

LONGi

Hi-MO 5

Shaping the future. Once again.

540W

Delivering true value
Higher power, lower LCOE

Propelling the **transformation**

Since its founding 20 years ago, LONGi has been deeply involved in the photovoltaics industry and has continuously promoted its breakthrough innovations.

Every LONGi's successive technological innovation had brought about an industrial transformation.

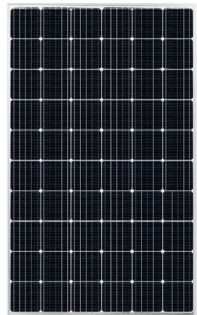
LONGi believes that the value of every innovation lies in real world applications. With scale, volume production of the product delivers true value. LONGi is committed to delivering maximum value for our global partners and customers.

Hi-MO 1 — 4

LONGi roadmap **industry benchmark**

From standard monocrystalline to monocrystalline PERC to P-Type PERC bifacial technology and M6 (166mm) size wafer with gallium-doped technology, every LONGi's new product spearheads the transformation of the photovoltaics industry and becomes a new benchmark for the entire industry.

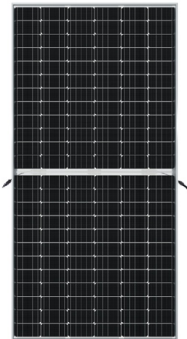
Monocrystalline
market share up to **90%**



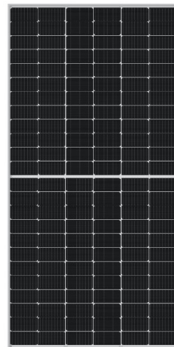
Hi-MO 1



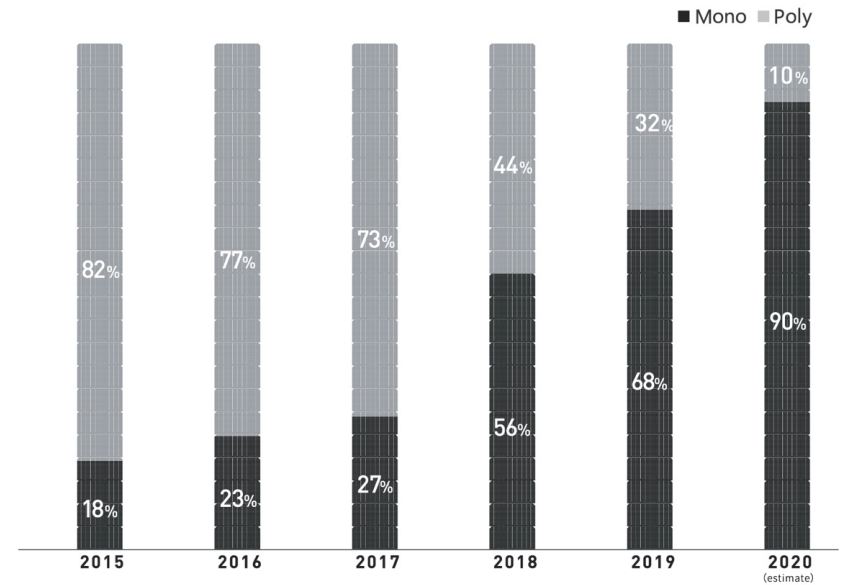
Hi-MO 2



Hi-MO 3



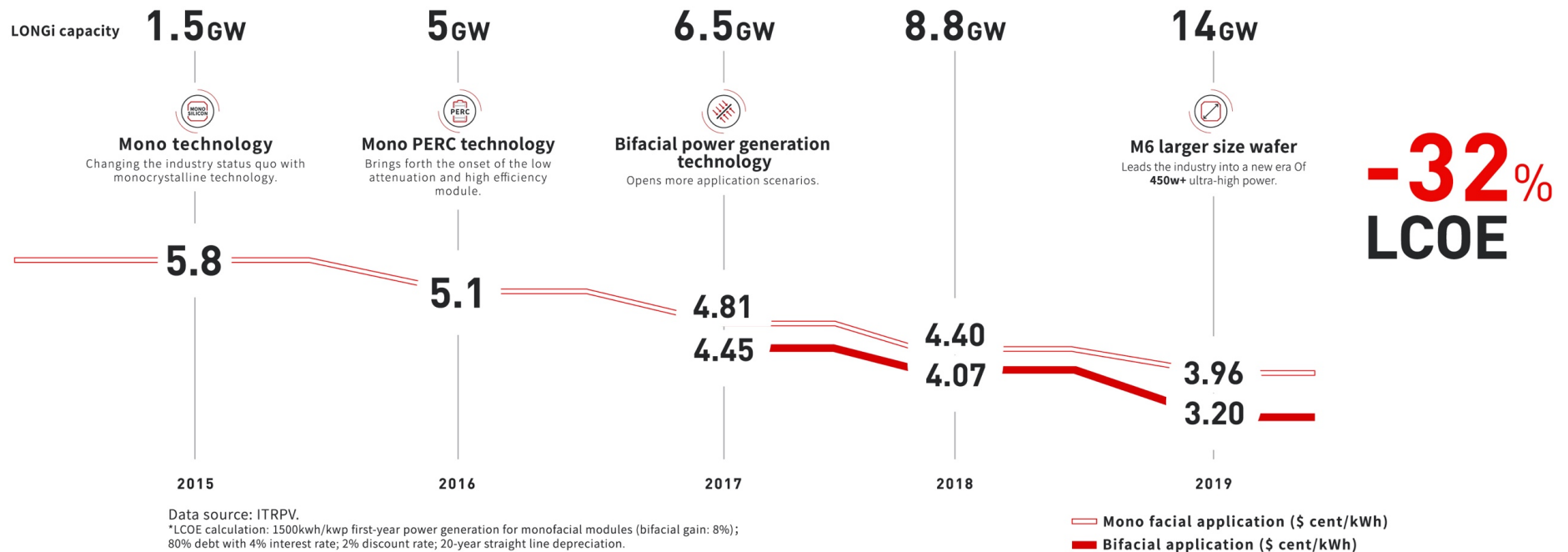
Hi-MO 4




Hi-MO 1 — 4

Leading LCOE, realizing the value of technological innovation in volume production

LONGi insists on research-based methods to achieve industry breakthroughs and quickly promote the commercialization of every innovation.



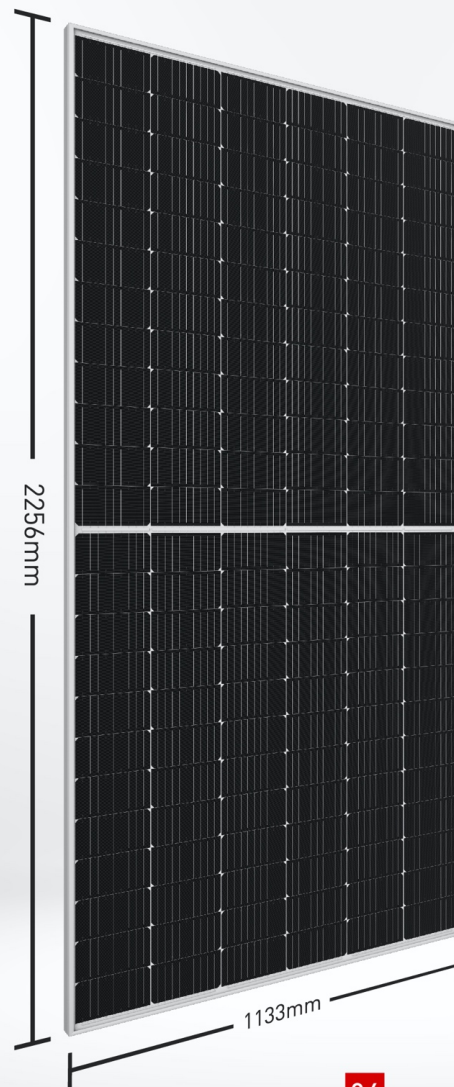
The background of the entire page is a photograph of a vast desert landscape with rolling sand dunes under a bright blue sky with scattered white clouds. In the center of the image, there is a large, semi-transparent white rectangular box with a thin grid pattern. Inside this box, on the right side, is a graphic of several black solar panels arranged in a stepped fashion. The text "Shaping the future. Once again." is written in white, sans-serif font on the left side of the box.

Shaping the future.
Once again.

Delivering true value | Higher power, lower LCOE

Hi-MO 5

Hi-MO **5**
Product
specifications
540W LR5-72HBD



06



✓ **Power output**

- 180+mm wafer with gallium-doped technology
- P-PERC cell technology
- Half-cut cell with multi-busbars
- 72-cell format



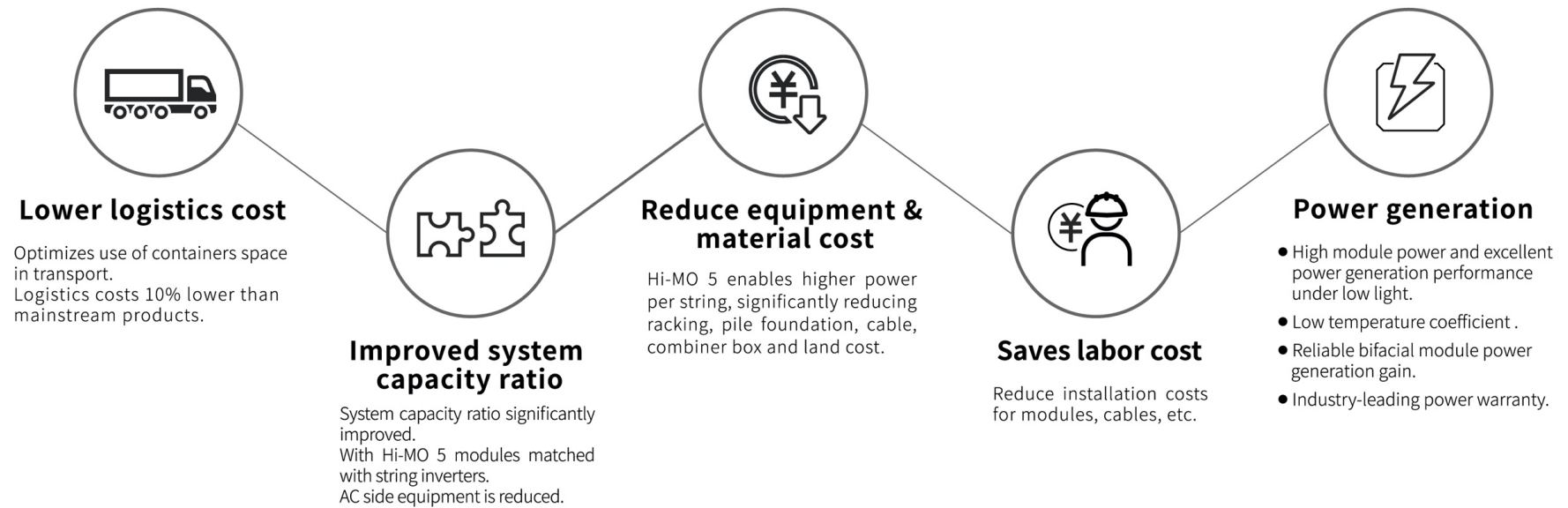
⚡ **Module efficiency**

- Voc: 49.5V
- Imp: 13.0A
- Power temperature coefficient: -0.35%/°C
- Weight: 32.3kg

Hi-MO 5
Lowest LCOE solutions
for ultra-large power plants

Hi-MO 5

Lowest LCOE solutions for ultra-large power plants



Hi-MO **5**

BOS analysis : scenario 01

Location: JiuQuan, China. 100MWdc solar plant with 1500V central inverters, each standard solar subarray with a 3125kVA transformer, And a DC-to-AC ratio of 1.2 for different types of solar modules.

BOS analysis

(Fixed-tilt racking with 4l solar modules -21°C for design lowest temperature, 110kv utility grid voltage)



Labor cost

-20.9%



Land cost

-5.3%








BOS

BOS cost

-4.1%

LCOE

-2.9%

| Product | | 158.75, 72C | 163.75, 78C | 210, 50C | Hi-MO 5 72C |
|---|---|-------------|-------------|----------|--------------------|
| Power | | 410W | 465W | 495W | 540W |
| Module quantity / String | | 27 | 25 | 26 | 27 |
| Power / String | | 11.07kW | 11.625kW | 12.87kW | 14.58kW |
| BOS |  Mounting system | Reference | -3.1% | -6.0% | -8.1% |
| |  Combiner box | Reference | -6.7% | -13.4% | -26.8% |
| |  Cable | Reference | +0.5% | -7.2% | -9.3% |
| |  Labor | Reference | -8.66% | -13.91% | -20.9% |
| |  Land | Reference | -2.8% | -3.6% | -5.3% |
| |  Total BOS | Reference | -1.2% | -2.6% | -4.1% |
|  LCOE | | Reference | -0.6% | -1.0% | -2.9% |

*Considering difference in power degradation warranty but not the difference in bifacial energy yield.

Hi-MO **5**

BOS analysis : scenario 02

Location: Qatar, middle east. 100MWdc solar plant with 1500V central inverters, each standard solar subarray with a 6250kVA transformer, and a DC-to-AC ratio of 1.06 for different types of solar modules.

BOS analysis

(Horizontal single-axis tracker with 2p solar modules, 9.8°C for design lowest temperature, 132kv utility grid voltage).



Labor cost

-10.6%



Land cost








-4.9%

BOS
BOS cost

-2.9%

LCOE

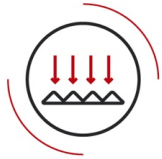
-2.4%

| Product | | 163.75, 78C | 210, 50C | Hi-MO 5 72C |
|---|---|-------------|----------|--------------------|
| Power | | 465W | 495W | 540W |
| Module quantity / String | | 28 | 29 | 30 |
| Power / String | | 13.02W | 14.355kW | 16.2kW |
| BOS |  Mounting system | Reference | 0.5% | 5.7% |
| |  Combiner box | Reference | 9.0% | -18.2% |
| |  Cable | Reference | -11.2% | -18.4% |
| |  Labor | Reference | -5.2% | -10.6% |
| |  Land | Reference | -1.1% | -4.9% |
| |  Total BOS | Reference | -1.0% | -2.9% |
|  LCOE | | Reference | -0.5% | -2.4% |

*Considering difference in power degradation warranty but not the difference in bifacial energy yield.

Hi-MO 5
Outstanding design
Reliable real world applications





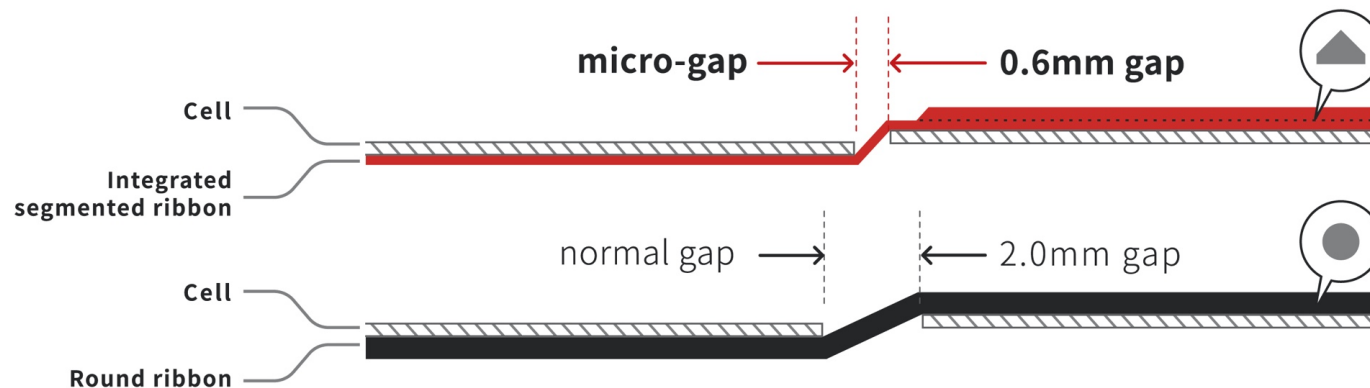
Hi-MO 5

Smart soldering

Improved packing density, reliability and conversion efficiency

LONGi's smart soldering technology uses integrated segmented ribbons. The triangular section maximizes light capturing while the flat section reliably connects cells with reduced gap. Smart soldering technology reduces the tensile stress of the cell by 20%, enabling higher reliability.

Cell gap reduction **2/3** Cell stress reduction **20%** Gain in module efficiency **0.3%**





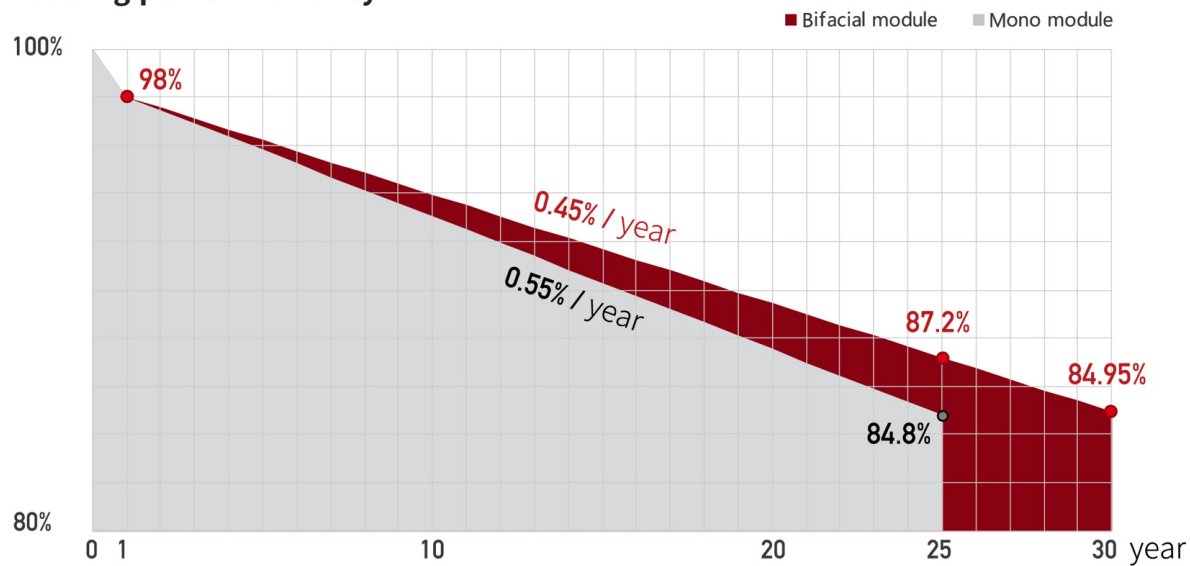
Hi-MO 5

Gallium-doped technology

P-type module with lowest LID

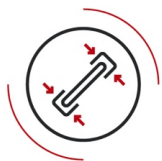
LONGi products use gallium-doped PERC cells.
Better LID performance with stable, long-term power generation.

Leading power warranty



$\leq 2\%$
1st year degradation

-0.45%
Linear annual degradation
after the 1st year

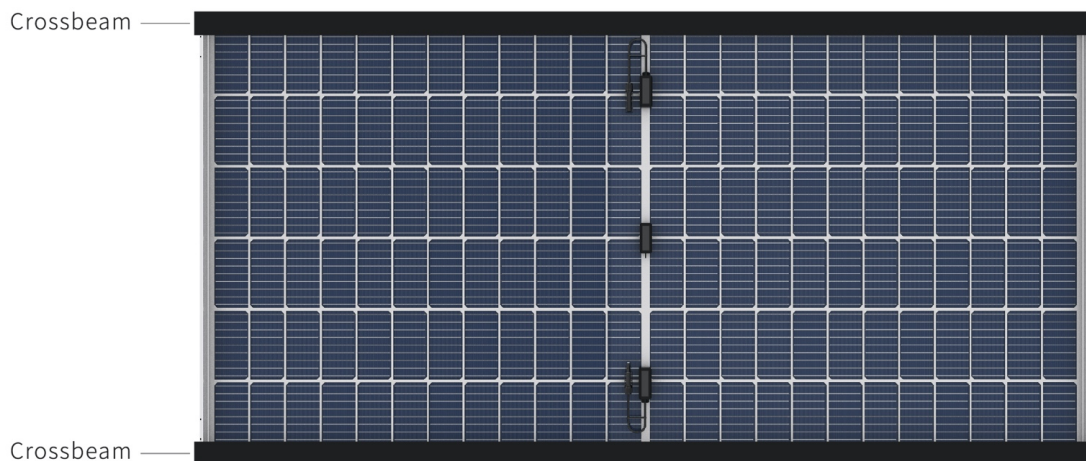


Hi-MO 5

Double-glass with frame

The strongest bifacial module

Hi-MO 5 adopts bifacial double-glass with frame which provides exceptional strength for higher load capacity. Qualified for 5400Pa static load on the front when there is no cross-beam on the back of the module (as shown in the left figure). Avoids shading loss due to cross-beam at the back of the module.



Installation method
dual glass bifacial module

5400/2400 Pa

Front/rear side load

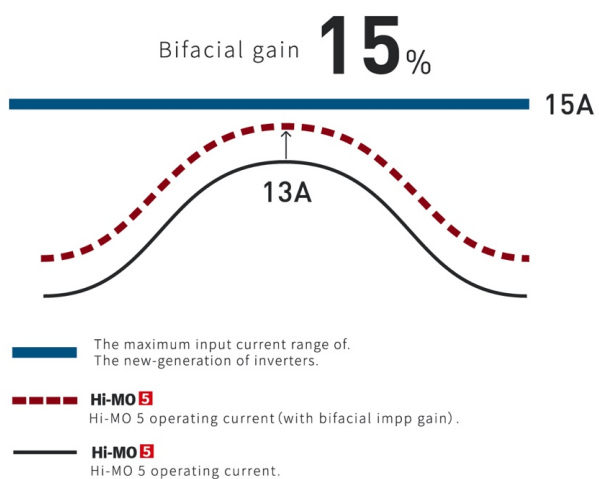


Hi-MO 5

Optimized electrical parameters

Fully compatible with inverters

The operating current of LONGi Hi-MO 5 module is about 13A.
Including bifacial gain, the operating current remains within the maximum input current range of advanced inverters, hence there is no power generation loss.

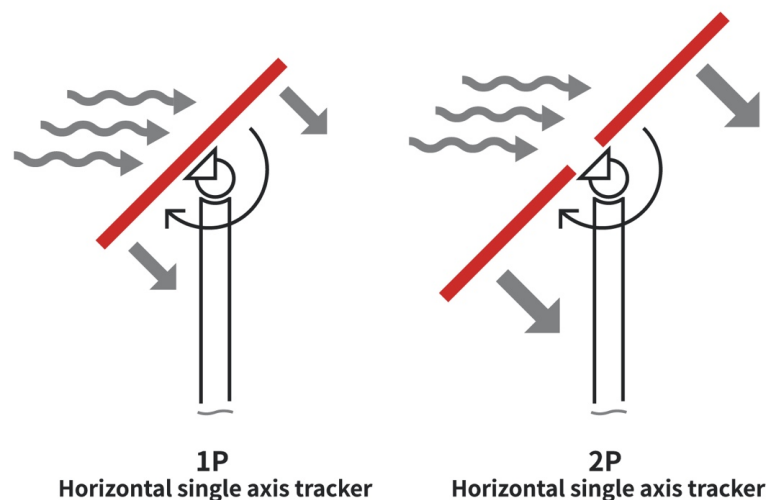


Hi-MO 5

Optimized module size

Perfectly matched with tracking systems

A Hi-MO 5 module length is about 2.25 meters.
Compatible with mainstream 1P and 2P horizontal single axis tracking system.
Bifacial module + tracking system can achieve the lowest lcoe in low latitude areas.





* Sort in alphabetical order.

Hi-MO 5

Once again, we take the lead in volume production

LONGi believes that the core value of innovation lies in real world application, and volume production of the technology delivers visible value.
LONGi is committed to create the maximum value for our global partners and customers.

Hi-MO 5
12.0_{GW}

⚡ **Global capacity**
(Expect U.S. market)

2020 Q3

Hi-MO 5
1.50_{GW}

⚡ **U.S. market**

2021 Q1



13.5_{GW}
Global capacity
for Hi-MO 5

LONGi product portfolio

Hi-MO 5 extends the Hi-MO series of LONGi's high performance module products. Concurrently available with Hi-MO 4. LONGi's product portfolio is suited for a wide range of photovoltaic applications.



Hi-MO 4 60c

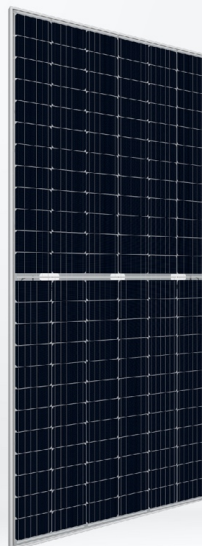
Best for rooftop
DG projects



Residential rooftop



C&I rooftop



Hi-MO 4 72c

Most cost-effective
mainstream product



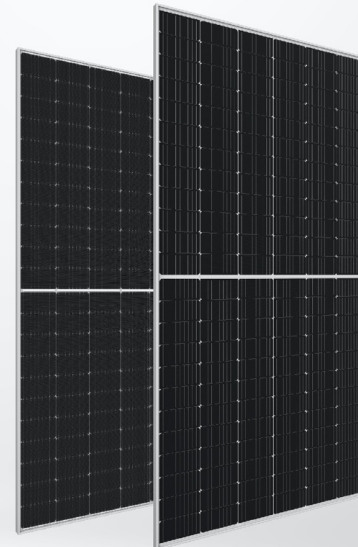
C&I rooftop



Large ground
power station



Floating power
station



Hi-MO 5 66c/72c

Optimal choice
for ultra-large
power plants



Ultra-large
power station

