

# CREATE A SUSTAINABLE FUTURE

SINCE 2006

Manufacturer

**Customized Design** 

PV System Integrating

SUNRISE ENERGY CO., LTD

www.sunriseenergy.cn



## **COMPANY** PROFILE

#### **SINCE 2006**

SUNRISE brand was founded in 2006, located in Changzhou, Jiangsu., with 35000m<sup>2</sup> owned automatic workshop.

# SUNRISE HAS PASSED ISO, TUV, CQC, CSI, CERTIFICATES

Sunrise has more than 100 core technology patents for its main business and has been awarded the honors of "AAA rating of the highest credit rating of Chinese enterprises", "High-tech enterprise", "Excellent brand of Jiangsu Province", "Top ten influential enterprises" and "Top ten innovative module enterprises".

## SUNRISE ADHERES TO THE BRAND POSITIONING OF "CREATING A SUSTAINABLE FUTURE"

Focusing on scientific and technological innovation, Sunrise has successfully built four business segments: solar modules manufacturing and sales; inverters manufacturing and sales; system integration and sales; energy storage and application. So far, Sunrise has provided high-quality photovoltaic products and energy solutions to more than 100 countries in the world.



# 2006-2015



The brand was established in Changzhou, Jiangsu.



The first 8MW project in Italy.



Signed an exclusive agency agreement with HSBC for the financing of Australian resident photovoltaic projects.



Sunrise was rated by AAA, the highest credit rating of Chinese enterprises.



Awarded the title of "national high tech enterprise".



Branch in Australia NPP Energy Pty Ltd was Officially established.



New production base with annual capacity exceeding 500MW.



Successfully invested in Australian public utilities pv project.



2016-2021



Established the independent brand "zhaoyangbao" PV power generation system.



Awarded "China's most influential brand enterprise", "excellent PV enterprise award", "excellent module Award" and other honors.



Monthly 1million **US** dollars income and won the title of "super seller" of Alibaba international station.



The automatic production line was updated to produce M10 and G12 cells, capacity is up to 1GW.



Awarded the title of "Jiangsu excellent brand".





Brand 'S' graphic trademark has been successfully registered in EU and China.



Sunrise global dealer annual meeting was held.



Mr. Yuan Qinghua was awarded the title of provincial "Excellent Entrepreneur".



Included in the list of Jiangsu key enterprises in 2020.



Full-black modules has been passed the test by TUV(Safety).



2022-2023



N-type solar modules were officially launched, and capacity was up to 2GW.



Italy CSI certification.



Sunrise brand was awarded internationally renowned brand of key cultivation and development in Jiangsu.



N-type TOPCon light weight double glass solar modules were launched in Frankfurt.





Aqueous battery was launched globally in Germany, 100% safe, environmentally friendly and pollution-free.



British MCS certification.



Long-term strategic cooperation with Sri Lankan government.



**2**024.....



Overseas subsidiaries Overseas warehouses.



Morocco subsidiary was established in May.



More subsidiaries will be established soon in Senegal, Ghana, Ivory Coast, Togo, Nigeria, Mali and so on.





Pakistan subsidiary was established in April.



Tunisia subsidiary was established in August.

More good things are happening...



## TIMES TO ATTEND EXHIBITION

Covered EU, South America, Southeast Asia, Asia, Africa









SOLAR MODULES

MANUFACTURING

AND SALES

**Business 1** 



INVERTERS

MANUFACTURING

AND SALES

Business 2



SYSTEM DESIGN,
INTEGRATION AND
SALES

**Business 3** 



ENERGY
STORAGE AND
APPLICATION

Business 4

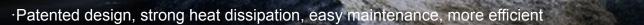


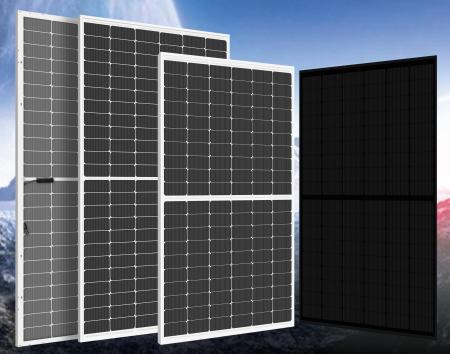
# LARGE SIZE AND HIGH POWER SOLAR MODULES

ANNUAL CAPACITY **2GW**GLOBAL BUSINESS PARTNERS **120**4

# 30-YEAR PRODUCT WARRANTY + LINEAR POWER WARRANTY

- WATERPROOF, DUSTPROOF, FIREPROOF,
- AMMONIA RESISTANCE, SALT SPRAY RESISTANCE
- AND HIGH CONVERSION EFFICIENCY





Aquaman Series--M10 (double glass, single glass)
Zeus Series--G12 (double glass, single glass)



# THREE PHASE STRING ON GRID INVERTERS

## **TLC SERIES**

- FLEXIBLE DESIGN
- EFFICIENT CONVERSION
- GRID FRIENDLY
- EXCELLENT QUALITIES

#### Certification & Standard:

NB/T32004-2018, IEC62109, IEC61000, IS16169 & IS16221(BIS)

IEC61727, EN50549-1, VDE-4105, NRS-097-2-1, OVE-Richtlinie R25, UNE217001/2, Ordinace No.140

IEC61683, IEC62116, EN50530, IEC60068





# PV SYSTEM BRAND ZHAOYANGBAO

### Main components of on grid system:

PV module, Grid-connected inverter,
Support brackets, PV cables(DC cable, AC cable), lightning proof grounding system,
combiner box and distribution box.



remote monitoring



save electricity



green building





The advantages of Sunrise energy storage system in realizing power balance within the microgrid:

- (A) Flexible use
- **24**) Full day supply
- (=) transfer from on grid to off grid

- Reliable output
- Stable output
- Not affected by external power





## **AUTOMATIC PRODUCTION+BEST QUALITY CONTROL**



Passed the environmental impact assessment audit, the environmental protection completion acceptance of the project, and passed the ISO management system certification.









≥ 23%

Conversation efficiency



**≤1%** 

Attenuation (first year)



**≤12.6%** 

Attenuation (30 years)



# HIGH-EFFICIENCY MODULAR AUTOMATIC PRODUCTION LINE

Sunrise divides the production of modules into multiple relatively independent and highly interconnected modules, scientifically applies statistical engineering, equipment improvement and clean production that combines various management systems, fully automated production lines, while ensuring the consistency of finished product quality, product quality is guaranteed, production efficiency is improved, production costs is reduced, and return of investment are increased.



15%

Lower cost



15%

Increased efficiency



24\*7

All-time monitoring system



100+

Product and process improvement patents



99.4%

Qulified percentage



35%

Increased eff
Of manufacture



# RELIABLE QUALITY

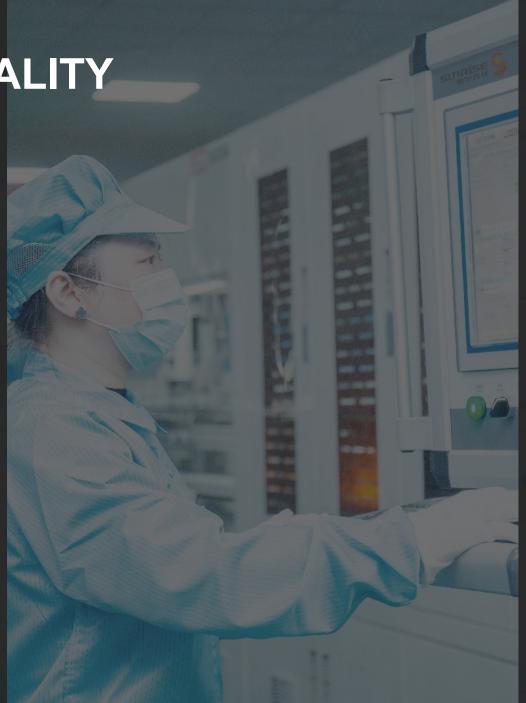
100%

100% raw material test

#### 80 STEPS

#### **Supplier test**

Solar cells test, EL test, EVA test, cable test, frame test



## 3 PROCESS

EL test of Modules will be from string welding to Lamination and final EL.

### 100%

Industry leading performance tester

100%

Appearance test







#### Advantage 2:

# Strict selection of quality









Incoming materials inspection

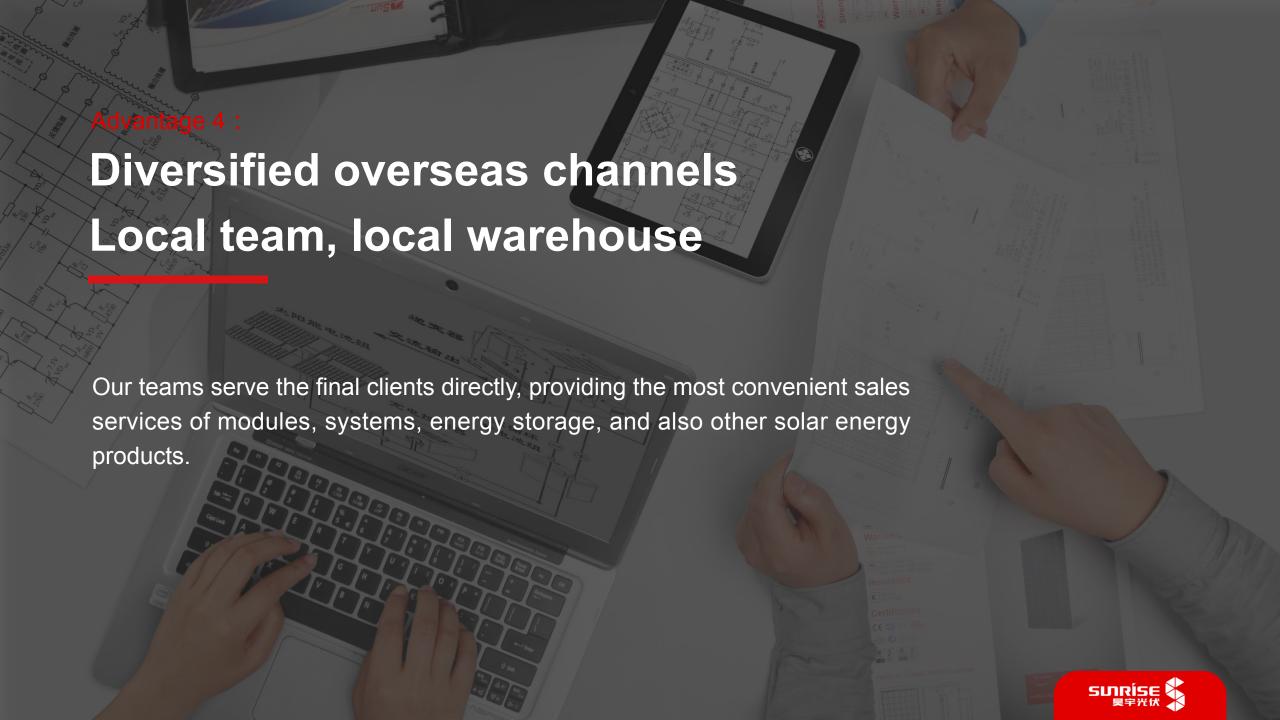
Process EL inspection

Final EL inspection

Packaging Inspection







#### Advantage 5

# Project management and considerate service



#### **PROFESSIONAL TEAM**

All have rich experience in photovoltaics. 100% of the engineers hold the construction engineer certificate. The core managers and personnel information are checked and filed to ensure the technical ability of the construction personnel. All projects are quality inspected at every level, and 5 key nodes are specially inspected. The construction party, the project department, the engineering department Multi-party and multi-level acceptance by the department, company, owner and supervisor.



#### **MANAGEMENT MECHANISM**

The perfect management mechanism and construction standards enable Sunrise to follow up and deal with emergencies and special events on the project site in a timely manner, so that every screw and every interface can be based on evidence.



### **SERVICE GUARANTEE**

The engineering management team attaches great importance to communication and coordination with the owner, and can respond to the owner's suggestions and requirements in a timely manner, providing professional consultation, including R&D, design, business, and engineering 1-to-1 professional value-added services throughout the life cycle.



#### Advantage 6:

# Intelligent operation and maintenance

All time monitoring

Through the integration of Internet technology and new energy technology, establish a cloud data collection system, conduct big data analysis of power station operation, improve and optimize power station management, effectively ensure and increase power generation, data monitoring, and the whole life cycle will continue to create for customers best profit.

Sunrise Distributed Intelligent Operation and Maintenance Platform





















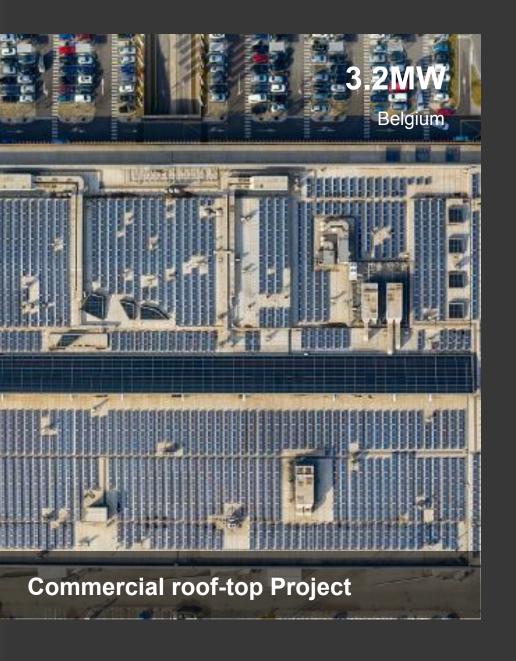






















































8.4KW

Frankfurt, Germany 3.2KW

Italy **4KW** 

Amsterdam, Netherlands

3.4KW

Klaipeda Lithuania







**15KW** 

Huaihua, Hunan 9.72KW

Gansu, Baiyin

10KW

Henan, Zhoukou

**13KW** 

Hengshui, Hebei



