G-STAR PTE. LTD.

COMPANY PROFILE



CHOOSE GSTAR, GRASP THE FUTURE!



ABOUT G-STAR

1500 t Global Staff

major production bases

GW+ annual production capacity (projected to 2024)

majorglobal service centers

years+ experience in the field of photovoltaic power generation

Founded in 2019, G-STAR is a technology-based enterprise specializing in photovoltaic power generation solutions, realizing vertically integrated R&D, production and sales from silicon wafers, cells to modules, and is a one-stop supplier of new main-stream photovoltaic products in the world. Adhering to the globalization layout, the company has formed a strategic layout of "one headquarters and six centers", and will realize the significant transformation of a GW-class manufacturing supplier overseas in 2024. Adhering to the mission of "building a greener and better future for mankind", G-STAR will continue to forge ahead with its global partners, dreaming of an energy revolution and exploring more possibilities for the harmonious coexistence of man and nature!

Presently, the company's primary products include 182/210mm large-sized silicon wafers, PV cells, high-efficiency monocrystalline PERC, TOPCon, HJT, HPBC photovoltaic modules, BIPV photovoltaic building integration, and lithium storage batteries. G-STAR has established a "vertically integrated" PV production base in Southeast Asia. Projected capacities for 2024 are 3GW for ingot, 3GW for silicon wafers, 3GW for photovoltaic cells, 12GW for frames, and 3GW for modules. The construction of the silicon ingot slicing factory in Indonesia is underway, covering an area of 60,000 square meters. Laos is constructing a factory for the manufacture of photovoltaic aluminum frames and brackets, with an annual production capacity of 60,000 tons. Additionally, the company maintains offices and a front warehouse in the United States, ensuring timely and efficient provision of products to meet customer demands.

G-STAR's products have obtained various international certifications including ISO9001 for quality management systems, ISO14001 for environmental management systems, ISO45001 for occupational health and safety systems, as well as certifications from TUV, CEC, ETL, CE, BIS, among others. Our products are sold to Europe, America, Asia, Africa and other countries and regions, utilized in household PV power plants, industrial and commercial PV power plants, large-scale ground-based power plants, agricultural PV power plants, fishing PV power plants, and more. Through our cost-effective products and prompt service, G-STAR has garnered widespread acclaim from customers worldwide.

AREAS OF SPECIALIZATION



182/210mm Monocrystalline Solar Modules



High-efficiency TOPCon Solar Modules



High-efficiency HJT Solar Modules



BIPV Photovoltaic Building Integration





Large-scale Ground-based Power Plants



Agricultural PV Power Plants



Fishing PV Power Plants



Industrial and Commercial PV Power Plants



Household PV Power Plants



CORE COMPETENCIES

G-STAR is a technology-based enterprise specializing in photovoltaic power generation solutions, realizing vertically integrated R&D, design, production and sales from silicon wafers, cells to modules, and is a one-stop supplier of new mainstream photovoltaic products in the world.



SPECIALIZED PRODUCTION



SPECIALIZED SPEED



SPECIALIZED PRODUCTS

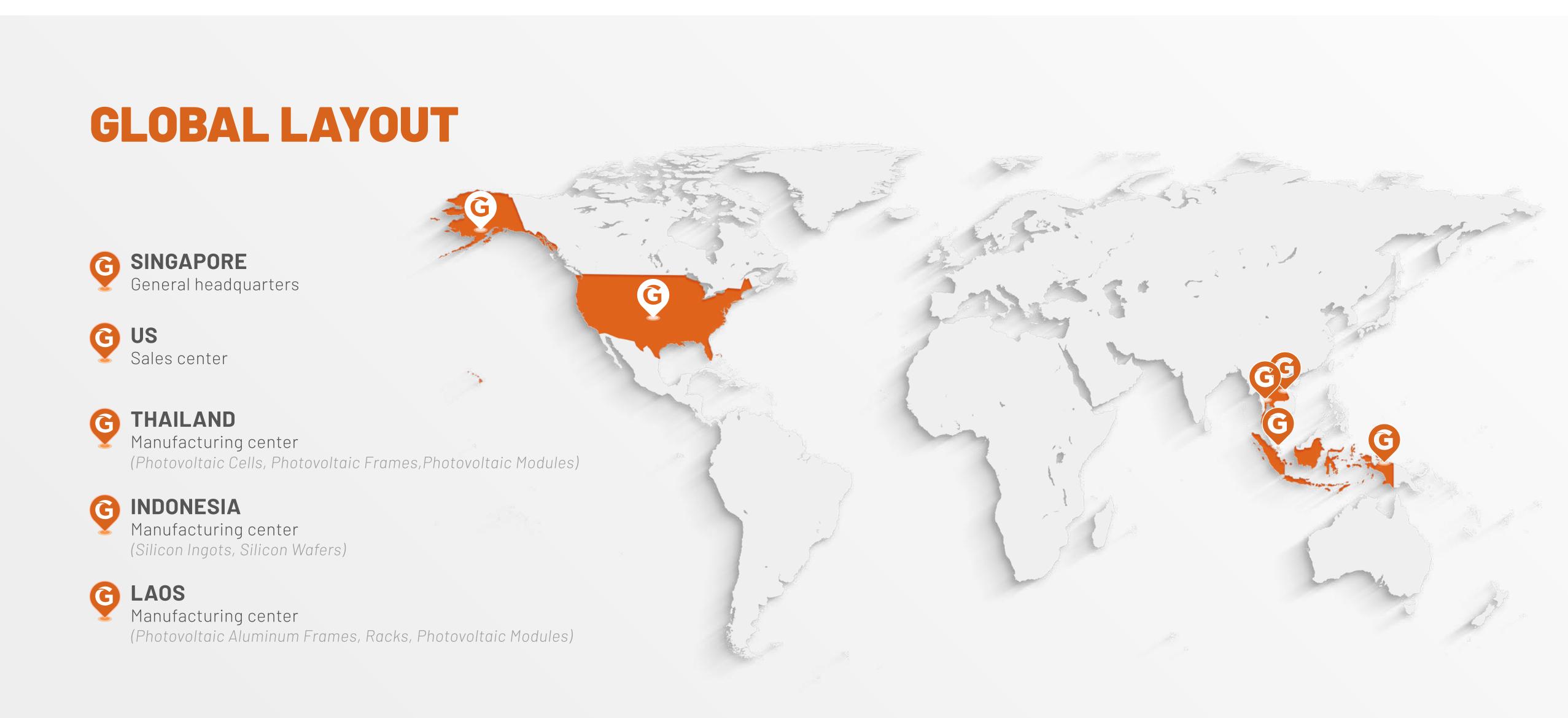


SPECIALIZED PRICES









DEVELOPMENT HISTORY AND PLANNING The plan

2023

- STD cell and wafer factory in Thailand put into construction •
- The planned annual production capacity is 8GW of wafers and 8GW of cells:

 Phase I 3GW wafers and 3GW N-type cells

 Phase II 5GW wafers and 5GW HJT cells
 - YiYin module bezel plant in Thailand goes into production Realization of annual production capacity of 2GW
 - Construction of STD crystal pulling/slicing plant in Indonesia commenced Planned annual capacity of 3GW silicon rods and 3GW silicon wafers

2024

- STD cell and wafer plant in Thailand goes into production Realization of annual production capacity of 3GW silicon wafers and 3GW N-type cells in the first phase
- STD's crystal pulling/slicing plant in Indonesia goes into production Realized annual production capacity of 3GW silicon rods and 3GW silicon wafers
- ALUMSUN PV Aluminum Bezel and Rack Manufacturing Plant in Laos Commences Production
 Achieve annual production capacity of 60,000 tons in the first phase and 120,000 tons in the second phase
- 2GW solar monocrystalline vertical integration project opens in the US
- OCEAN module plant relocated to Laos
 Achieve annual production capacity of 2GW

2021

G-star incorporated in Singapore

2022

OCEAN module plant in Thailand goes into production
 Realization of annual production capacity of 1GW

2019

G-star Brand Incubation 2019

Mainly cell production and sales •

2020

• Establishment of the American company EPOCH

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HONORABLE MENTION

G-STAR products have successively obtained ISO9001 quality management system certification, ISO14001 environmental management system certification, ISO45001 occupational health and safety system certification, as well asmultiple international authoritative product certifications such as TUV, CEC, ETL, CE, BIS,etc.

















PARTNERS

















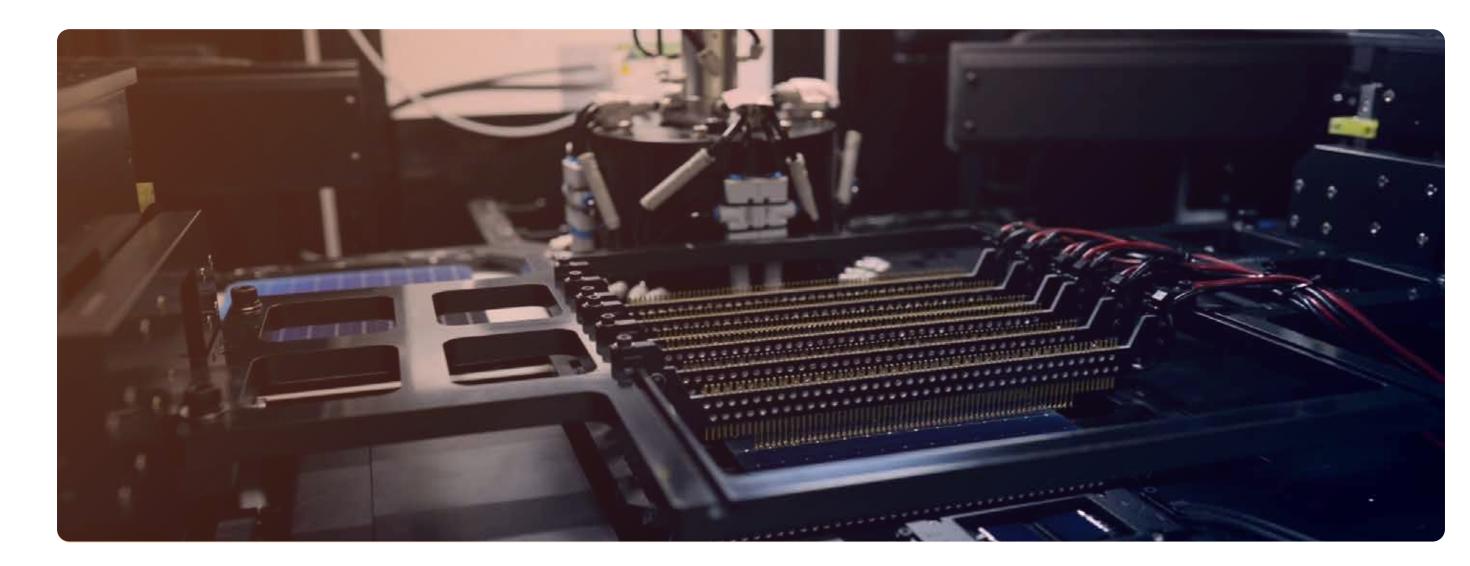


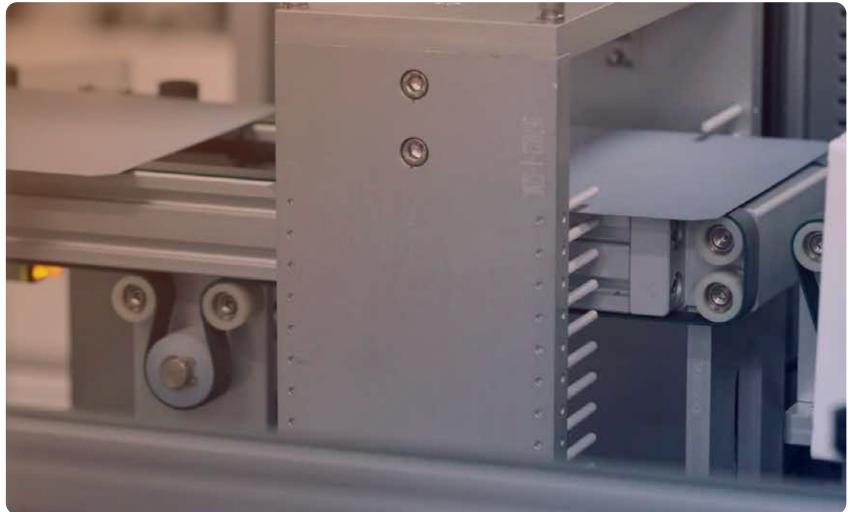












THE OVERSEAS VERTICALLY INTEGRATED SMART FACTORY: 'SMART MANUFACTURING' IN PHOTOVOLTAICS

G-star's comprehensive implementation of smart manufacturing has created a benchmark for efficient, agile, and fully automated manufacturing of photovoltaic products, allowing its globally distributed factories to be characterized by scale, standardization, modularity, sophistication, superior quality, and flexibility, with brand new solutions and technologies used from production to internal logistics and transportation.

Advanced equipment and technology

The factory is equipped with state-of-the-art production equipment and technology, including high-efficiency automated systems and precision production lines. The application of these equipments and technologies enables us to produce at a faster speed, higher precision and lower cost.



THE OVERSEAS VERTICALLY INTEGRATED SMART FACTORY: 'SMART MANUFACTURING' IN PHOTOVOLTAICS

Production capacity and scale

The factory has massive production capacity and excellent scale advantages. Our production lines are diverse and large enough to handle large orders and maintain high quality production levels.

Sustainability and Environmental Measures

G-star is committed to sustainable production and environmental protection, adopting energy-saving, environmentally friendly materials and recycling to minimize environmental impact, and constantly seeking innovative environmental solutions.



Professional staff



Intelligent production



Advanced equipment



Big data support



High degree of automation



Production line flexibility



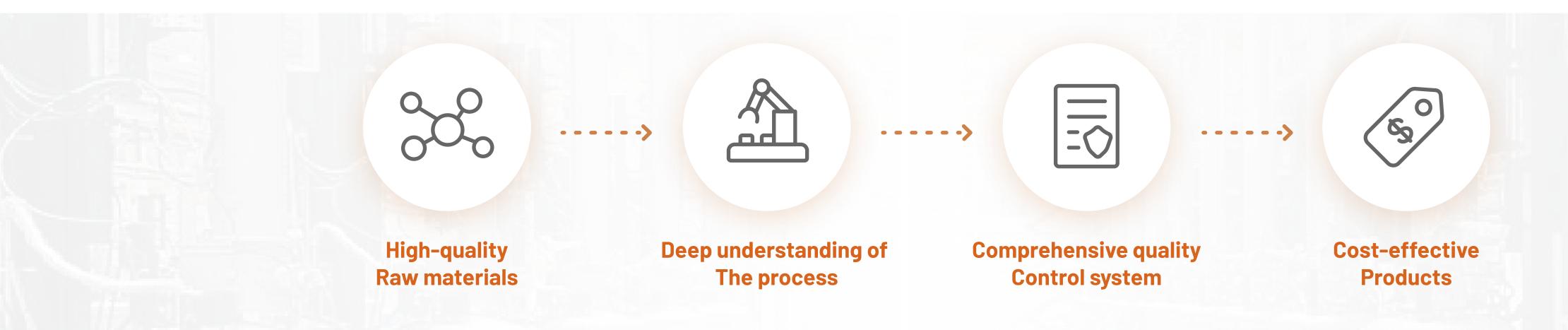
Efficient production processes



Automatic monitoring of the entire process



HIGH-QUALITY PRODUCTS AT COMPETITIVE PRICES



G-Star focuses on vertically integrating the production process, with a perfect own vertically integrated production plant and professional manufacturing team, which can realize effective cost control and enhance the competitive advantage of product price.

We strictly control the quality of raw materials, fully implement the quality control system, and strictly implement international standards and certification systems throughout the production process. G-STAR products have obtained ISO9001 quality management system certification, ISO14001 environmental management system certification, ISO45001 occupational health and safety system certification, TUV, CEC, ETL, CE, DEKRA, BIS and many other international authoritative product certificates, we can ensure the reliability and excellent quality of our products while providing price advantages.

DEEP GLOBALIZATION AND RAPID RESPONSE TO CUSTOMER NEEDS

FLEXIBILITY AND CUSTOMIZATION CAPABILITY

We have strong flexibility and customization production capability, which enables us to flexibly adjust our production schedule to meet different needs and customization requirements of our customers, ensuring that our customers receive personalized services and products.



EFFICIENT DELIVERY CYCLE GUARANTEE

We have established an efficient internal collaboration process, excellent factory production process management and advanced production technology, which can accelerate the product delivery time and greatly shorten the delivery cycle.

RESPONSIVENESS IS GUARANTEED

We layout service centers around the world, with professional global teams and systems, can quickly respond to customer needs, quickly provide solutions and services to ensure customer satisfaction.

TIMELY COMMUNICATION AND COORDINATION

We focus on close communication with customers, fully and accurately understand customer needs and expectations, and quickly complete the delivery.

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The Complete Mainstream Product Matrix, Comprehensive Application Coverage

Silicon Wafers

P - TYPE

- Mature process matched with advanced equipment
- Customizable, fast delivery to meet customer needs
- Low attenuation process





N - TYPE

- Low Oxygen Large Heat Field Process
- High-efficiency wafers that match customers' differentiated needs
- Adequate capacity reserves





182 N-Type

210 N-Type

The Complete Mainstream Product Matrix, Comprehensive Application Coverage

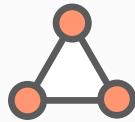
Photovoltaic Cells: Big Size+Multi-BB+Half Cutting Cells+Bifacial



High Photoelectric Conversion Efficiency



Higher Power Generation



Excellent Resistance To Hidden Cracks



Higher Efficiency In Power Generation



The Complete Mainstream Product Matrix, Comprehensive Application Coverage

N-Type GSD8J66H[690-720W]

Bifacial Dual Glass Half-cut HJT



N-type HJT technology

HJT Microcrystalline technology applied.



Lower Attenuation

Components have better reliability and lower LID/LETID attenuation.



Double Power Output

The dual-glass module has a bifaciality up to 90% and a power generation gain of 7%-30% on the back side.



Wider Application

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area.



No PID phenomenon

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

IEC 61215 /IEC 61730 / UL 61730

ISO9001: 2015: Quality Management System

IS014001:2015: Environment Management System

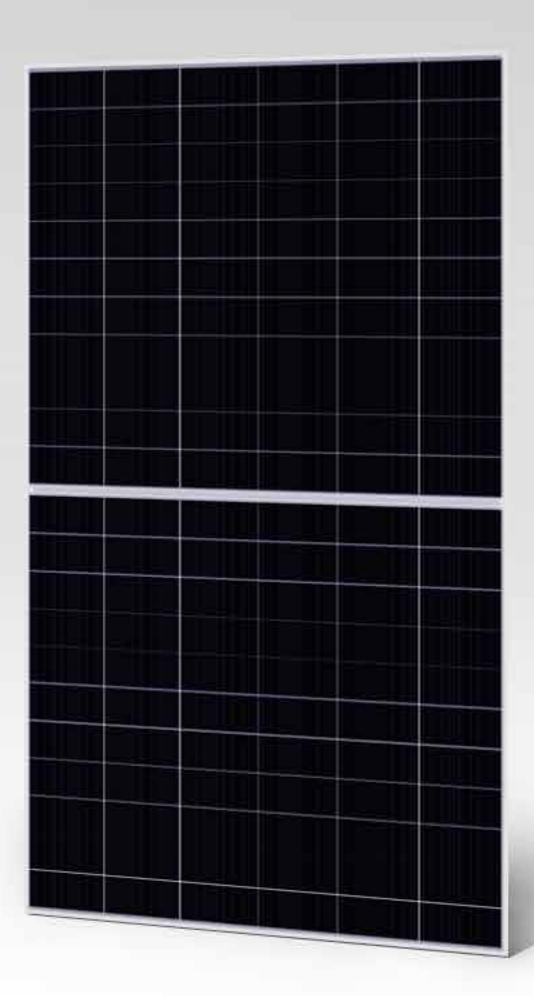
ISO45001:2018: Occupational Health And Safety Management System



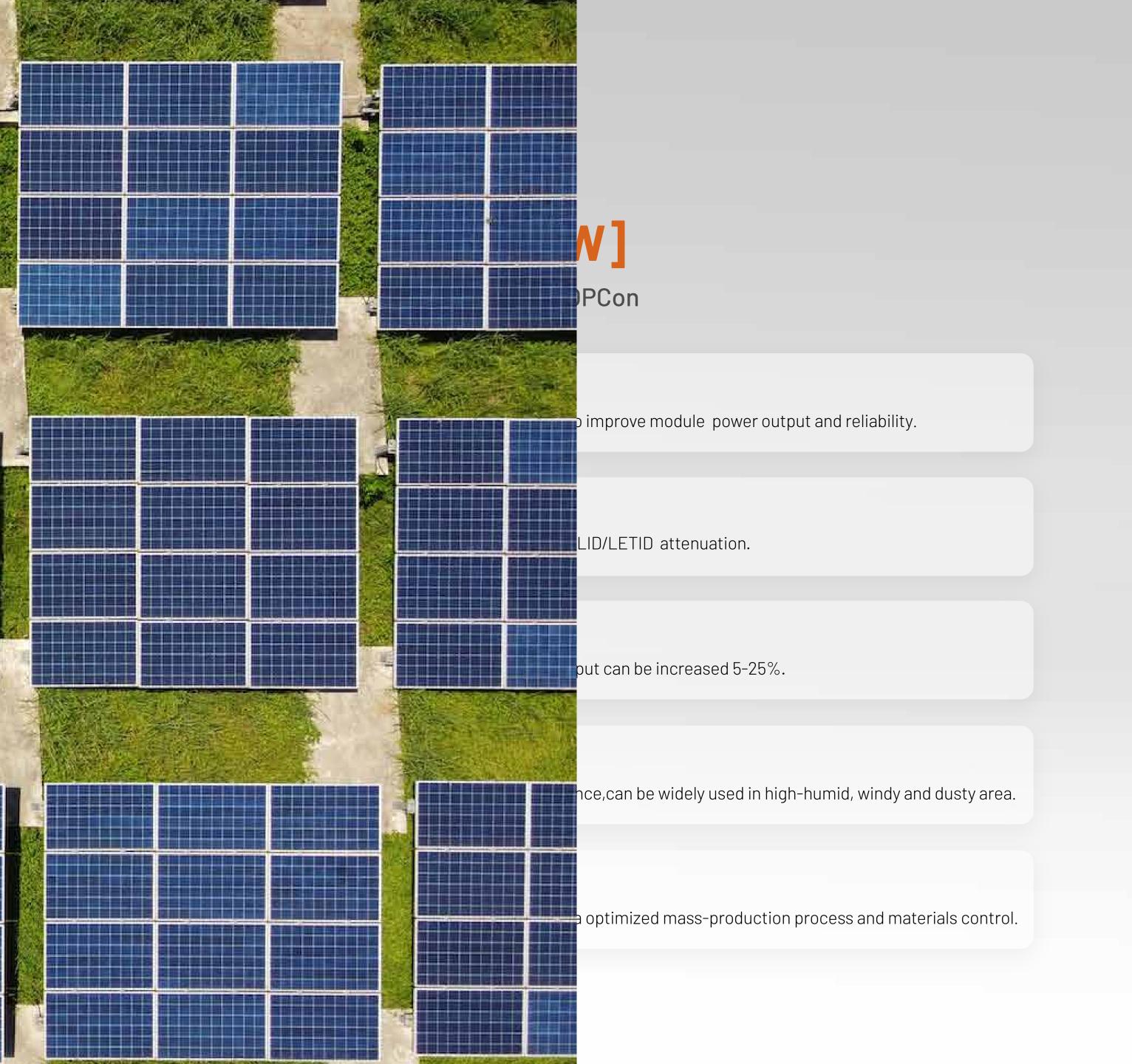












IEC 61215 /IEC 61730 / UL 61730

ISO9001: 2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational Health And Safety Management System













N-Type GSD8K66T[670-690W]

Bifacial Dual Glass Half-cut Mono TOPCon



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



Lower Attenuation

Components have better reliability and lower LID/LETID attenuation.



Double Power Output

For higher power output, backside power output can be increased 5-25%.



Wider Application

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

IEC 61215 /IEC 61730 / UL 61730

ISO9001: 2015: Quality Management System

IS014001:2015: Environment Management System

ISO45001:2018: Occupational Health And Safety Management System



















ADHERE TO THE GLOBALIZATION LAYOUT

G-star Group, headquartered in Singapore, has been developing the global market, and has already established sales centers in the U.S., manufacturing centers in Thailand, Laos and Indonesia, U.S. Vertical Integration Project in Full Planning, and it is expected that by the end of 2024, it will have 6 factories around the world.

With the cell factory in Thailand and the silicon wafer factory in Indonesia put into construction, G-star's overseas vertically integrated production capacity from wafers to cells to modules has been further completed. G-star specializes in the field of photovoltaic, and its products have been sold to customers all over the world in more than 30 countries and regions, and are widely acclaimed.

GLOBAL FACTORY



Indonesia **PT STD Ingot Plant**





Laos Aluminium Frame&Racks Plant 12GW



Indonesia **PT STD Wafer Plant**







CUSTOMER CASES







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