

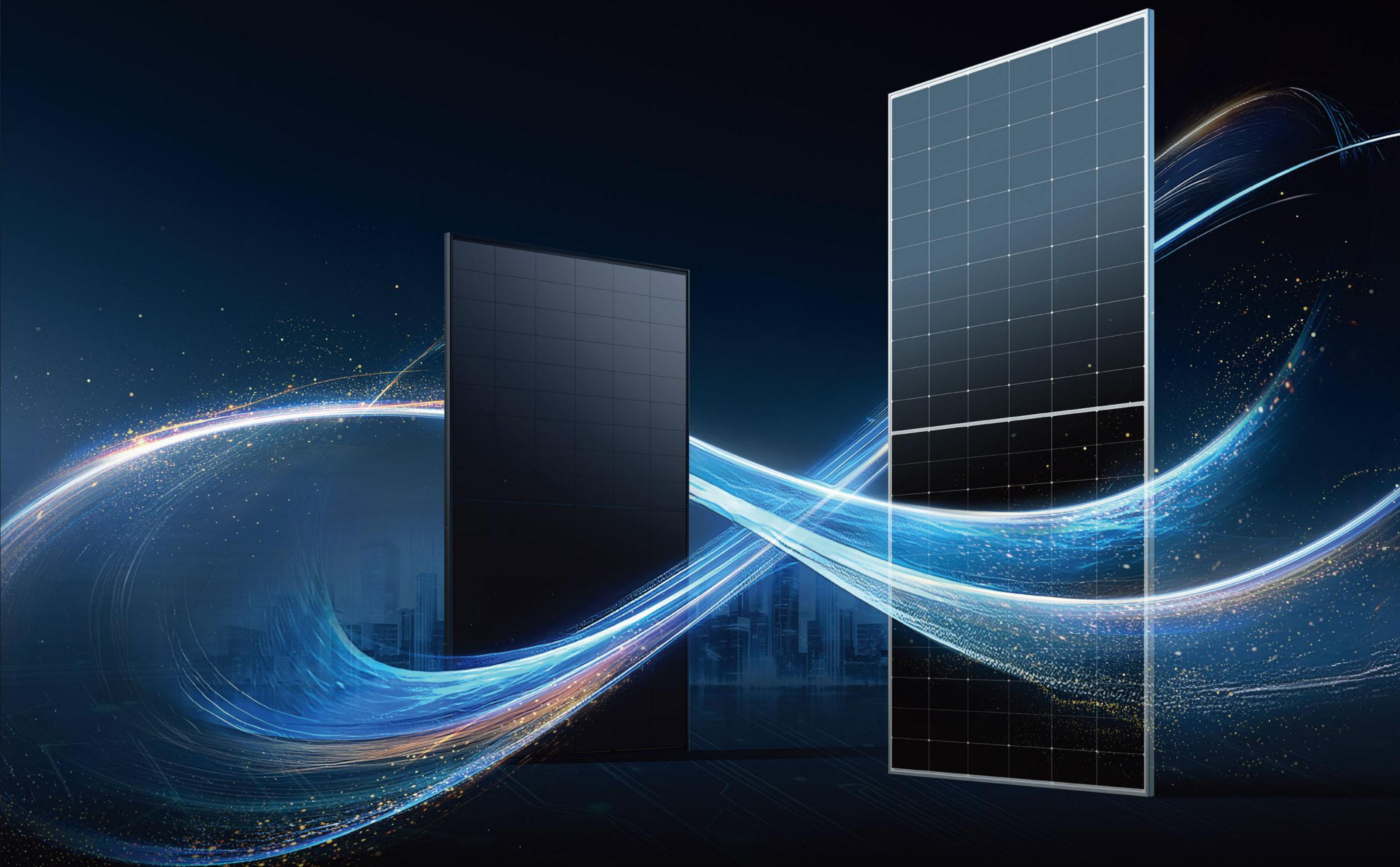
LONGi

Hi-MO **X10**

Peak of Crystalline Silicon

First Choice for Value

Unleash the Future Without Limits



To Make the Best of Solar Energy To Build a Green World

Founded in 2000, LONGi Green Energy Technology Co., Ltd. (LONGi) is committed to being the most valuable solar technology company in the world. Under the mission of "To make the best of solar energy to build a green world" with a brand positioning of "The most trusted, reliable solar company that blazes the trail for green technology". LONGi is developing solutions for large-scale power plants, for different industries and households with its innovation-focused development. Eventually, we will also supply "Green Power + Green Hydrogen" solutions for global zero-carbon development.

125.42GW

Monocrystalline Silicon Wafer Shipment
(2023)

170GW

Monocrystalline Silicon Wafer Capacity
(2023)

200GW

Annual Capacity Plan for the Next Three
Years Wafer Annual Planed Capacity

67.52GW

Monocrystalline Silicon Module Shipment
(2023)

120GW

Monocrystalline Silicon Module Capacity
(2023)

150GW

Annual Capacity Plan for the Next Three
Years Module Annual Planed Capacity

LONGi has consistently maintained industry leading ability to mitigate risk and adapt to market changes and, as part of operations, the company prioritizes corporate financial health and stability, with its asset-liability ratio at a low level compared to other global PV manufacturers.

TIER 1

Tier 1 PV Module Manufacturer

Source: BNEF 1Q 2024 Global PV Market Outlook

100%

100% Bankable PV Module Brand

Source : BNEF PV Module & Inverter Bankability 2023

AAA

PV Module Tech Bankability Rating

Source : PV ModuleTech Bankability Ratings Quarterly | Q1'24 Release

Innovation Without Limits

HPBC 2.0 Sets Sail, Great Leaps in 3 Key Technologies

Leap the Cell Technology Barrier

Upgraded three-layer structure of light absorption/photovoltaic conversion/electricity transmission

Optimised Multi-layer Anti-reflection Film: Increase light absorption

2.25% increase in short-circuit current | 12%+ reduction in reflections at short waves

Innovation Bipolar Hybrid Passivation

Mass production Voc exceeds 745mV | Effective against UV-induced degradation

Soft Breakdown Design + Bipolar Low Resistance Passivation Contacts

Reduced hot spot/shading power loss | Overall cell efficiency improvement

Leap the Silicon Substrate Limitations

Equipped with TaiRay core

Enhances overall power generation potential and reliability

Leap the BC Manufacturing Dilemma

Innovative development of OBB structure,
Breakthroughs in key processes and materials

Innovative Development Of OBB Structures

No frontal gridline, No back busbars

HPBC2.0
26.6%+
Mass Efficiency

Traditional BC backside gridline structure



When the charged particles approach the positive/negative zone, they need to move a certain distance to be collected by the busbar, and are prone to loss in the free process.

Hi-MO X10 Backside OBB structure



Positive and negative fingers through the back, welding strip directly connected to the fingers to eliminate the influence of the transmission distance, shorten the maximum current transmission distance, and further increase the 5W+ of the module power.

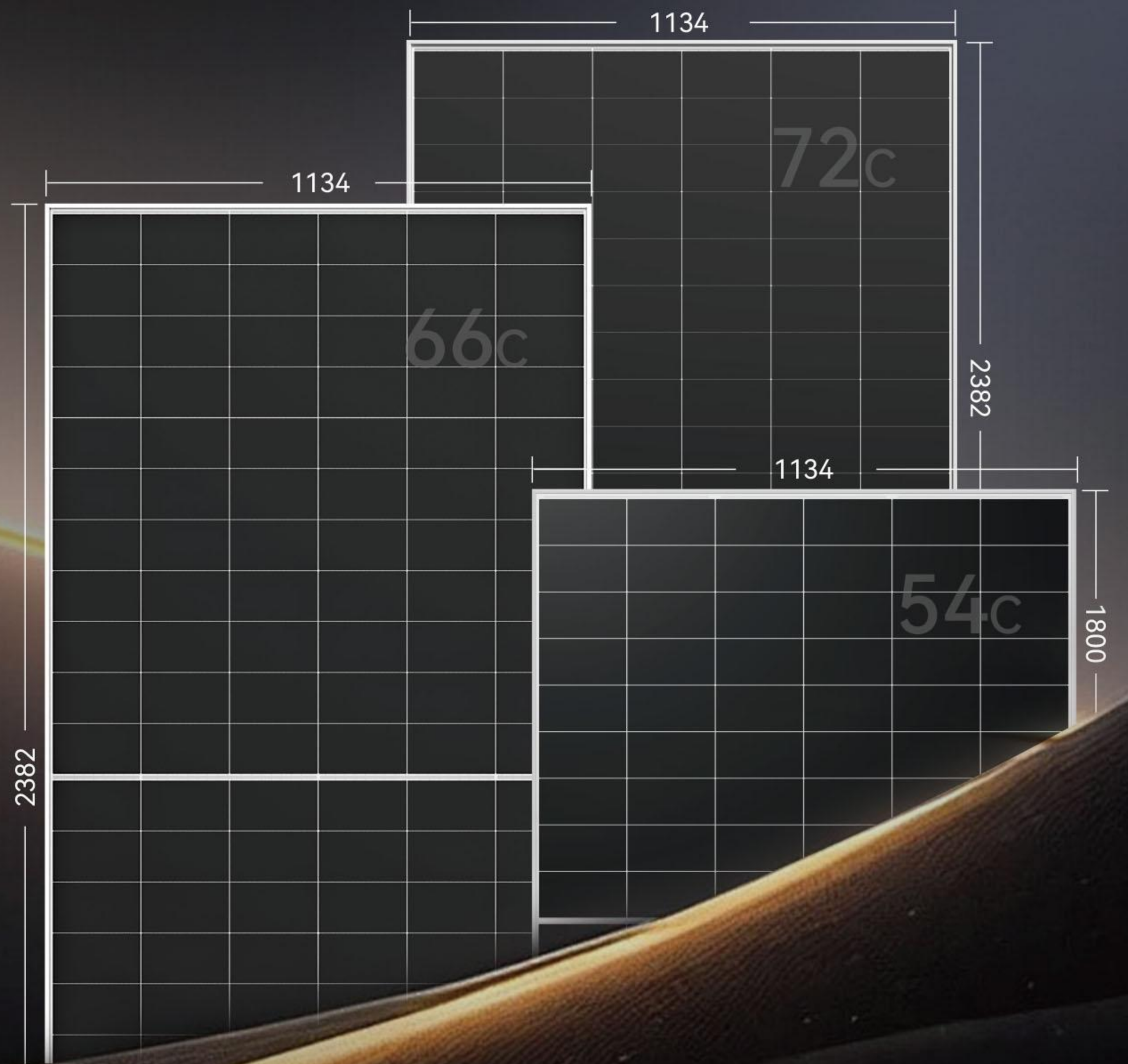
Power Without Limits

Peak Efficiency, The Mass Production Power Leads the Industry by 30W

Hi-MO X10

Maximum Conversion Efficiency **24.8%**

Maximum Module Power **670W**



The mass production power leads competitors by **30W**

Absolute increase of **1%** in module efficiency

Installed capacity up by about **5%** under same area

Hi-MO X10
660W

TOPCon
630W

Ambition Without Limits

Unique Leading Technology Establish the Core Superiority of Hi-MO X10

Anti-Shading

No Fear of Partial Shading | Lower Power Loss

Hi-MO X10

Single-cell shading leads to self-bypass
No affect to the power output of the entire string of cells,
less power loss



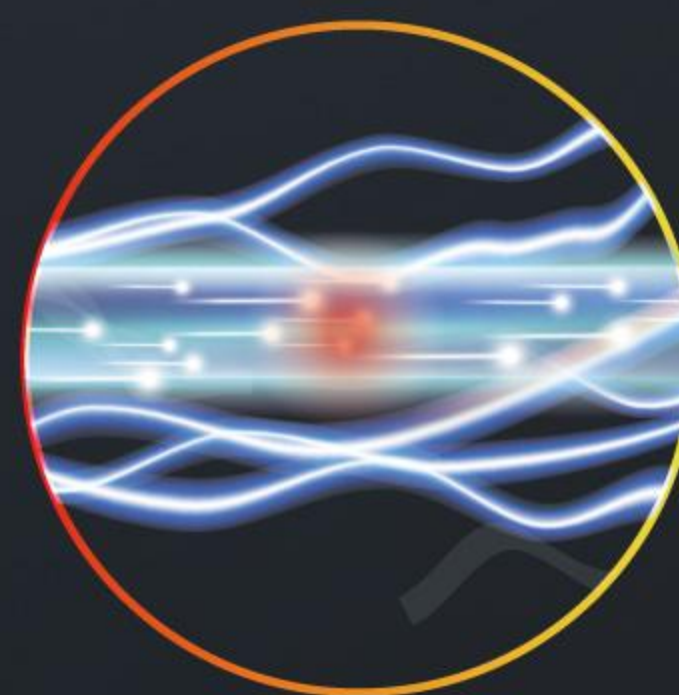
Regular Module

Single-cell shading leads to the entire string of cells to
bypass large power loss



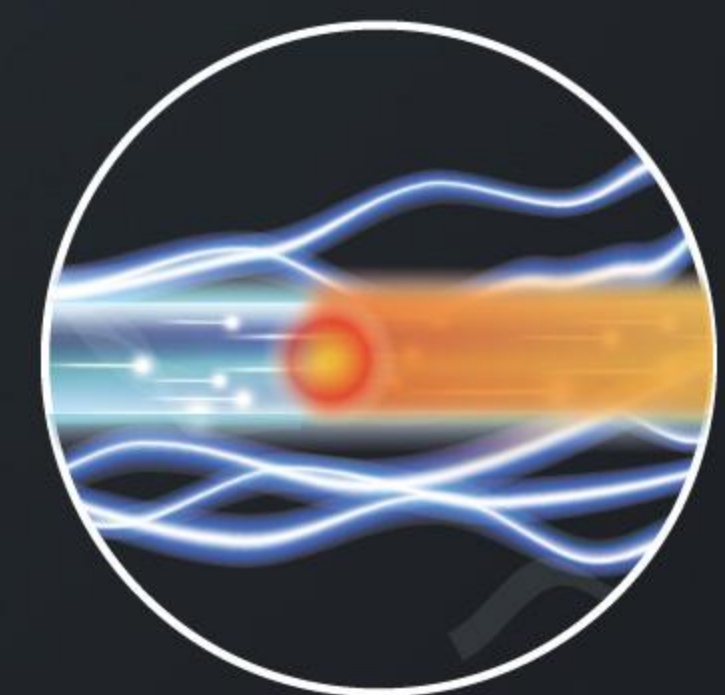
Prevent localized overheating

Reduce Hot Spot Temperature | Failure Risk Drops Sharply



Hi-MO X10

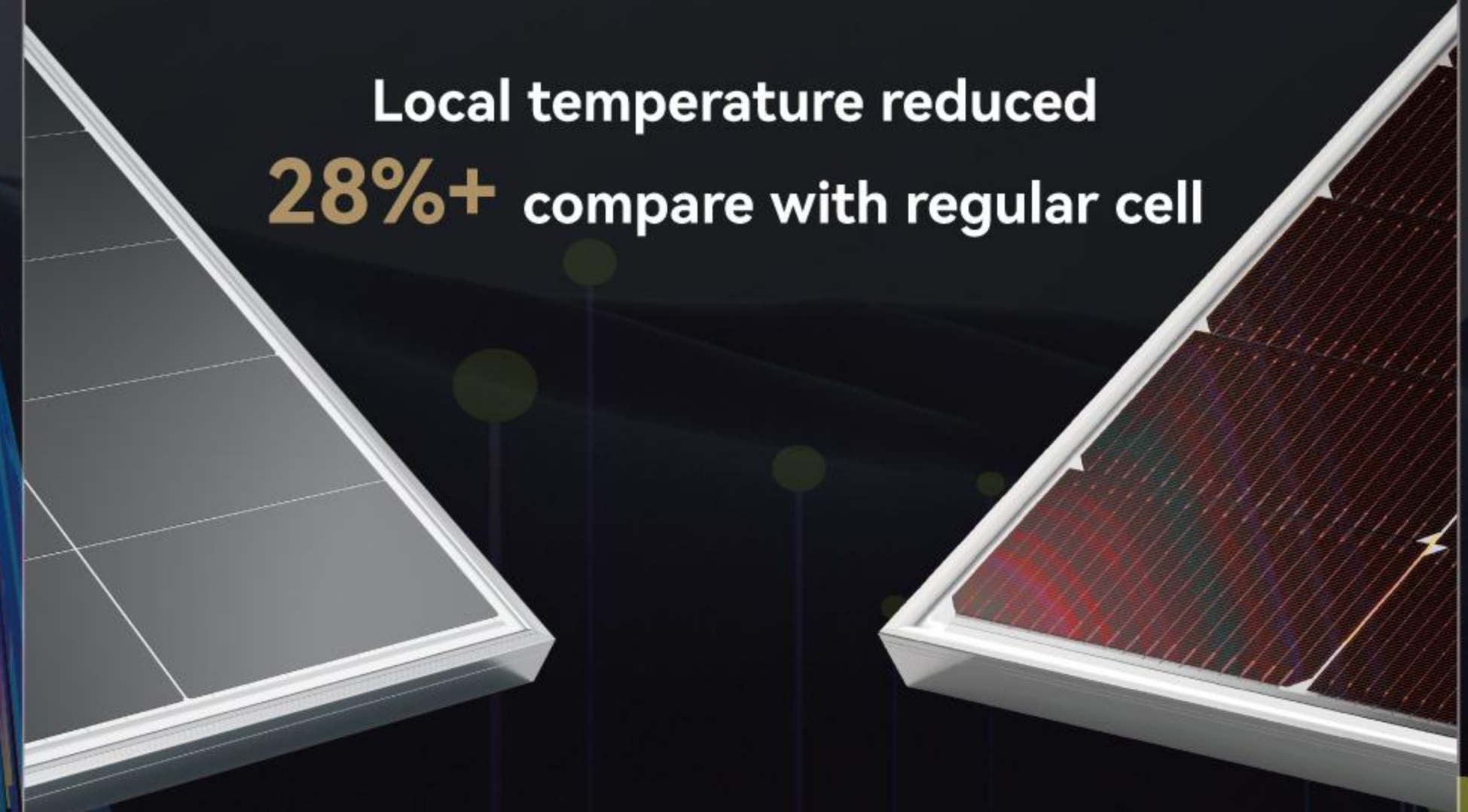
Soft Breakdown Design can
significantly reduce the local
temperature under shading



TOPCon

Shading transform cell into a load,
consumes current,
local Temperature rise,
causes hot spot

Local temperature reduced
28%+ compare with regular cell



High Efficiency



Low Temperature
Coefficient



Low Degradation



Anti-Shading



Low Fault Failure

Ambition Without Limits

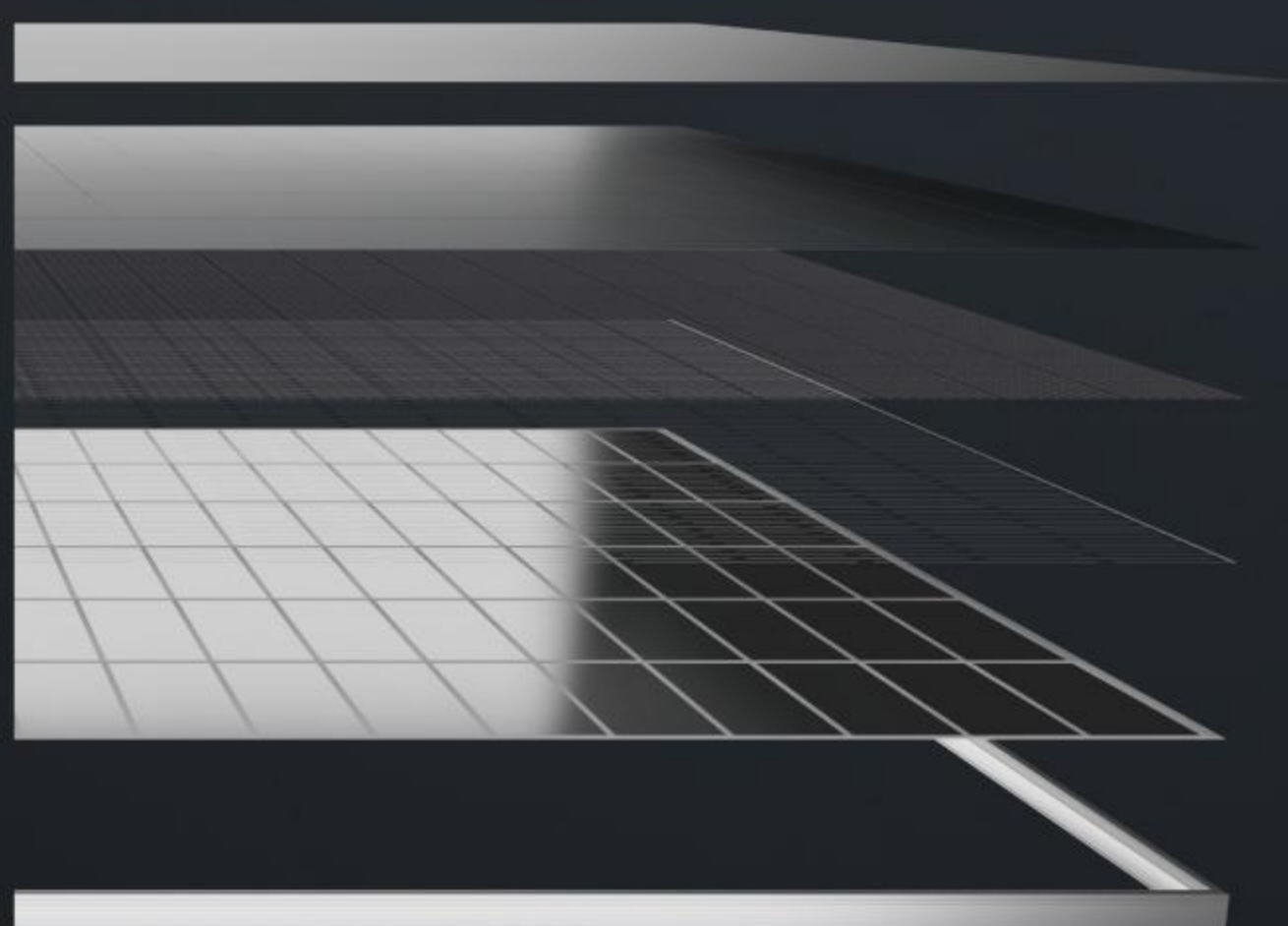
Unique Leading Technology Establish the Core Superiority of Hi-MO X10

Full- Scenario Aging Suppression

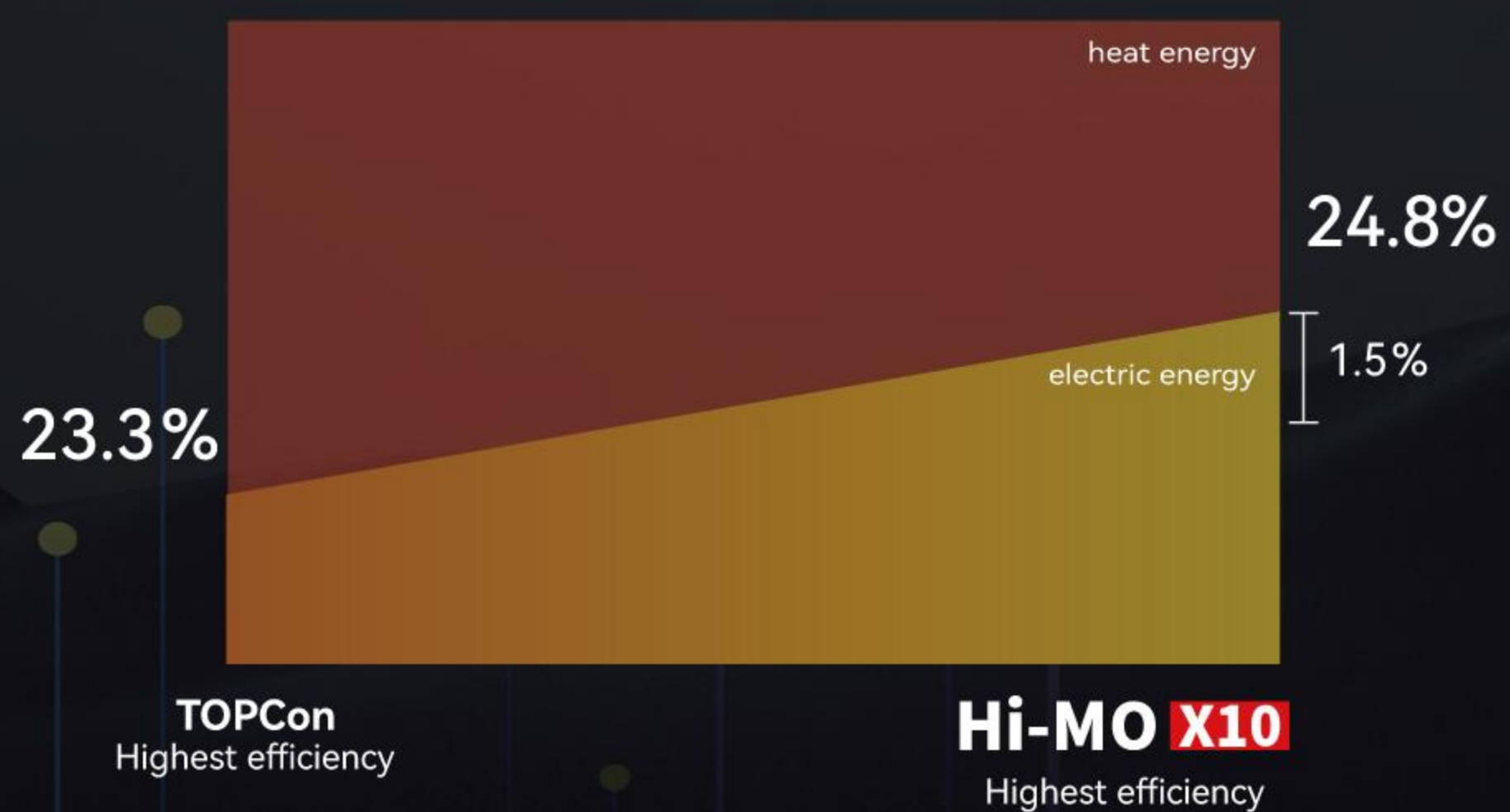
High-Reliability Packaging Resists Aging | High Efficiency Reduces Temperature

High-Reliability Packaging

- High density packaging
- POE encapsulation film
- Pure silver electrode paste
- Innovation bipolar hybrid passivation



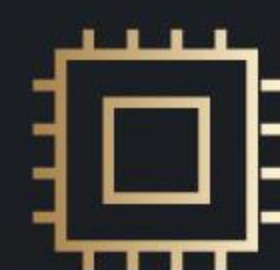
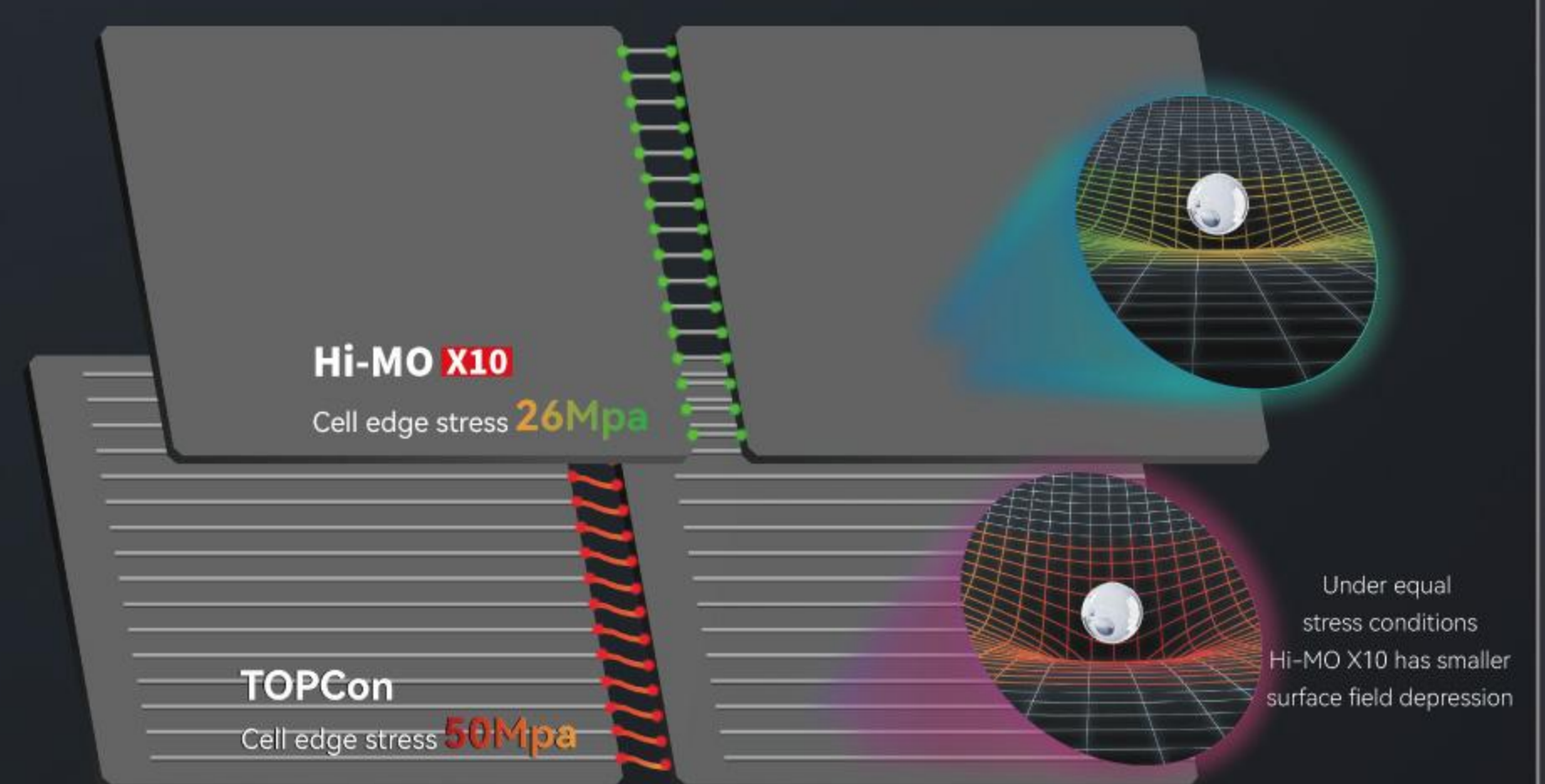
Suppression of Operating Temperature



Law of conservation of energy: higher efficiency means higher power and less heat, thus lower temperature. Hi-MO X10 module is 1.5% more efficient than TOPCon, with lower operating temperature and better aging suppression.

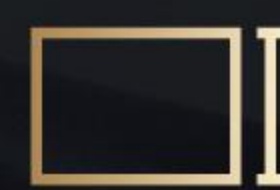
System-Level Resistance to Mechanical Stress

Thicker TaiRay wafer | All Back Contact One-line Welding Structure



TaiRay Core

Ultra-high mechanical strength maximum rupture strength increased by 16%.



Thicker TaiRay Wafer

Wafer thickness is 10μm thicker than mainstream thicker for stronger reliability



All Back Contact One - line Welding Structure

Reduce cell edge stress improve anti-cracking performance



High Efficiency



Low Temperature Coefficient



Low Degradation



Anti-Shading



Low Fault Failure

Value Growth Without Limits

8%+ Increase in Power Generation

Enter Thousands of Industries and Households

Investment Residential

Higher Investment Returns

- 📍 Xian, China
- 🏠 Roof area: 260 m²
- 📐 Roof angle: 25° tiled
- 🔌 Full Grid Connection, Feed-in tariff: \$0.05/kWh
- System design: 15 pcs /string, a total of 5 strings, 5 inverters of 8kW

TOPCon		Hi-MO X10		
630	Module rated power (W)	660		
47.25	Project Capacity (kW)	49.50	⬆️	4.76%
1485.2	Total Power Generation (MWh)	1602.1	⬆️	7.9%
11.56	IRR (%)	12.57	⬆️	8.75%
8.19	Payback Period (year)	7.59	⬆️	7.34%



Long Tail C&I

Higher Investment Returns

- 📍 Madrid, Spain
- 🏠 Roof area: 10000 m²
- 📐 Roof angle: Color Steel Tile Roofing 3°
- 🔌 Full Grid Connection, Feed-in tariff: \$0.05/kWh
- System design: 20 pcs /string, a total of 154 strings, 11 inverters of 175kW, system voltage 1500V

TOPCon		Hi-MO X10		
630	Module rated power (W)	660		
1940	Project Capacity (kW)	2033	⬆️	4.76%
83647	Total Power Generation (MWh)	90933	⬆️	8.7%
9.07%	IRR (%)	9.96%	⬆️	9.88%
10.06	Payback Period (year)	9.27	⬆️	7.89%



Residential

Lower LCOE

- 📍 Madrid, Spain
- 🏠 Roof area: 260 m²
- 📐 Roof angle: 35° tiled
- 🔌 Self-consumption, Residential electricity price: \$0.17/kWh
- System design: 13 pcs/string, a total of 6 strings, 6 inverters of 8kW

TOPCon		Hi-MO X10		
630	Module rated power (W)	660		
49.14	Project Capacity (kW)	51.48	⬆️	4.76%
2396	Total Power Generation (MWh)	2610	⬆️	9.0%
0.039	LCOE (yuan/kWh)	0.036	⬆️	7.16%



Value C&I

Lower LCOE

- 📍 Xian, China
- 🏠 Roof area: 14000 m²
- 📐 Roof angle: Color Steel Tile Roofing 3°
- 🔌 Self-consumption, C&I electricity price: \$0.11/kWh
- System design: 22 pcs/string, a total of 160 strings, 11 inverters of 175kW, system voltage 1500V

TOPCon		Hi-MO X10		
630	Module rated power (W)	660		
2217.6	Project Capacity (kW)	2323.2	⬆️	4.76%
66593	Total Power Generation (MWh)	71958	⬆️	8.1%
29.36	IRR (%)	31.33	⬆️	6.72%
0.05	LCOE (\$/kWh)	0.047	⬆️	6.9%



Peak of Crystalline Silicon First Choice for Value

New Product, Meet User Scenario Needs



Performance Leading

Peak efficiency
Fearless to high temperature
Anti-shading



Reliability Leading

Anti-high temperatures & hot spots
Full- Scene aging suppression
System-level resistance to mechanical stress



Standard Leading

Raw material standard
Full- Scene reliability standard

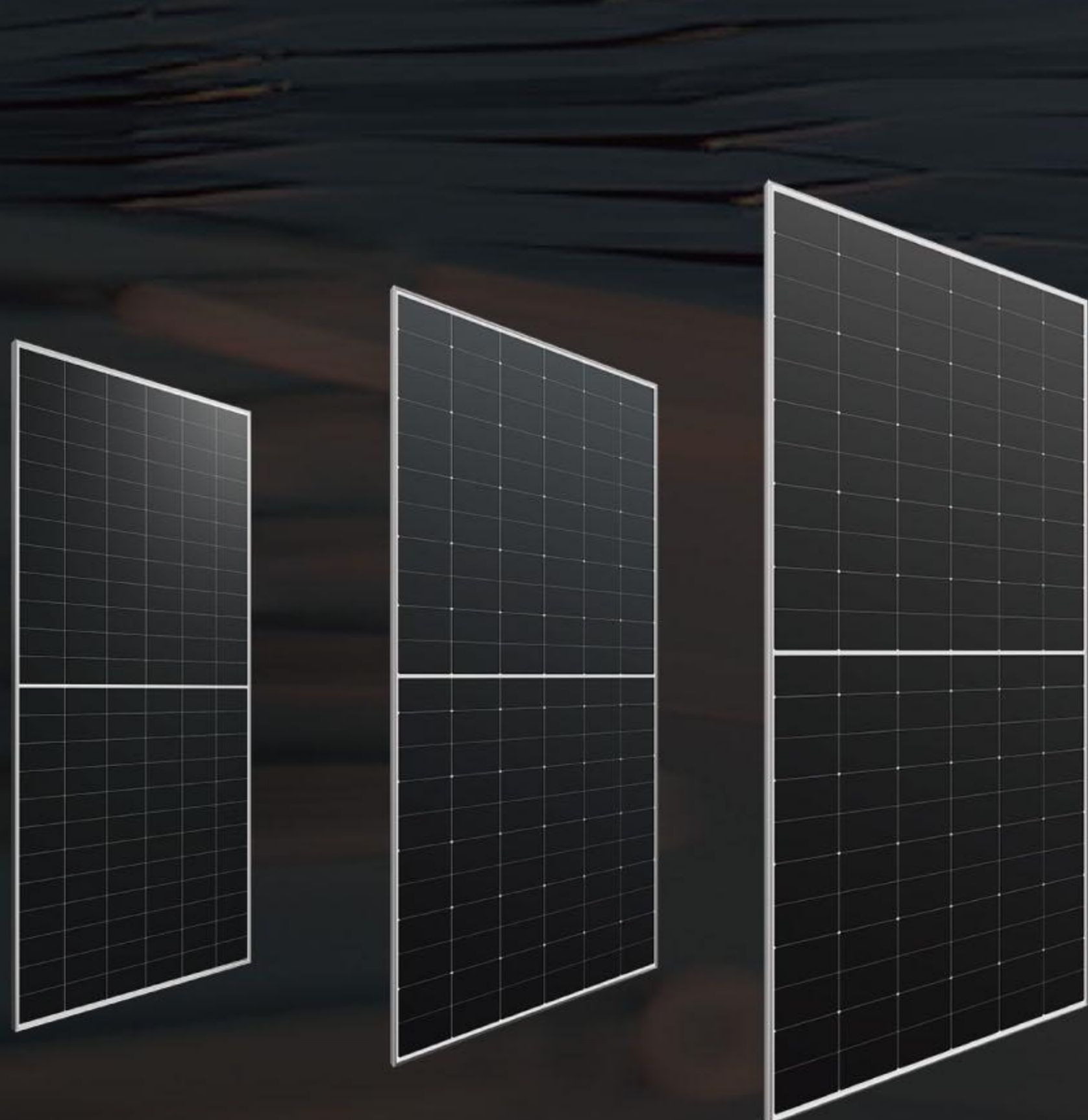


Manufacturing Leading

Lighthouse factory
Technological manufacturing

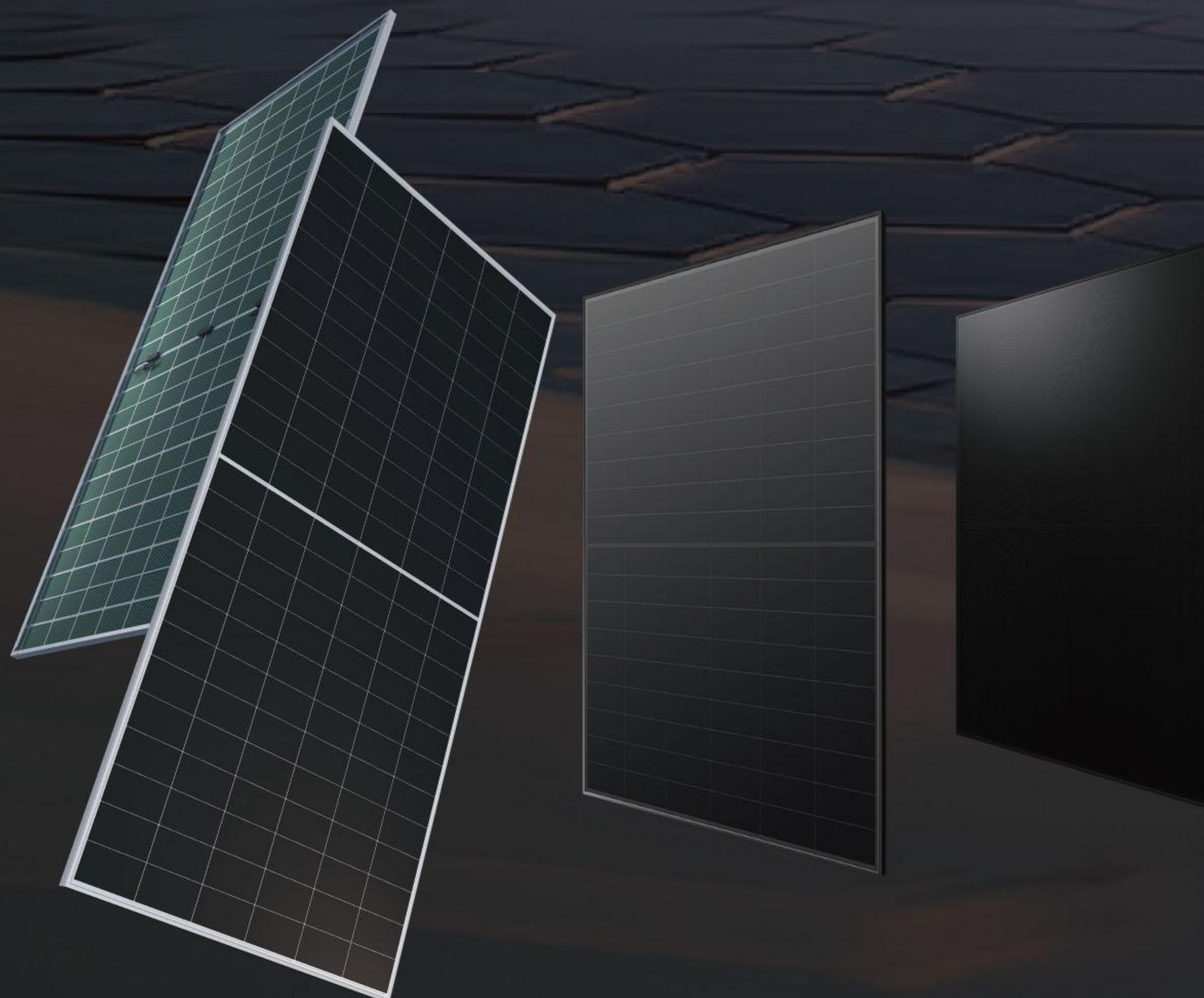
Hi-MO X10

Explorer



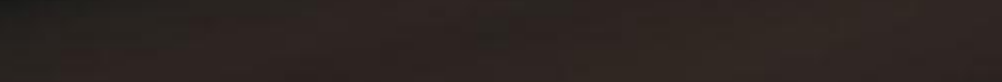
Hi-MO X10

Scientist



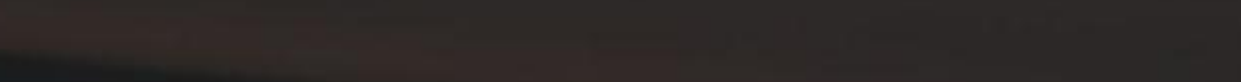
Hi-MO X10

Guardian



Hi-MO X10

Artist



LONGI

www.longi.com