

AIKO ABC vs LONGi HPBC 2.0

Which back-contact solar panel is better on technology and on price? A check of datasheets, an independent efficiency ranking, company results and Thai shop prices.

TECHNOLOGY

Almost a tie.
AIKO slightly ahead

Same heat behaviour, same ageing, same warranties. AIKO gives about 20 W more from the same size panel in what Thai shops stock.

PRICE IN THAILAND

About equal.
AIKO a little lower per watt

AIKO 670 W: 5.35 to 5.81 baht per watt. LONGi 650 W: 5.35 to 7.00 baht per watt.

COMPANY SIZE

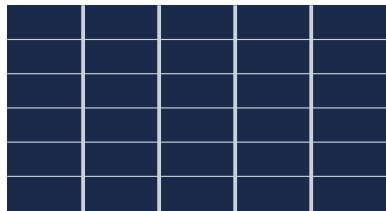
LONGi is about three times larger

29.9 GW of modules shipped in the first half of 2026, against 9.4 GW for AIKO. Both made a loss.

Two routes to the same idea

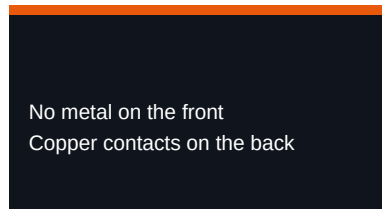
Both makers move the metal contacts to the back of the cell, so the front has no silver lines blocking light. That is why both panels look clean and black, and why both beat ordinary panels.

Ordinary panel cell

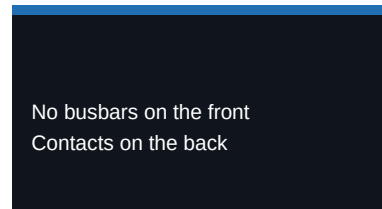


Silver lines on the front shade the cell

AIKO ABC cell



LONGi HPBC 2.0 cell



AIKO

ABC: All Back Contact · Comet 3N72

- 670 W (24.8%) and 675 W (25.0%) in the standard large size
- Copper contacts in place of silver, so cost depends less on the silver price
- Specialist maker: back-contact panels are 79% of its revenue

LONGi

HPBC 2.0: Hybrid Passivated Back Contact · Hi-MO X10

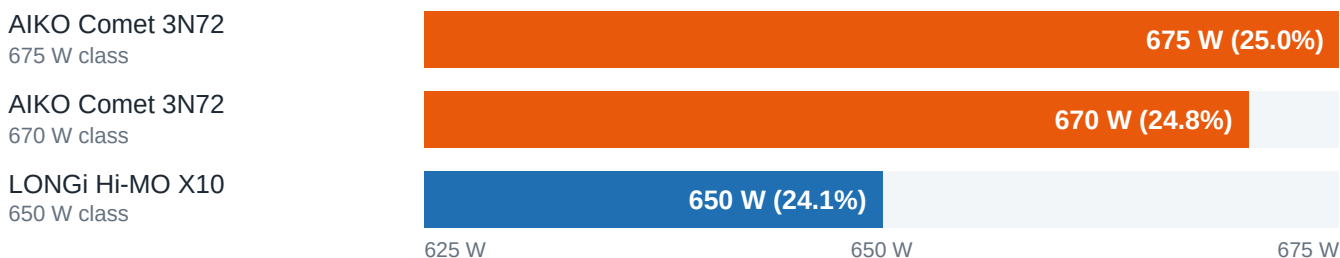
- 650 W (24.1%) is the model Thai shops list; the range goes higher
- Certified 25.4% module record (Fraunhofer ISE, 2024)
- Much larger maker with a long record in big projects

Technology

On paper the two panels are nearly twins. The real difference is how many watts fit in the same frame.

Watts from the same size panel

All three panels below measure 2,382 × 1,134 mm, so a higher wattage means a higher efficiency. Efficiency in brackets.



Where they are the same

DATASHEET ITEM	AIKO COMET 3N72	LONGI HI-MO X10
Power loss in heat	−0.26% per °C	−0.26% per °C same
Ageing	1% in year one, then 0.35% a year	1% in year one, then 0.35% a year same
Product warranty	15 years	15 years same
Performance warranty	30 years	30 years, 88.85% at the end same
Glass and size	3.2 mm single glass · 28.2 kg	3.2 mm single glass · 28.5 kg
Best commercial panel	25.0% (Comet 3N72, 675 W)	25.0% (EcoLife, 510 W home panel)

The last row is from the TaiyangNews August 2026 ranking of panels on sale, where the two makers share first place. The next best technology, TOPCon, is at 24.1%.

Where they differ

AIKO uses copper for the contacts. Silver is a large part of a cell's cost, so this protects AIKO when silver prices rise. LONGi named higher silver prices as one reason for its 2026 loss.

LONGi holds an independently certified module record (25.4%, Fraunhofer ISE). AIKO's top figures are mostly its own reports. Both makers claim better shade handling than ordinary panels; neither claim is independently compared.

Verdict on technology: a near tie. AIKO has a small, real advantage in watts per panel in the models sold in Thailand, and in not depending on silver. It is not a large enough gap to decide a project by itself.

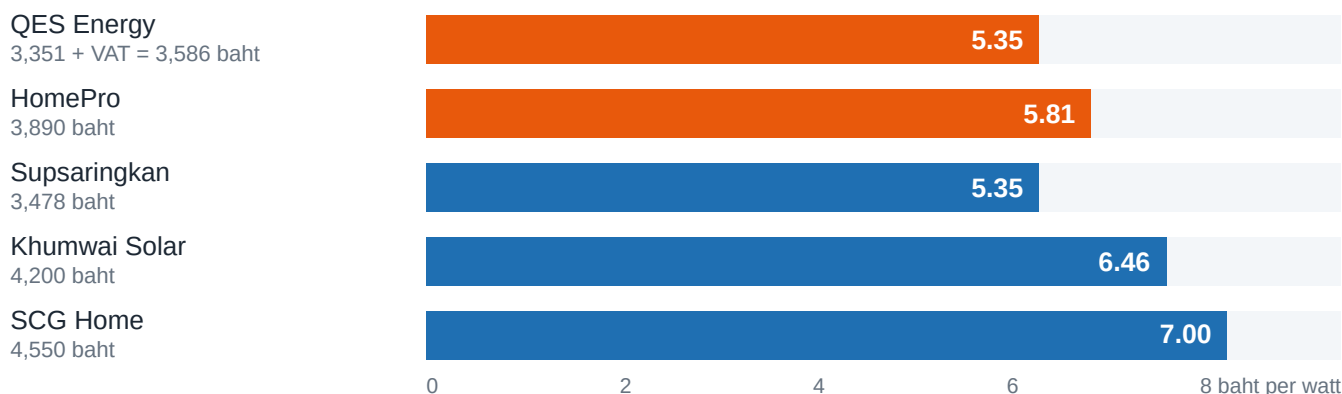
Price and company strength

In Thai shops the two cost about the same per watt. The bigger gap is in the size of the companies behind them.

Thai shop prices, in baht per watt

Price of one panel divided by its watts, checked 11 October 2026. Lower is better.

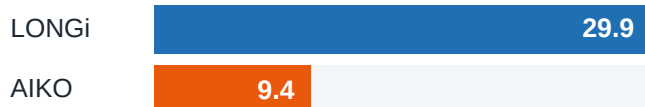
■ AIKO 670 W ■ LONGi 650 W



Only QES states its VAT treatment; the others do not say. The Supsaringkan page mixes two LONGi model names. One shop lists the AIKO 670 W at 6,700 baht (10 baht per watt), far above the others, and is left out.

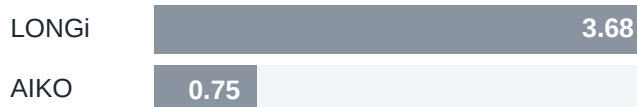
The companies, first half of 2026

Modules shipped (GW)



19.6 GW of LONGi's total was back-contact. All of AIKO's 9.4 GW was.

Net loss (billion yuan)



Both are losing money in an oversupplied market. A 30-year warranty is only as good as the company's survival, for either brand.

Which to choose

AIKO when

- roof space is tight and every watt per panel counts
- the price per watt is equal or lower, as it is now

LONGi when

- the buyer or lender wants the largest, best-known maker
- your supplier's LONGi price is clearly lower

Verdict on price: no clear winner. The common claim that AIKO costs more does not hold in Thai shops today. Your own supplier quotes matter more than these retail prices.

Sources. AIKO Comet 3N72 datasheet V3.1 (09/2025) · scghome.com and sun.store (LONGi LR7-72HVH specifications) · TaiyangNews Top Solar Modules listing, August 2026 · EnergyTrend, "LONGi, Aiko, and HY Solar Report H1 2026 Financial Results", 31 August 2026 · couleenergy.com HPBC vs ABC comparison (a distributor of both brands) · Shop prices: qesenergy.co.th, homepro.co.th, supsaringkan.co.th, khumwaisolar.com, scghome.com. Specifications are the makers' own figures unless stated.