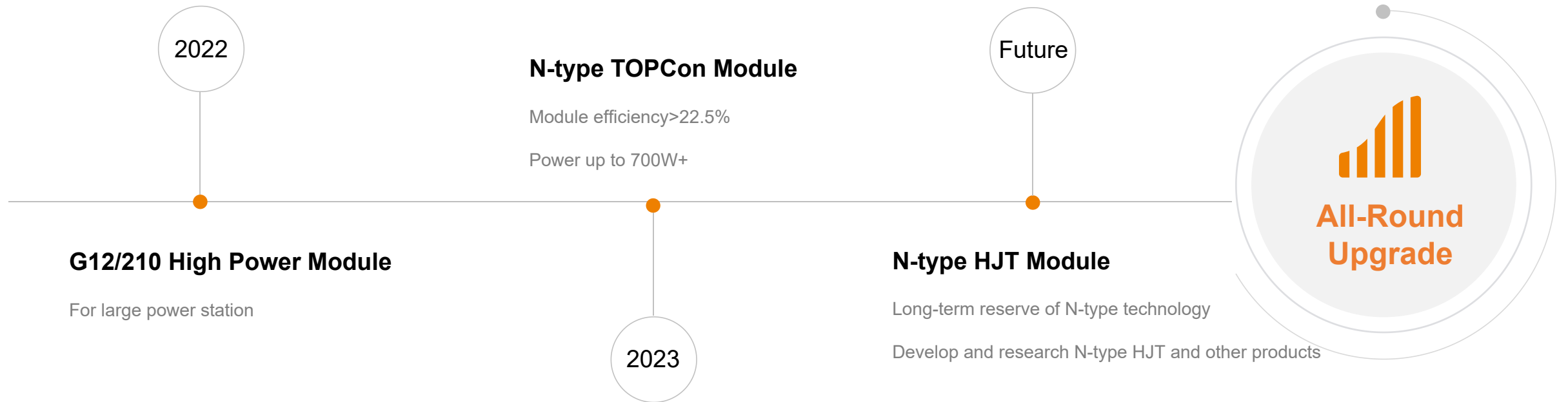
China National Accreditation Service for Conformity Assessment certified laboratory.

Module Processing



Innovative Roadmap

2022-2024



Product Matrix

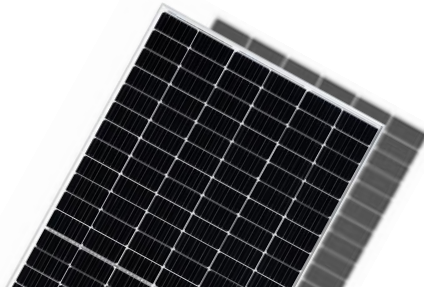


Mono 166 72 Cells

JMPV-HM6HBM1/72-450~455 (R)

Bifacial 166 72 Cells

JMPV-HM6VHBM2/72-450~455(R)



Mono 166 60 Cells

JMPV-HM6HBM1/60-370~380 (R)



Mono 182 54 Cells

JMPV-X1/54-410~420 (R)



Industrial and Commercial Distribution

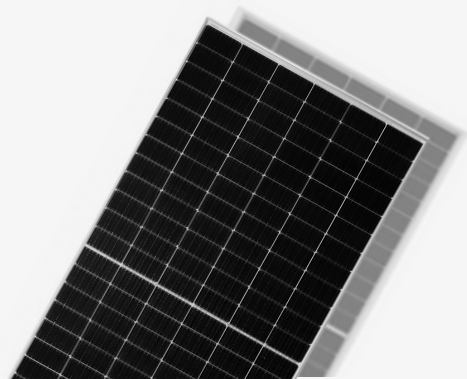
Large Power Station

Mono 182 72 Cells

JMPV-X1/72-545~555 (R)

Bifacial 182 72 Cells

JMPV-XV2/72-545-555 (R)

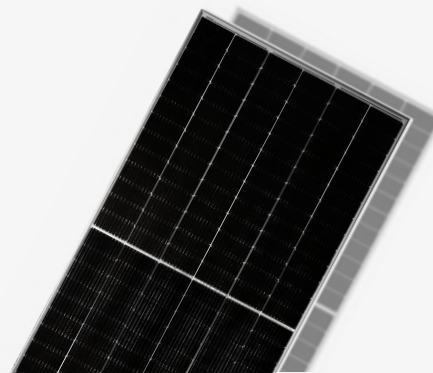


Mono 182 78 Cells

JMPV-X1/78-590~600 (R)

Bifacial 182 78 Cells

JMPV-XV2/78-590~600 (R)

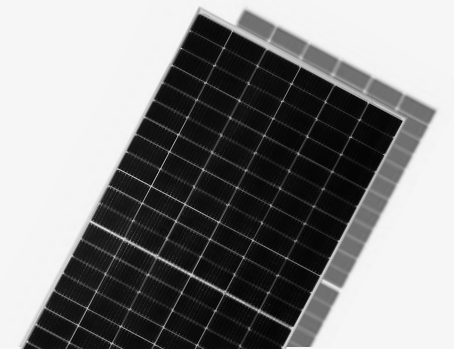


Mono 166 72 Cells

JMPV-HM6HBM1/72-450~455 (R)

Bifacial 166 72 Cells

JMPV-HM6VHBM2/72-450~455 (R)



Product Matrix



Large Power Station

Mono 210 66 Cells

JMPV-T1/66-660~670(R)

Bifacial 210 66 Cells

JMPV-TV2/66-660~670(R)



Mono 210 60 Cells

JMPV-T1/60-600~610(R)

Bifacial 210 60 Cells

JMPV-TV2/60-600~610(R)



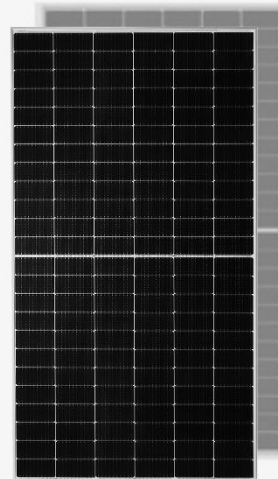
N-type TOPCon

Mono 182 72 Cells

JMPV-X6/72-570~580(R)

Bifacial 182 72 Cells

JMPV-XV6/72-570~580(R)



Mono 210 66 Cells

JMPV-T6/66-695~705(R)

Bifacial 210 66 Cells

JMPV-TV6/66-695~705(R)



Product Matrix



Mono 182 54 Cells

JMPV-X1/54-410~420 (R)



Mono 166 60 Cells

JMPV-HM6HBM1/60-370~380 (R)



Mono 166 72 Cells

JMPV-HM6HBM1/72-450~455 (R)



Residential Application

BIPV Application

IBC Module for residence

475-485W 48 Cells



166 customized Module for residence

75-85W



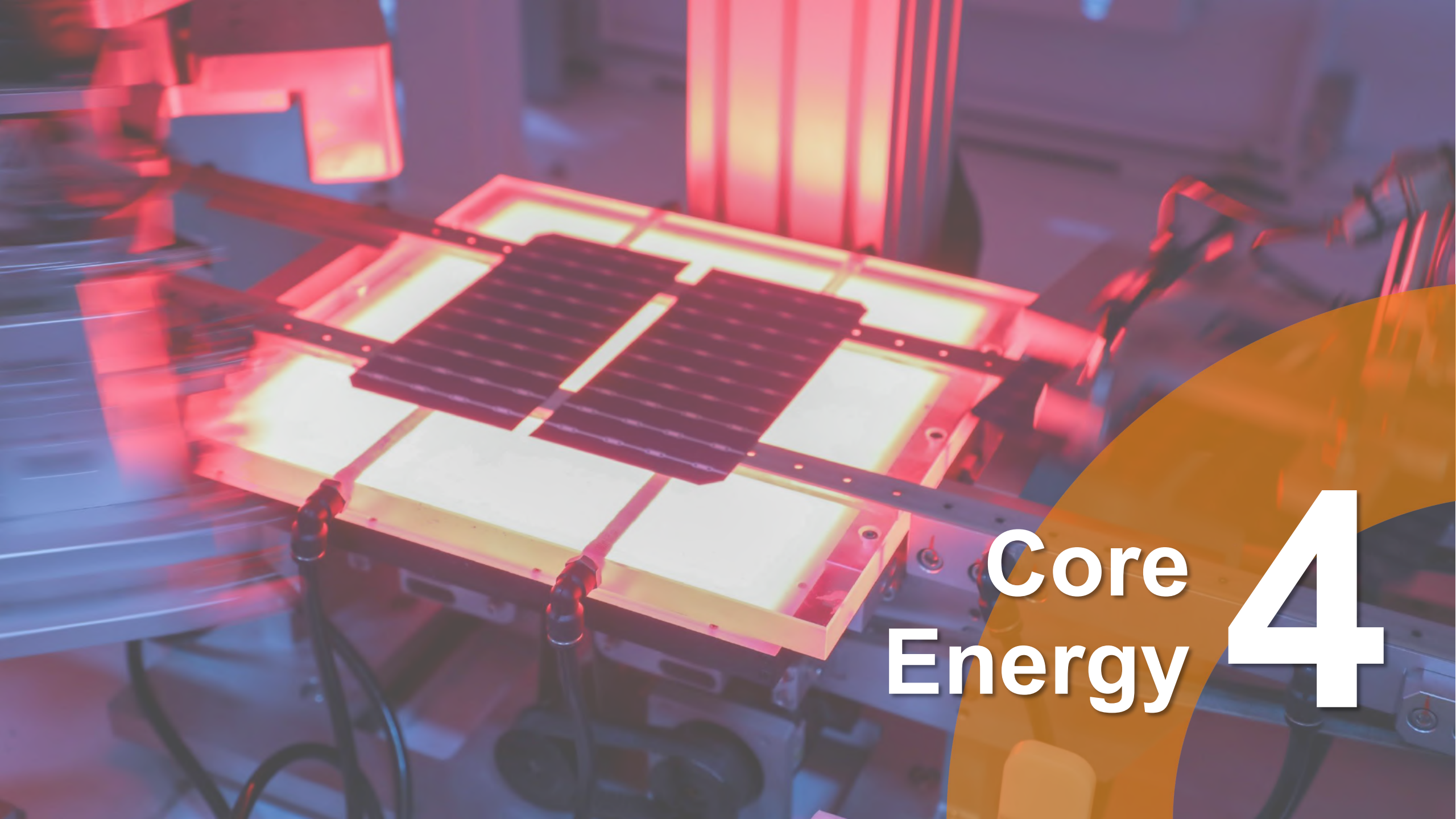
182 customized Module for residence

55-65W



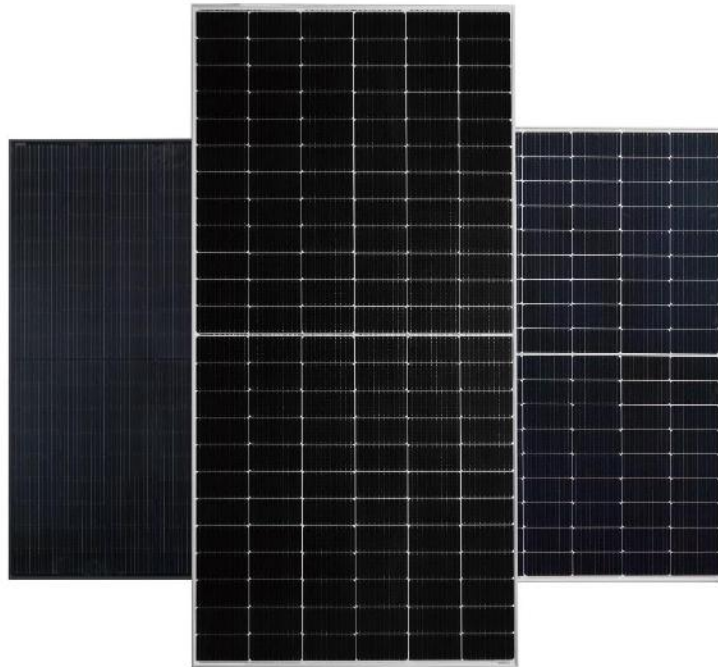
Tile Module for residence





Core
Energy **4**

Technology Highlights



High Efficiency, High Power

Multi-Busbar bifacial PERC technology with more current collection.
Half cell design reduces inner current loss, improving power output.
Rear power generation up to 5-25%.



Advanced Cell to Module Technology

Optional for M10/G12 mono or bifacial cells, N-type is also available.



Enhanced Mechanical Load

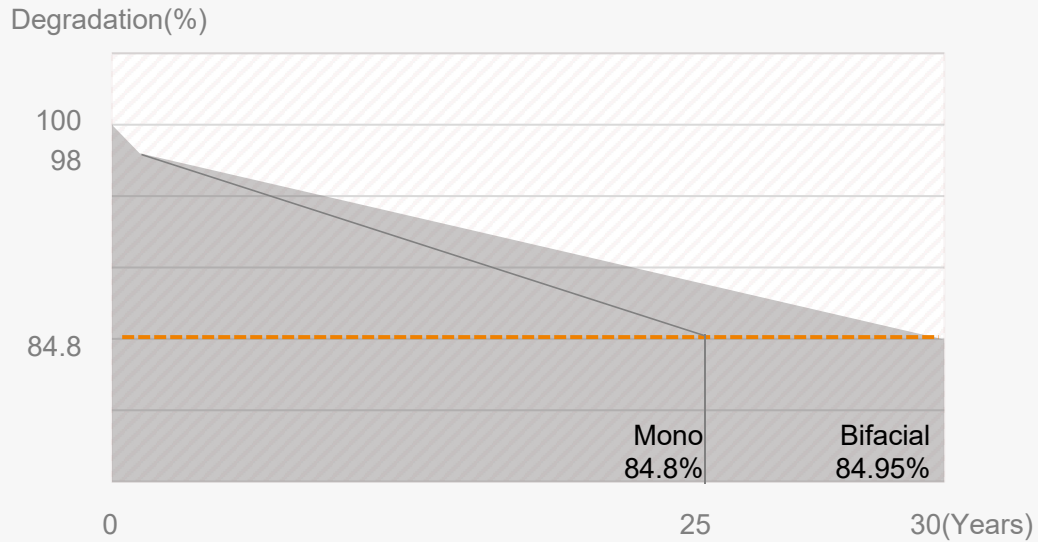
5400 Pa snow load 2400 Pa wind load



Premier Solution for various application scenarios

M10/G12 high power module enables lower BOS cost
and reduces LCOE

Trustworthy Quality



Lower Annual Power Degradation Reliable Linear Performance Warranty

25/30-year linear performance warranty

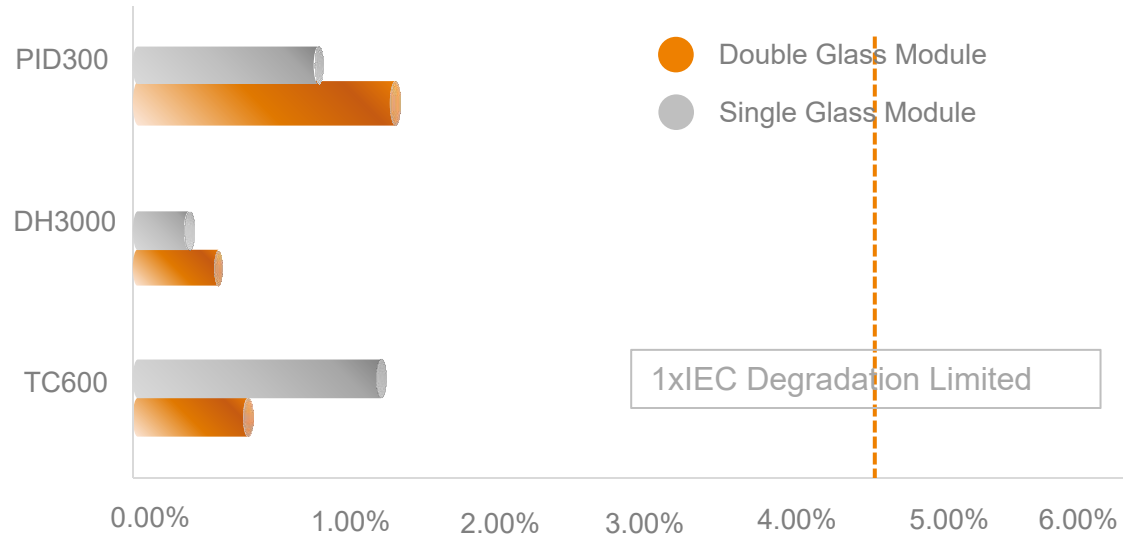
2% for the first year, 0.55%(mono)/0.45%(bifacial) annual degradation.

The first year of N-type products degradation is less than 1%,
and ensure that the output power of N-type products after 30 years is not less than 87.40%
of the original power.

Fully certified by professional organizations



Test Performance



Testing Information

Test Lab: UL Test

Test Period: Jun-Nov 2021

182 double glass Module: JMPV-XV2/72•545 (R)

182 single glass Module: JMPV-X1/72•545 (R)

IEC 61215/IEC 61730

IEC TS 62804-1:2015 PID Testing of PV Modules

IEC 61701 Salt Mist Corrosion Testing of PV Modules

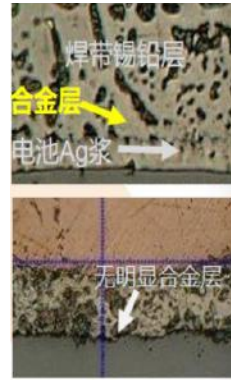
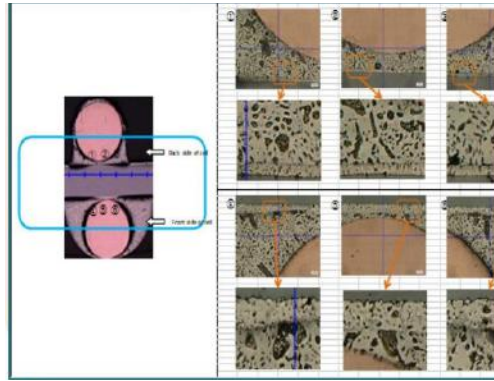
IEC TS 62782-2016 Cyclic (dynamic) Mechanical Load Testing of PV Modules

IEC 62716 Ammonia Corrosion Testing of PV Modules

IEC 60068-2-68:1994 Dust and Sand Testing of PV Modules

IEC 61853-1 Irradiance and Temperature Performance Measurements
and Power Rating Testing of PV Modules

Solid Welding



Strengthened quality control over welding

Metallography experiment of EGS is included in the quality management of module design and processing. The best welding parameters for the alloy layer are verified through the experiment on cell and welding to ensure the welding quality of modules.

In the case that the alloy layer fails to be synthesized, there will be a risk of welding strings splitting off the cell while the module is working. As a consequence, the generating efficiency will be cut down and other risks, such as the burning of module caused by increased contact resistance and local temperature rise, may occur.

Certified Management System



Fully certified by

- ISO9001 Quality Management System
- ISO45001 Occupational Health and Safety Management System
- ISO14001 Environmental Management System
- RB/T101 Energy management system

Customer Benefit is underscored in Solargiga Energy. We make every effort to understand and satisfy customer demands.

We emphasize employees' physical and mental health and urge the improvement of their safety and sanitary skills by employing international standards.

We possess "Green Passport" to the international market and are committed to sustainability by shipping "Green Products" to every corner of the planet.

Constantly optimizing energy efficiency, usage and consumption is our everlasting goal in business.

Thank you



@Solargiga Energy