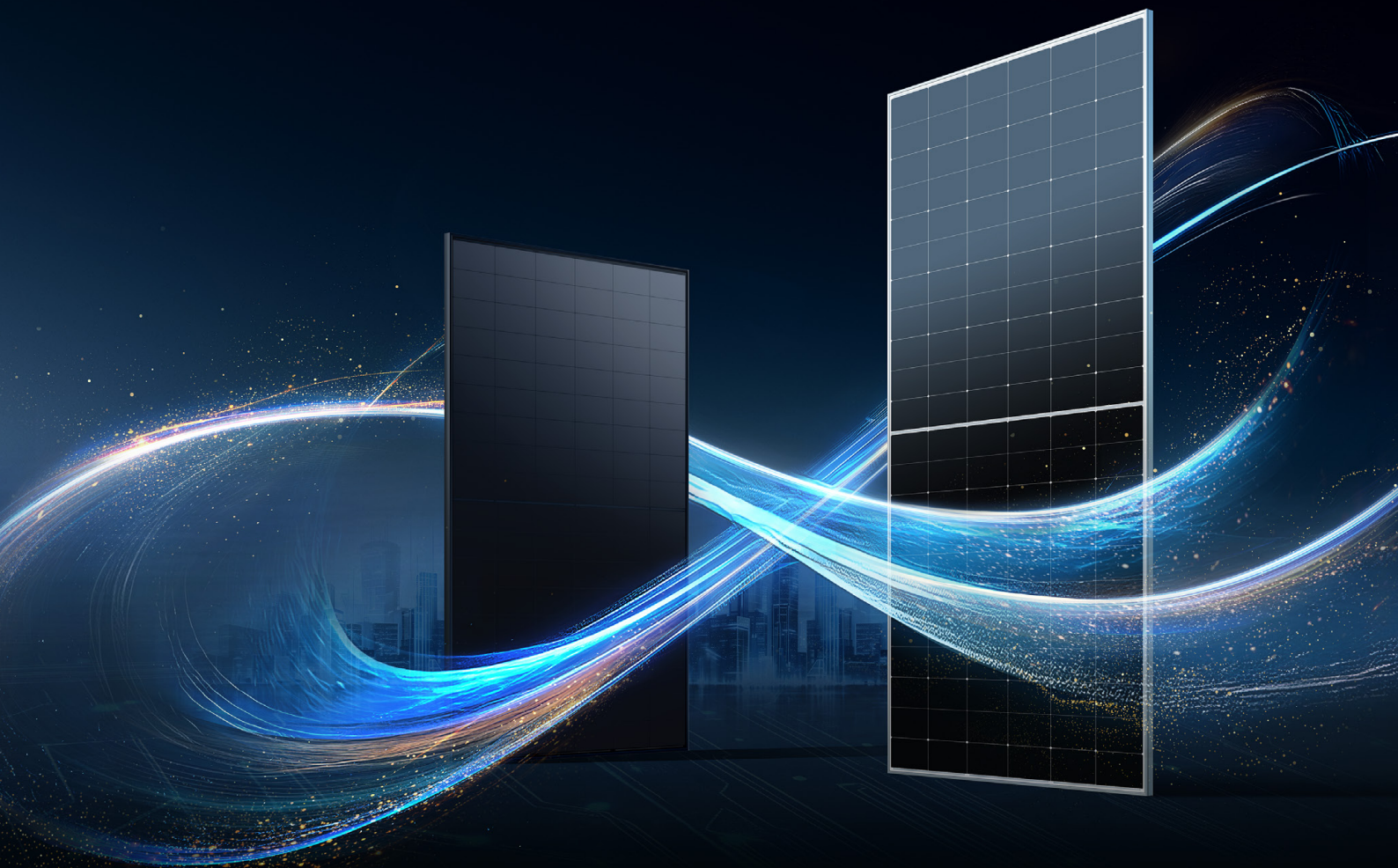


**LONGI**

# Hi-MO **X10**

The Pinnacle of Crystalline Silicon

Exceptional Value, Limitless Potential



# Innovation Without Limits

HPBC 2.0 - Advancing Solar with 3 Breakthrough Technologies

## Leading the Next Era in Cell Technology Innovation

Upgraded three-layer structure of light absorption, light-electricity conversion and current transmission

**Optimised Multi-layer Anti-reflection Film:**  
Maximizing light absorption and cell efficiency

**Innovative Bipolar Hybrid Passivation:**  
Reducing current loss

**Shading Optimizer Technology:**  
Protects against shading power loss and localized overheating

## Overcoming the Boundaries of Silicon Substrate Technology

Equipped with TaiRay core wafers  
Enhancing power potential with unmatched reliability

## Breakthrough in Key Materials and Processes

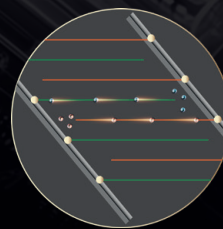
High-Transparency Insulation Materials and AI Assisted Manufacturing

## Innovative Development Of OBB Structures

No frontal gridlines, No back busbars

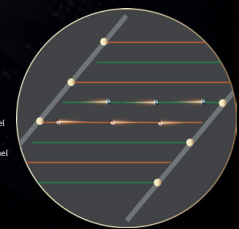


Traditional BC backside gridline structure



Charged particles moving toward the positive or negative zones must cover a certain distance to be collected by the busbar, which can result in some losses during free movement

Hi-MO X10 Backside OBB structure



With back-side positive and negative fingers directly connected to the welding strip, the transmission distance is minimized, enhancing current flow and increasing module power by 5W+

# Power Without Limits

Peak Efficiency, Mass Production Power Leading the Industry by 30W

## Hi-MO X10

Maximum Efficiency

24.8%

Maximum Power

670W



The mass production power leads competitors by **30W**  
Absolute increase of **1%** in module efficiency  
Installed capacity up by approx. **5%** under same area

Hi-MO X10  
**660W**

TOPCon  
**630W**

# Ambition Without Limits

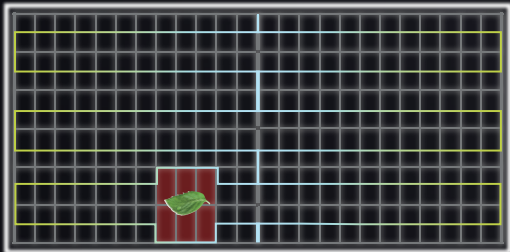
Establishing Core Superiority with Cutting-Edge Innovation

## Shading Optimizer Technology

No Fear of Partial Shading | Lower Power Loss

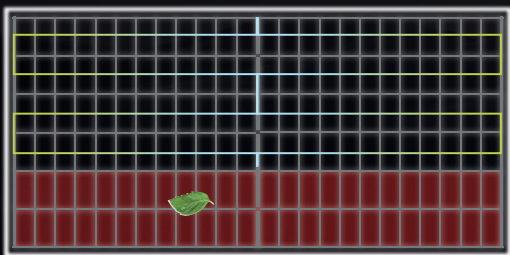
### Hi-MO X10

With Self-Bypass, single-cell shading minimizes power loss for the entire string



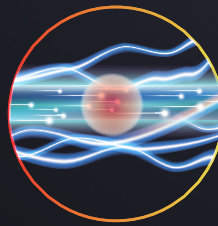
### Regular Module

Single-cell shading leads to the hard breakdown of the entire string of cells, causing a greater power loss



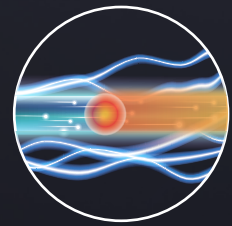
## Preventing localized overheating

Reduced Operating Temperature | Failure Risk Drops Sharply



### Hi-MO X10

The soft breakdown design significantly lowers local panel temperature



### TOPCon

Shading transforms cells into current-consuming loads, increasing localized heat

Local temperature reduced by **28%+** compared to a regular cell



High Efficiency



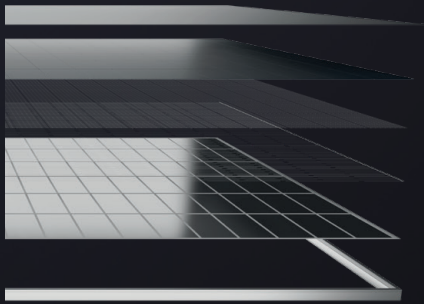
Low Temperature Coefficient

## Full-Scenario Aging Suppression

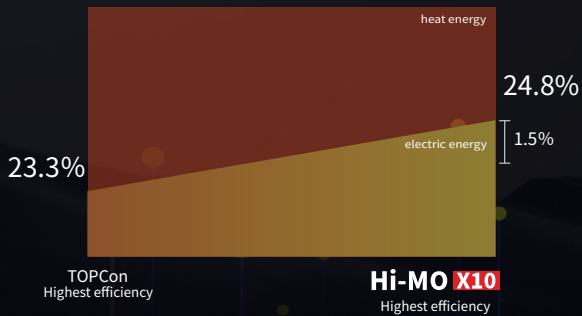
Packaging Built to Resist Aging | Increased Efficiency with Lower Temperatures

### High-Reliability Lamination

- High density lamination process
- Pure silver electrode paste
- POE encapsulation film
- Innovative bipolar hybrid passivation



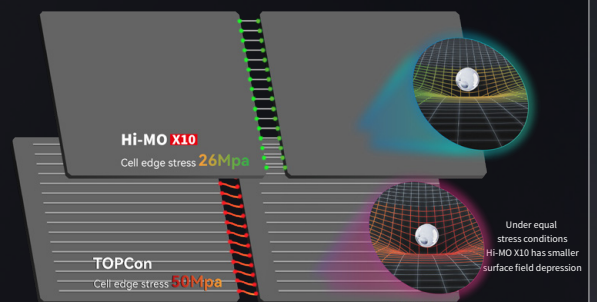
### Lower Operating Temperatures



With **1.5%** higher efficiency, Hi-MO X10 delivers **more power, less heat, and improved aging resistance** over TOPCon under the same conditions

## Enhanced Resistance to Mechanical Stress

Thicker TaiRay wafer | One-line Back Contact Welding Structure



### TaiRay Core

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



### Thicker Wafer

Wafer thickness is 10 $\mu$ m greater than other mainstream wafers leading to better reliability



### Back Side Straight-Line Welding

Reduces cell edge stress and micro-cracking issues



Anti-Shading



Low Failure Rate

# Improved Value and Unmatched Potential

**8%+** Increase in Power Generation

Powering Change Across Industries and Households

## Investment Residential Higher Returns

- 📍 Xian, China
- 🏠 Roof area: 260 m<sup>2</sup>
- 📐 Roof angle: 25° tilt
- 🔌 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 Returns

- 📍 Madrid, Spain
- 🏠 Roof area: 10000 m<sup>2</sup>
- 📐 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 m<sup>2</sup>
- 📐 Roof angle: 35° tilt
- 🔌 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 m<sup>2</sup>
- 📐 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%



# Unrivaled Value, Endless Possibilities

New Product for Every Scenario



## Performance Leading

Peak efficiency  
Resilient to high temperatures  
Anti-Shading Technology



## Reliability Leading

Heat and hot spot protection  
Advanced aging suppression  
Enhanced resistance to  
mechanical stress



## Standard Leading

Superior raw materials standards  
Uncompromised reliability standards

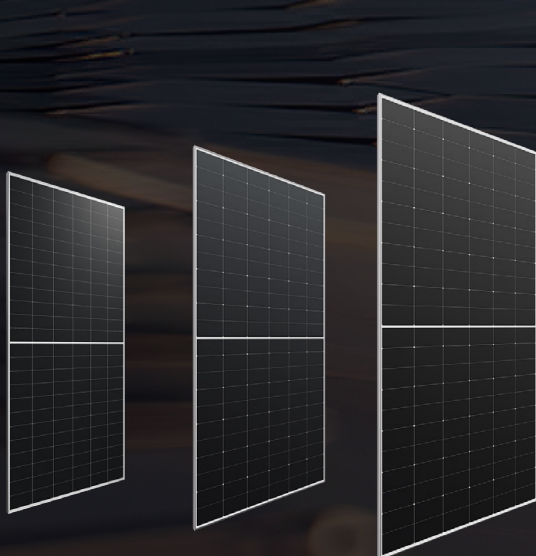


## Manufacturing Leading

Cutting edge technological and  
sustainable manufacturing at  
the world's first Lighthouse Factory

## Hi-MO X10

### Explorer



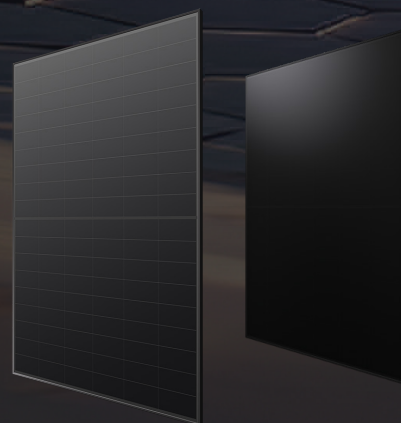
## Hi-MO X10

### Guardian



## Hi-MO X10

### Scientist



## Hi-MO X10

### Artist

**LONGI**

[www.longi.com](http://www.longi.com)

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

Founded in 2000, LONGi Green Energy Technology Co., Ltd. (LONGi) is dedicated to becoming the world's most valuable solar technology company. Guided by its mission, 'Harnessing Solar Energy to Build a Greener World,' LONGi positions itself as the most trusted and reliable pioneer in green technology. With a commitment to innovation, LONGi develops tailored solutions for large-scale power plants, diverse industries, and households, empowering a sustainable future for all.

**125.42**GW

Monocrystalline Silicon Wafer Shipment  
(2023)

**170**GW

Monocrystalline Silicon Wafer Capacity  
(2023)

**200**GW

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

**67.52**GW

Monocrystalline Silicon Module Shipment  
(2023)

**120**GW

Monocrystalline Silicon Module Capacity  
(2023)

**150**GW

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

LONGi consistently leads the industry in risk management and adaptability, prioritizing financial health and stability across its operations. With a low asset-liability ratio compared to other global PV manufacturers, LONGi stands out for its robust approach to corporate resilience and sustainable growth.

**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