

## **TALESUN INTRODUCTION**

Sharing Value with the Sun / May 2021



#### **Talesun Concept**





Our Vision : To Create a World Famous Brand, to Build a Century Outstanding Talesun

**Our Purpose :** Customer Oriented, Sincere and Reliable, Striving for Excellence

Our Spirit : Endless Efforts, Scale New Heights, Never Give Up

Our Values : Cherish the Fate, Cooperate Sincerely, Share Benefits

**Our Strategy Target :** Be a Leading Global Operation and Service Provider of Clean Energy

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#### **About Talesun**



Talesun Solar, a wholly owned subsidiary of Zhongli Group, was founded in 2010. Through more than 10 years of innovation and development, it has become one of the global Top 10 photovoltaic manufacturers, Tier 1 module supplier in Bloomberg Ranking, one of China's largest photovoltaic power station developers, and a first-class leading enterprise among China's photovoltaic manufacturers. Our downstream business includes solar photovoltaic project development, design, EPC construction, operation & maintenance and one-stop system integration solutions for customers.

In 2015, the Company innovated and launched "Intelligent Photovoltaic + Sci-tech Agriculture and PV Farms in Poor Villages", thus becoming a leader in global solar power industry. Through constantly improving our conversion efficiencies and the quality of PV cells and modules, and optimizing project solution design, Talesun continues to push the decrease of solar energy cost, and makes contributions to the development of global clean and environment-friendly energy.



### **About Talesun**





To be the world's leading PV module manufacturer and smart energy solutions provider.

**TOP 10** Module Shipment Worldwide since 2018

**TOP 50** 

Global New Energy Enterprise

G

Accumulative Shipment

TIER 1

Module Supplier in Bloomberg Ranking

\$300M

**R&D** Investment

50+ Shipped Countries **TOP10** Production Capacity Globally

TOP 5

PV + Agriculture Project Provider in China

350+

R&D Team Members

**TOP 10** 

PV Project Development & **EPC** Company in China

340+ Patents Applied

#### **Core Competitiveness**





### **Global Network**

- 50+ countries/regions for product shipment, 45+ branches and offices all over the world
- Talesun provides customers with localized service & support, backed by its global sales network
- Strong after-sales service network with rapid response
- Long-term partnership with China's state-owned enterprises and clean energy suppliers



- Top 10 PV manufacturer and supplier in the world
- China's tier-1 PV manufacturer, one of the largest PV
  power plant developers in China
- The reliable quality of solar modules ensures continuous power output for 25-30 years



### Solid Financial Strength

- Long-term cooperation with world's major banks and other financial institutions
- Considerable bank credit scale around the globe
- Diversified financial channels including finance lease, merger & acquisition fund



- Smart solar solutions covers the full lifecycle of the plant, maximizing the revenue and optimizing the LCOE
- With customized solutions, Talesun provides customers with safe, reliable and cost-effective green energy

#### **Milestones**



#### **Pioneer / Innovator**

2010

Talesun Solar

established

2009

Zhongli Group

exchange

listed on stock

2011 & 2012

2015

.

- Project development & EPC activities
- China TOP 10 Solar EPC Enterprise
- Completed 100 MW PV power plant

Thailand factory in operation

China TOP10 Solar Cell /

Module Enterprise

## **2016 & 2017**

- Tier 1 PV module supplier by BNEF
- China TOP 50 Most Innovative Solar Enterprise
- 3<sup>rd</sup> ranking in TOP 20 China PV Power Plant Investment Enterprise

### 2018

- Cooperate with Argentina Government on 315 MW
  ONE BELT ONE ROAD project
- TOP 10 shipment module supplier by PVTECH and PVInfoLink

## 2019

- TOP 10 shipment module supplier by PVInfoLink
- Provide modules to the largest PV project in western Europe

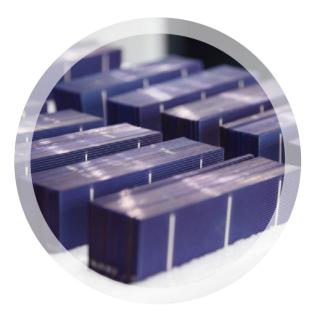
## 2020 & 2021

anti l

- Establishing new 10 GW production capacity for high-efficiency PV modules
- PVInfoLink P dules to the largest h

#### **Products & Solutions**





#### **Solar Module**

As global leading PV module manufacturer, Talesun offers solar products with world-class quality and performance





#### **Diversified solutions**

Talesun is dedicated to provide global customers with one-stop customized and smart solar energy solutions

#### **Solar Storage**

Talesun offers high-efficiency, reliable and customized solar storage solutions

#### **Strategic Direction**





Talesun's solar panel production capacity is vertically integrated in a creatively flexible way. From materials to cells and solar modules, Talesun has GW-capacity production facilities throughout global. Talesun dynamically stabilize our supply chain to mitigate risk and add value. Talesun supplies a wide variety of PV modules ideally suited for all types of installations: residential, commercial, industrial and utility. Since 2010, more than 20 GW+ modules have been installed in thousands of residential, commercial, and utility-scale solar applications worldwide.

Talesun smart energy solutions provide horizontally integrated one-stop solution services throughout entire lifecycle of a solar power plant, from project development, project financing and investment, project design and engineering, procurement and construction management, to project operation and maintenance services. Backed by a decade of knowledge and experience in solar module production, expertise and skills in EPC, Talesun smart energy solutions propose services enabling worldwide solar projects to be realized, and innovations throughout the entire project lifecycle optimizing each project's LCOE.

#### **Global Network**



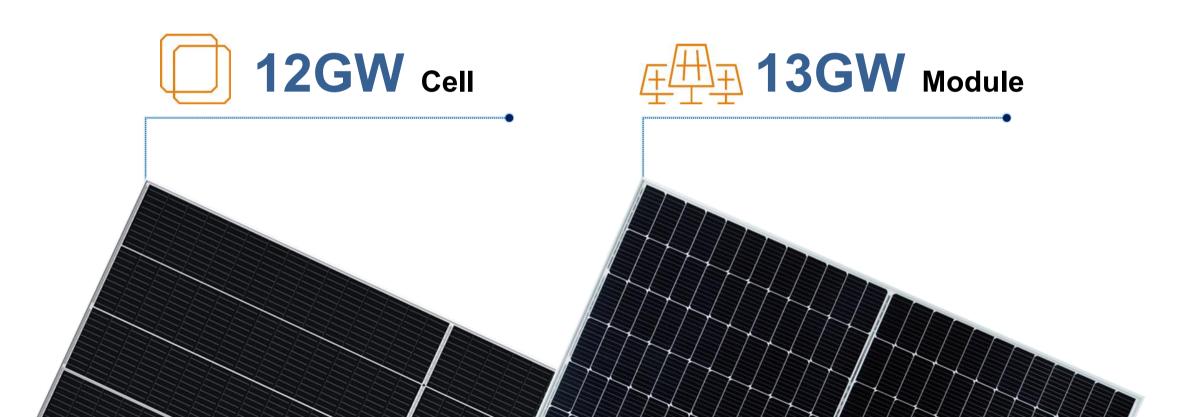


With 45+ overseas : Talesun always brin customer no matter

More Efficiency, Higher Capacity



**Talesun Production Flexible Module Production Capacity** 







## The World-leading

PV Module Manufacturer



#### **Product Portfolio**

### Comprehensive Product Portfolio

Talesun offers a wide variety solar modules, enabling it to meet the diversified requirements of all categories of solar installations: residential, commercial and utility.

As a leading solar module supplier, Talesun has been developing stateof-the-art technologies and launched innovative solar products into the global PV market.



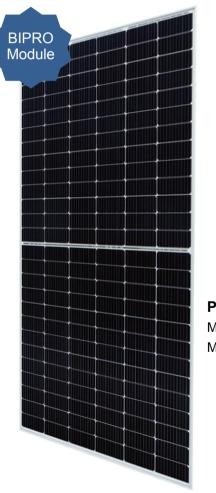
#### **Diversified Solar Modules**



#### A Rich Product Portfolio to Meet the Diversified Needs of Customers



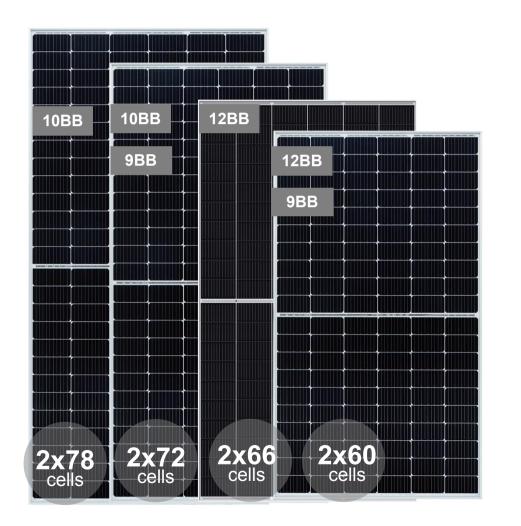
**Product Type** MBB 120 / 132 / 144 / 156 Cells M6 / M10 / G12



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#### **BIPRO Series**

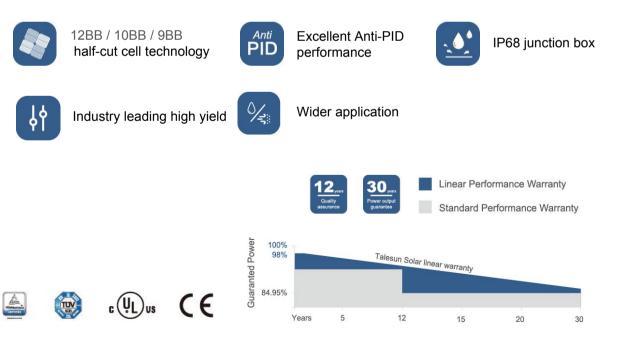




#### Product Model

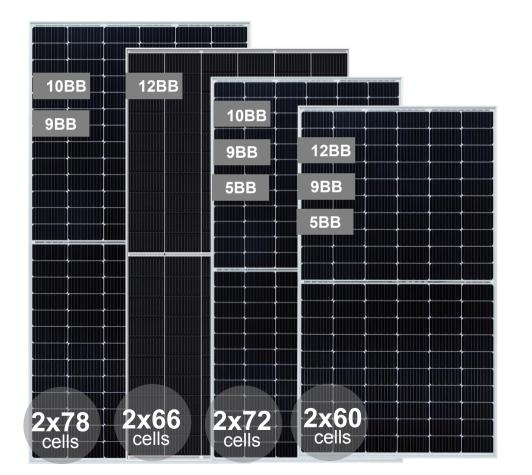
320W-665W

BIPRO TD8G66M 12BB / BIPRO TD8G60M 12BB BIPRO TD7G78M 10BB / BIPRO TD7G72M 10BB BIPRO TP6G72M & TP6G72M(H) 9BB BIPRO TP6G60M & TP6G60M(H) 9BB BIPRO TD6G72M 9BB / BIPRO TD6G60M 9BB BIPRO TD6I72M 9BB / BIPRO TD6I60M 9BB



#### **BISTAR Series**



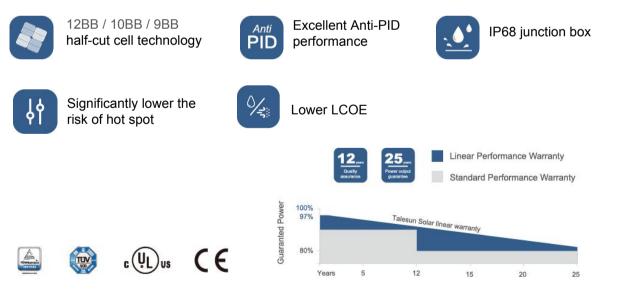


#### **Product Model**

#### 280W-665W

BISTAR TP8F66M & TP8F66M(H) 12BB / BISTAR TP8F60M & TP8F60M(H) 12BB BISTAR TP7F78M & TP7F78M(H) 10BB / BISTAR TP7F72M & TP7F72M(H) 10BB BISTAR TP6H72M & TP6H72M(H)\_full black / BISTAR TP6H72M & TP6H72M(H) black frame BISTAR TP6H72M & TP6H72M(H)

BISTAR TP6H60M & TP6H60M(H) full black / BISTAR TP6H60M & TP6H60M(H) black frame BISTAR TP6H60M & TP6H60M(H) / BISTAR TP6F78M & TP6F78M(H) 9BB BISTAR TP6F72M & TP6F72M(H) 9BB / BISTAR TP6F60M & TP6F60M(H) 9BB BISTAR TP6L72M & TP6L72M(H) 9BB / BISTAR TP6L60M & TP6L60M(H) 9BB



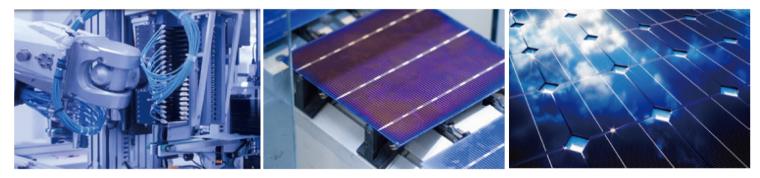
#### **Manufacturing Management**



### **PV Manufacturing Capabilities**

Talesun applies world-class technology and high-reliability procedures in production operations. We consistently improve employee skills and quality control to ensure the highest-quality workmanship.

We utilize fully automatic equipment from leading suppliers to maximize reliability and control the entire manufacturing process via an advanced management and control process to ensure product stability and sustainability. Talesun vertically integrated production process is proven to systematically optimize costs and provide maximized value for customers.



Talesun R&D facilities and constant technological innovation guarantee every Talesun product's remarkable advantages and ensure that Talesun products always stand out from the rest of the competition.



#### **Product Manufacturing Competitiveness**



### Unprecedented Quality Standards and Assurance









#### Vertical integration enables cost-saving and reliability

With certificates of ISO 9001, ISO 14001 and OHSAS 18001, Talesun applies strict quality control measures in all stages of the manufacturing process.



#### Affiliated top quality manufacturing

Talesun strict quality control ensures compliance with ISO and internationally recognized quality standards such as TÜV NORD、 TÜV Rheinland, etc.

#### Failure Modes and Effects Analysis (FMEA)

Talesun use the FMEA process to make improvements and improve reaction speed. Every process in product manufacturing is well monitored and recorded, and every potential risk is technically mitigated by preventive analysis and measures implemented. We strive to provide a perfect product to customers with a low failure rate.

#### **Highly automated**

**Constant innovations** 



### highest-quality products.

Talesun strives to implement continuous innovation in technology, products, and service based on customer needs. These innovative practices have provided customers with better products and energy solutions that enable better returns on investment.

Talesun employ a highly automated manufacturing process supported by the most

technologically advanced equipment that mitigates environmental effects and ensures the

#### **Continuous Innovation**



### Cutting-edge R&D Constant Innovation

Talesun has been closely cooperating with accredited testing organizations and authoritative institutions in the industry. Currently, the R&D Center has established close cooperation relationship with global well-known research institutes and institutions of higher learning, including Chinese Academy of Sciences (CAS), Shanghai Jiao Tong University, Sichuan University, Energy Research Center of the Netherlands (ECN), SERIES, Southeast University, Nanjing University of Aeronautics and Astronautics.





#### Experienced International R&D Team

- The international R&D team
- Outstanding teams of experienced experts
- Close cooperation with industry institutes and research organizations



#### Enough Annual Revenue Invested in R&D

- R&D fund for new technology / product development
- Different R&D theme for every project
- Generous incentives for notable R&D achievements



#### Patents, Creative Products, Innovative Technologies

- More than 340 patents and proprietary technologies developed
- 350+ R&D experts have published hundreds of solar papers in professional publications

#### **One-stop Solar Solutions**



### Proven Global Leading Energy Solutions Provider

Talesun is dedicated to providing energy solutions to customers worldwide. With its approach to maximizing energy output and reducing the levelized cost of electricity (LCOE) by integrating all of our technology roadmaps and activities throughout whole lifecycle of the power plant, Talesun has been delivering leading reliable, dependable, and cost-effective solar power plants to partners around the world.

For project developers, commercial and industrial users, utilities, independent power producers, worldwide energy off takers and investors, we confidently believe that Talesun energy solutions are your smart choice.



Project Development



Engineering Design





Operation and Maintenance

#### **Reliable Project Development**



### An Experienced Partner Knows What You Need

With comprehensive know-how and rich experience, Talesun has developed a reasonable development process to ensure that every PV project is commenced and completed as scheduled.

#### **Reliable Track Record**

- 7.5 GW PV project development experience
- Global sales and project development network

#### Flexible and Professional Project Development

- Localized profession project development team in Europe and Southeast region
- · High-efficiency management based on substantial experience in project development
- Flexible development models including project planning, independent development and cooperative development

#### **High-quality Project Pipeline**

- Close partnership with leading developers around the world
- High-quality project development team and rich project pipeline



### **Excellent Project Engineering Design Capabilities**



### **Excellent Engineering Design Capabilities**

#### **Rigorous Standards and Tailor-made Services**

- High standards are implemented throughout the project engineering design to ensure project quality
- Project layout design is based on actual solar radiation, weather and site conditions, and other factors
- Tailor-made solar energy solutions based on the project characteristics
- The most optimized engineering design based on demands of customers

#### Professional Engineering Design and High-efficiency Team

- · Talesun adopts industry-leading PV project design tools
- Talesun provides customers with best solar energy solutions based on data from professional platforms
- Respond quickly and make adjustments timely through teamwork



Experienced Engineering Team



Rich Solution Package



Professional Industrial Standards



Leading System Design

### **Global Supply Chain System**



### Perfect Supply Chain System

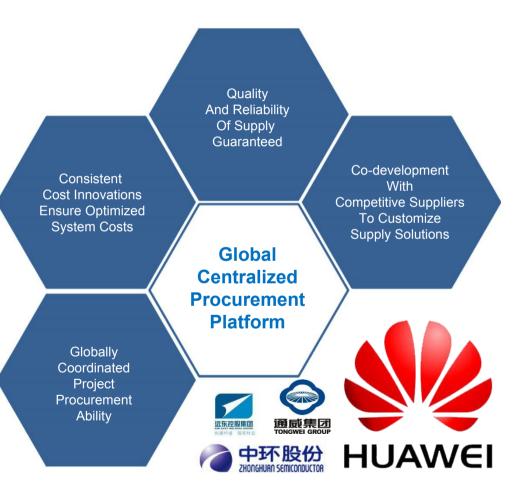
Talesun has a strict supplier management system and a complete qualified supplier base. Under the premise of ensuring the quality of PV plants, Talesun has long-term strategic partnerships with domestic fist-tier suppliers such as Huawei, ZHONGHUAN, TONGWEI, Far East Etc., with good quality assurance and reliable after-sales services. Talesun conducts a comprehensive assessment of qualified supplier quarterly, forming a healthy cooperation with the supplier and win together while reducing costs and increasing efficiency, constantly introducing new materials to help company win opportunities in fierce market competition.

#### **Global Procurement System**

- · Centralized procurement, unified management
- Talesun has established partnerships with well-known equipment suppliers to ensure supply stability and cost optimization

#### **Complementary of Advantages**

- In collaboration with supplier partners, Talesun keeps optimizing performance ratio of PV projects
- Talesun works with its key suppliers to jointly develop innovative products and solutions



### **High-efficiency Construction Management**



### **Rich Experience of PV Project Construction**

Talesun has an experienced construction management team with EPC qualification for power engineering. By improving project construction management process, Talesun has been building PV projects efficiently, and optimizing construction costs and LCOE.



#### **Strict Execution Plan & Management**

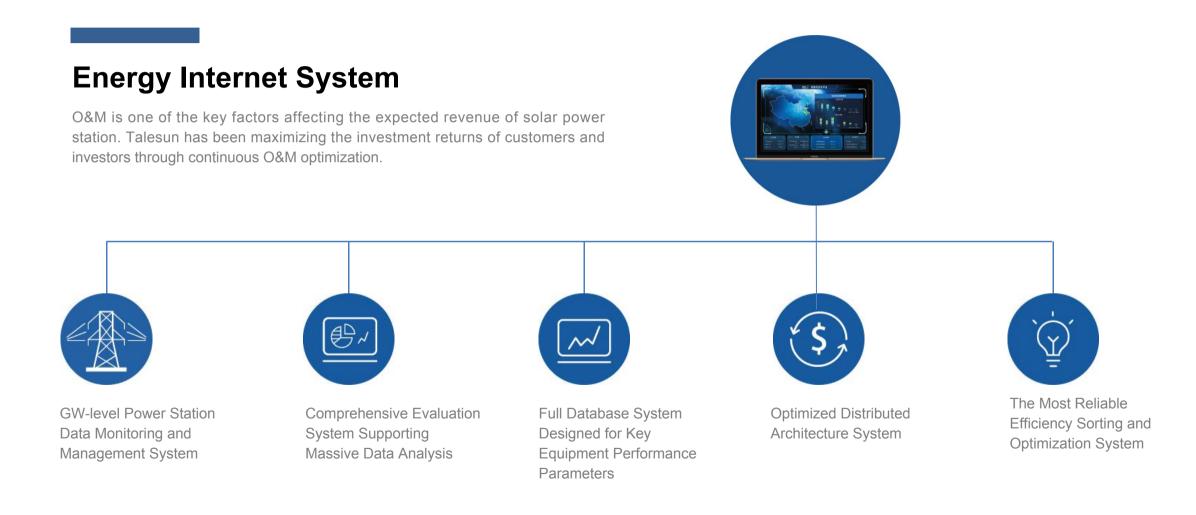
- With efficient team management, every Talesun's PV project is completed on time
- Accelerate installation and reduce labor costs by improving the construction process
- · Maximize power output across the whole lifecycle of PV projects

#### Professional and experienced Team

- Rich PV project construction management experience, and know-how of PV industry
- World-class PV project construction capabilities and top-level project operation management team

#### Smart O&M Management







### **Global Leading PV Module Manufacturer**

Hands with Talesun, to Share Value with the Sun



## 20GW+ Solar Power Plants Completed

CO2 Reducing emissions of CO2 per year 20,000,000 tons

iIII





Equivalent to planting trees per year 10,000,000

Providing electricity to residents per year

TALESUN



213,483

One of the Largest PV Utility in South America

## 315 MW

Cauchari, Argentina

One of the Largest PV Utility in Western Europe

States Mr. o.

## 99.5 MW

Limburg, Belgium

THE REPORT OF A DESCRIPTION OF A DESCRIP

California, USA

Juarez, Mexico

# 3.8 MW

Thai-China Industrial Park, Thailand

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Jiayuguan, Gansu, China

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Ningxia, China

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## 9.8 MW

Changshu, China

Sa Kaeo, Thailand

- I I I PA

Berlin, Germany



Thiruvannamalai Tamilnadu, India

Essex , UK

## 3.5 MW

11 SC

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Yamaga, Japan

## 2.2 MW

Nordhorn, Germany

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## 7.2 MW

Mark

Bonvillars, Switzerland

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## Advanced Solar Module Manufacturer Global Leading Energy Solutions Provider



## Thanks !

