



A full-page background image showing a person standing on a grassy mountain peak in the foreground. The sun is rising over a valley, creating a bright glow and long shadows. The sky is filled with dramatic, dark clouds. The overall scene is majestic and inspiring.

Powering the future

Vision

Provide more sustainable energy support for the future of mankind.



Mission

Through continuous technological innovation, become a leader in products and solutions of photovoltaic industry.

ABOUT ORISOLAR



Orisolar is a controlling subsidiary of HDHM and Orisolar is a photovoltaic manufacturing enterprise newly built by HDHM under the "dual carbon" strategic deployment. The company mainly produces N-type high-efficiency solar cells and modules. It plans to complete the construction of 30GW~50GW N-type high-efficiency solar cells and modules by 2026, and strive to build the company into a world-class new high-tech manufacturing enterprise of N-type photovoltaic cells and modules.

2025 Cell
Capacity Planning

20GW+

2025 Module
Capacity Planning

20GW+

SHAREHOLDER

HDHM founded in the year 1989, is an A-share listed company. The company is headquartered in Wuxi, with a registered capital of over one billion CNY. HDHM is the leading supplier of high-end intelligent equipment in the world. The company was listed in the list of China's top 500 manufacturing enterprises and China's top 500 private enterprises.

**TOP
500** | MANUFACTURING
ENTERPRISES
OF CHINA

**TOP
500** | PRIVATE
ENTERPRISES
OF CHINA

MILESTONES

1989

Founded

Established Wuxi Huadong Heavy Machinery Factory.

2012

Listed

Listed on the Shenzhen Stock Exchange with the stock code 002685.

2019-2022

Leading in the high-end intelligent equipment industry

Ranked among the top 500 Private enterprises and the top 500 manufacturing companies in China.



2023

Entering the PV industry 1st production base put into operation

Orisolar is the high-tech manufacturing enterprise newly established by HDHM under the "Double Carbon" strategic deployment. It produces N-type high-efficiency solar cells and modules. The 1st 10GW N-type TOPCon solar cell production base (Peixian) has been put into production.

2024

The 2nd production base will put into operation

The 2nd 10GW N-type TOPCon solar cell production base is located in Bowu Modern Industrial Park.



GLOBALIZATION



2025 Cell
CapacityPlanning
20GW+

2025 Module
Capacity Planning
20GW+

Europe

Europe

Other



HQ



BASE

China

China

Wuxi Headquarters

Peixian Base

Bozhou Base

Singapore

Southeast
Asia

- The first 10GW cell factory will be put into operation in August 2023 (Peixian Base)
- In August 2023, the second base 10GW cell and module factory will be put into construction (Bozhou base)
- The first overseas base of 2GW cell will be put into construction by the end of 2023

PRODUCTION BASE



Xuzhou Jiangsu

10GW N-type high-efficiency solar cell production base

 Xuzhou Peixian Economic
Development Zone

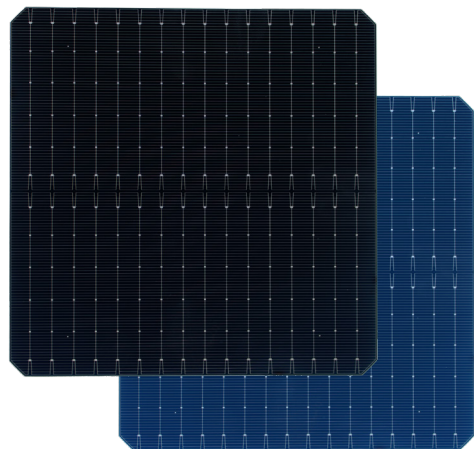


Anhui Bozhou

10GW N-type high-efficiency solar cell production base

 Bozhou Bowu Modern
Industrial Park

M10-M12 N-Type TOPCon Cell



**Higher
Conversion Efficiency**

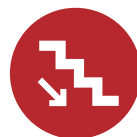
26.5%

Average Efficiency
of Mass Production

85%

Bifaciality Over

**Lower Temperature
Coefficient**



Lowest to $-0.30\%/^{\circ}\text{C}$

Lower CTM Loss



Less than 1%

**Better Weak
Light Generation**



Extending the working
time in the morning &
evening over 1 hour

Better Reliability



Lower degradation

ORISun N-Type TOPCon Module

Higher
Energy Output

22.5%-23%

Efficiency exceeds 22.5%

Guaranteed
Reliability
30 years

Linear warranty



Intelli. Manufacturing



Leading intelligent
production high cost-
effectiveness

Higher Yield



Bifaciality power gain
up to 25% or more

Extremely Durable



Passed wind load of
2400Pa 5400Pa Snow Load
certification

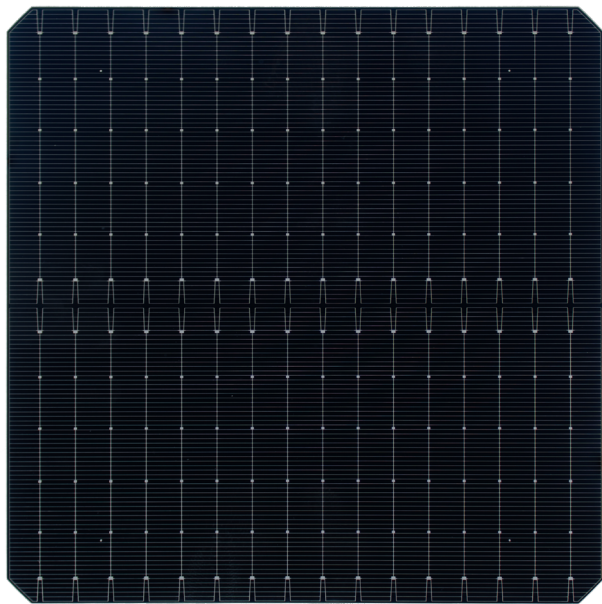
Extremely Elegant



Simple industrial
design for various
applications

CELL PRODUCT SERIES

M10N-ST-16BB N-type TOPCon Monocrystalline Solar Cell



Technique data	M10N-ST-16BB
Front	16 busbars
Rear	16 busbars
Thickness	130±10μm
Dimensions	182/182R
Power temperature coefficient	-(0.32±0.02)%/k
Voltage temperature coefficient	-(0.28±0.02)%/k
Current temperature coefficient	+(0.05±0.005)%/k

CELL PRODUCT SERIES

M10N-ST-16BB N-type TOPCon Monocrystalline Solar Cell



PID Resistance

Exceptional PID resistance



Better Performance in Low Irradiance Environment

200W/m relative conversion rate in low irradiance environment $\geq 97\%$



Lower Sealing Damage

Lower sealing losses, better suited to high efficiency module



LID

Lower LID



High Conversion Efficiency

Front-side efficiency $\geq 25\%$
Bifaciality $\geq 85\%$

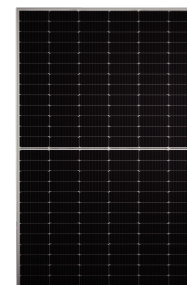
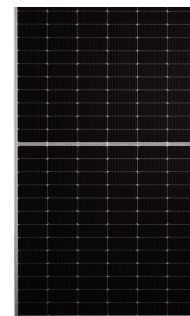
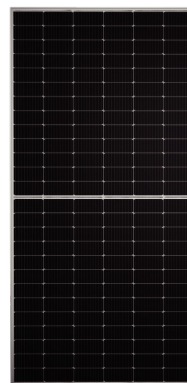
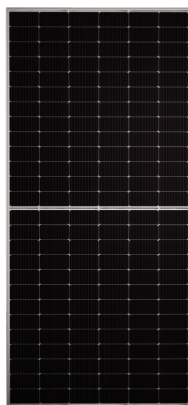
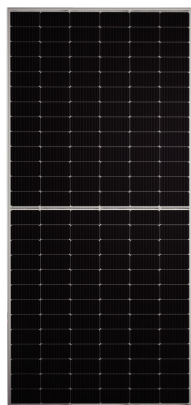


Lower Power TEMP Coefficient

The power temperature coefficient down to $-0.30\%/^{\circ}\text{C}$

PRODUCT SERIES

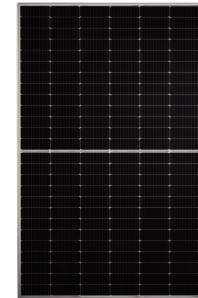
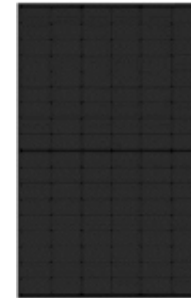
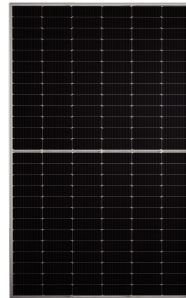
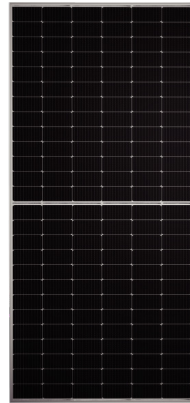
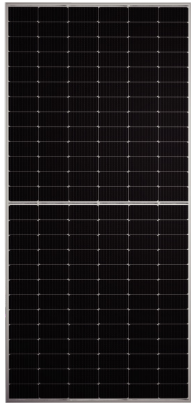
N-type TOPCon Module Series (Single-Glass & Dual-Glass)



ORISUN-78-SGH	ORISUN-78-DGH	ORISUN-72-SGH	ORISUN-72-DGH	ORISUN-60-SGH	ORISUN-54-SGH
620-640W	615-635W	570-590 W	565-585 W	475-485W	420-430 W
2465*1134mm	2465*1134mm	2278*1134 mm	2278*1134 mm	1903*1134mm	1722*1134mm
78p Mono-facial	78p Bifacial	72p Mono-facial	72p Bifacial	60p Mono-facial	54p Mono-facial
Utility	Utility	Utility Distributed	Utility Distributed	Household	Household

PRODUCT SERIES

N-type TOPCon Module Series with 182R (Single-Glass & Dual-Glass)



ORISUN-72R-SGH	ORISUN-72R-DGH	ORISUN-54R-SGH	ORISUN-54R-SGB	ORISUN-54R-DGH
585-605W	580-600W	435-450W	425-445W	420-440W
2382*1134mm	2382*1134mm	1762*1134mm	1762*1134mm	1762*1134mm
72P Mono-facial	72P Bifacial	54P Mono-facial	54P Mono-facial Black	54P Bifacial
Utility Distributed	Utility Distributed	Household	Household	Household

ADVANCED PROCESS

We use the most advanced production technology, combined with innovative technology and 5G communication, to achieve an efficient and intelligent production process. The introduction of automatic guided vehicle (AGV) technology is used for unmanned handling of cells, making the production process more intelligent and efficient. AGV can accurately and stably handle raw materials and finished products, thereby reducing manual intervention in the production process and improving the operating efficiency of the production line. Optimal management of resources to achieve sustainable development.

5G

High Speed
Connection

MCS

Task
Scheduling

MES

Process
Control

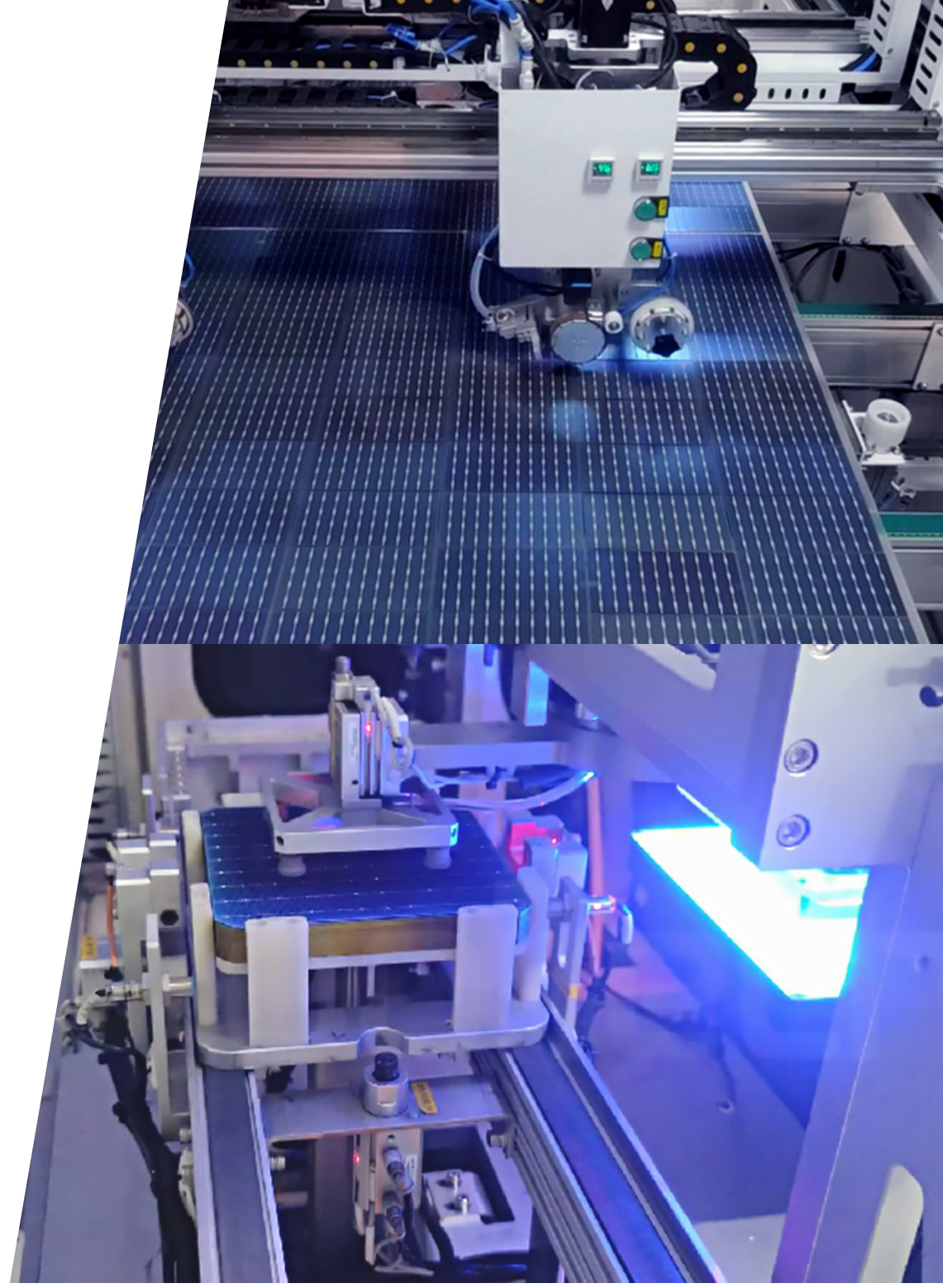
RSC

Dispatching
System



QUALITY CONTROL

We have established strict quality control standards, covering all aspects of raw material procurement, production process monitoring, product testing and packaging. All products must meet these standards to ensure product stability and performance.



AFTER-SALES SERVICE

We firmly believe that after-sales service is an important guarantee for enterprise development, and customer satisfaction is our greatest pursuit. Therefore, after you choose our photovoltaic products, we will go all out to provide you with comprehensive and high-quality after-sales service, so that your photovoltaic system can always run efficiently and contribute to sustainable energy. Thank you for your trust in us, we look forward to serving you!



- Multi-dimensional service network
- Product traceability after-sales service system
- Online and offline training platform
- aftersales@orisolartech.com

SOLUTIONS

As a technology leader in the pv industry, We have brought three series of centralized, distributed and off-grid distributed to customers, as well as one-stop full-scenario photovoltaic system solutions such as large-scale ground power stations, photovoltaic and energy storage integration, etc.



Centralised PV

Utility
Complementary agriculture and fishing
.....

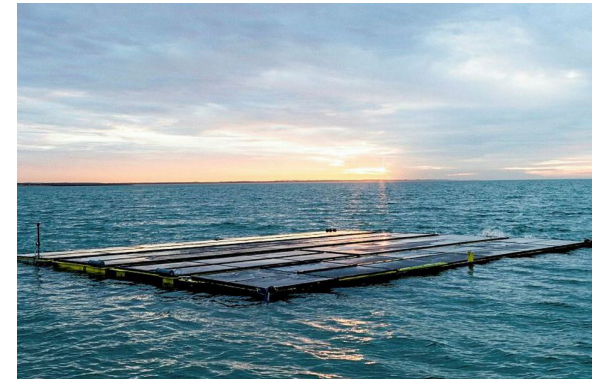
UTILITY



Distributed PV

Distributed
BIPV (Building Integrated PV)
.....

DISTRIBUTED



Off-grid distributed integrated energy solutions

Offshore PV
Isolated grid system
.....

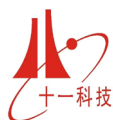
OFFSHORE

PARTNERS

R & D institutions



Business partners



FINANCE



ESG



We established a good reputation in the industry with its stable financial strength. We focus on the efficient operation of financial management and always adhere to prudent and prudent financial strategies. This solid financial strength is one of the keys to our success, allowing us to maintain a strong foothold in an environment of market volatility and economic challenges.



Powering the future

www.orisolartech.com