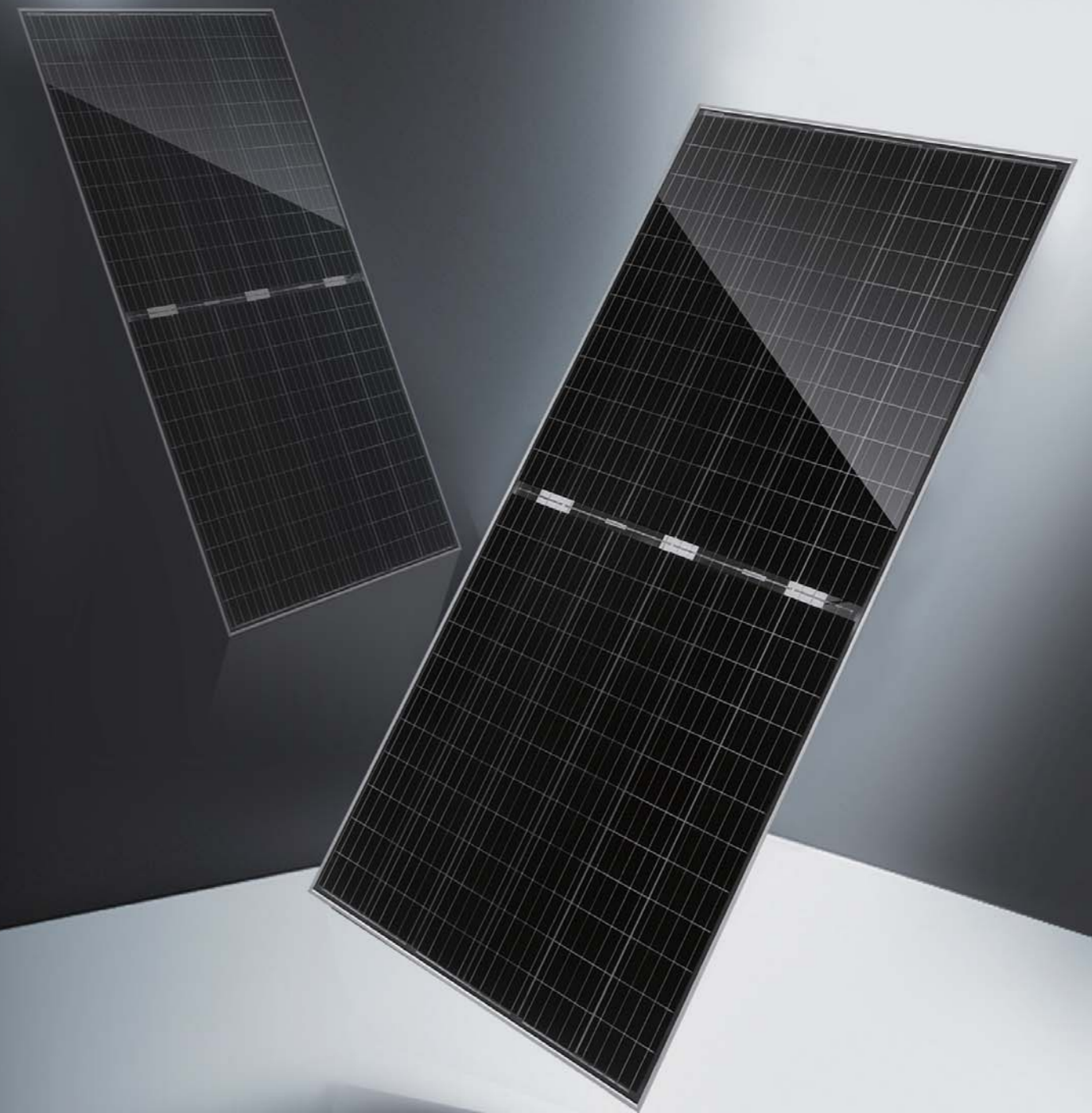
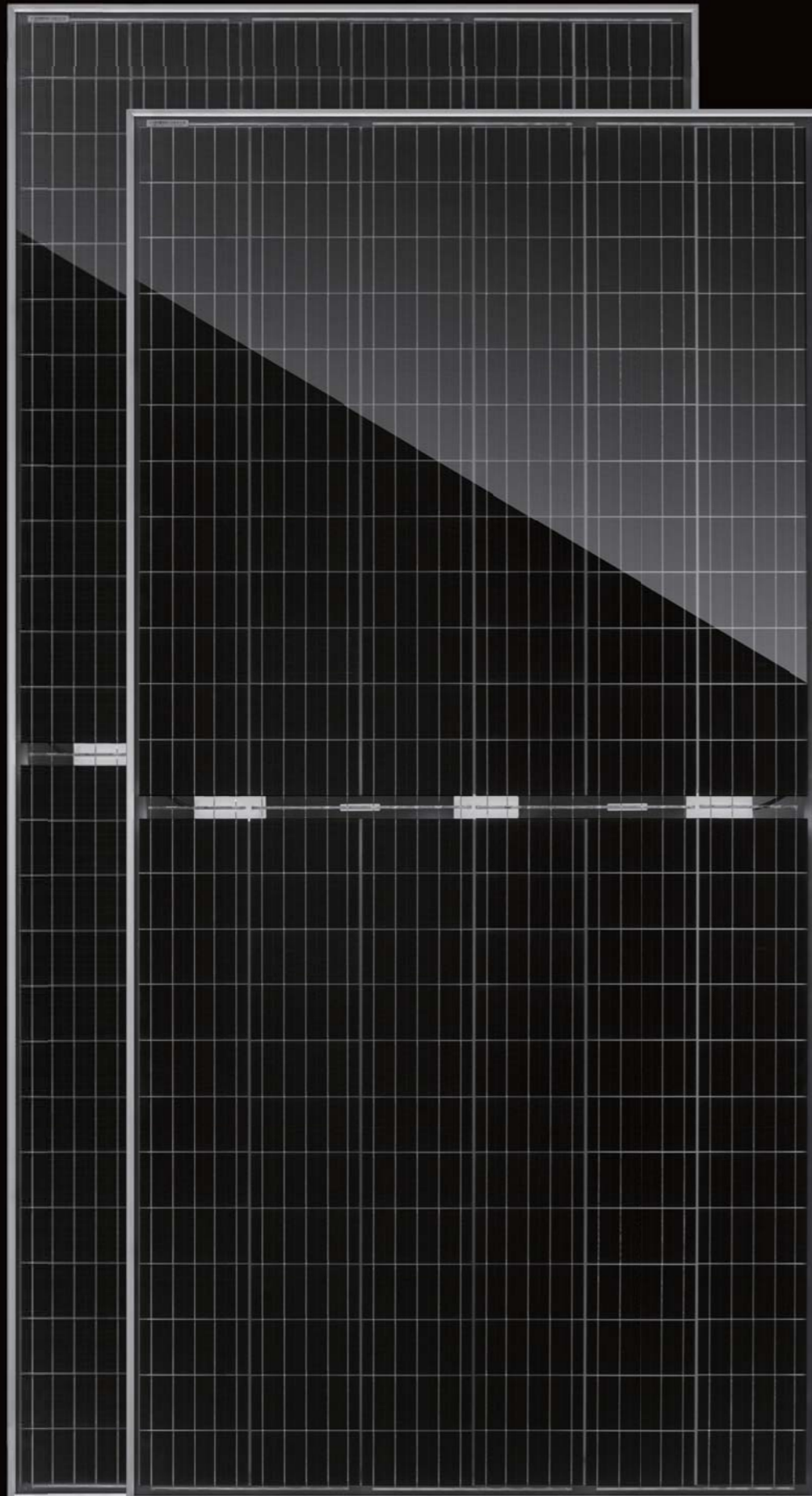


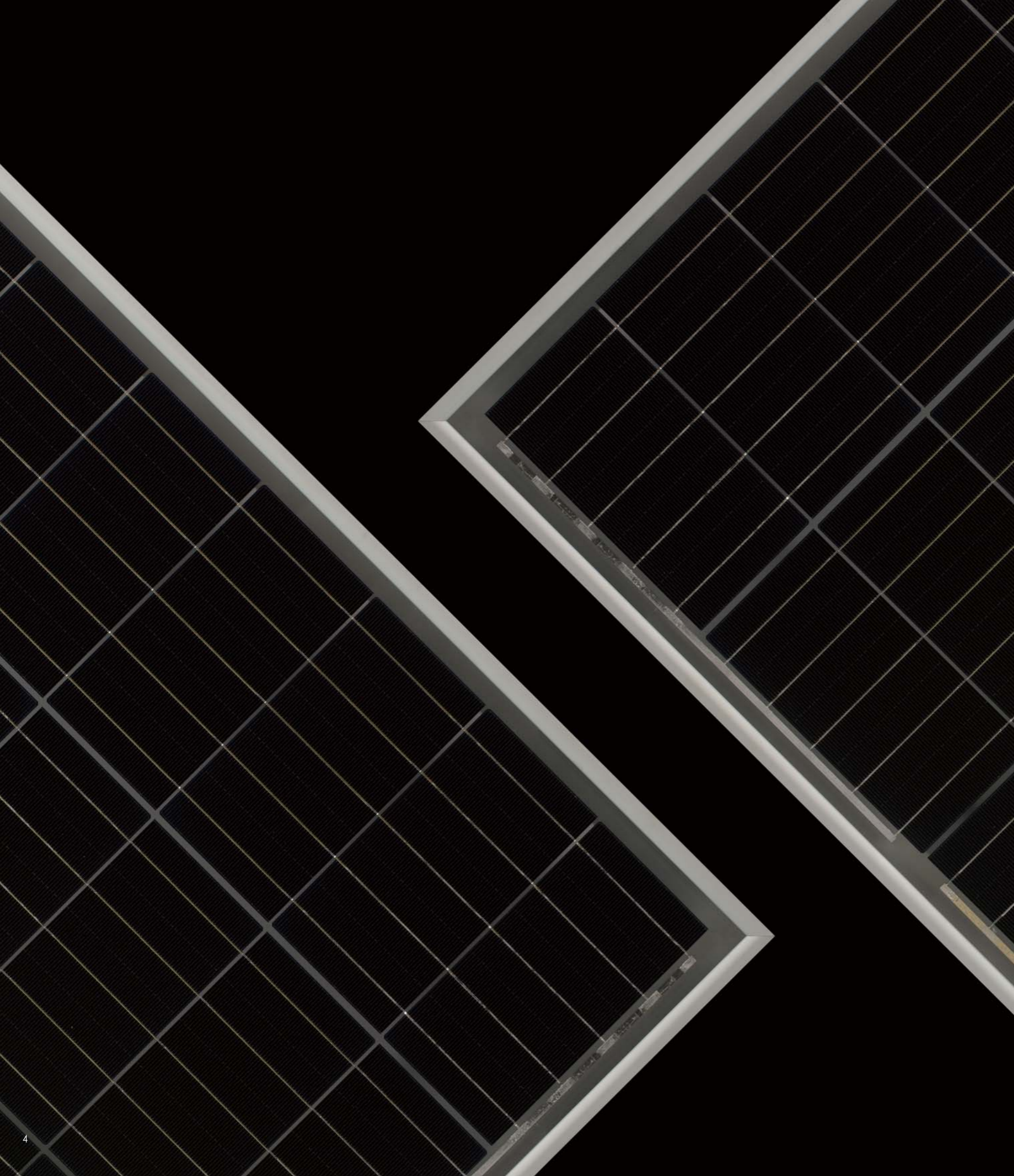
Swan Bifacial Module





Bifacial Energy Generation

Up to 25% energy gain from the rear-side



More Power

Up to 500 / 540W
(front and rear side)



Better Structural Strength

Less prone to bending and cracking during transportation and installation

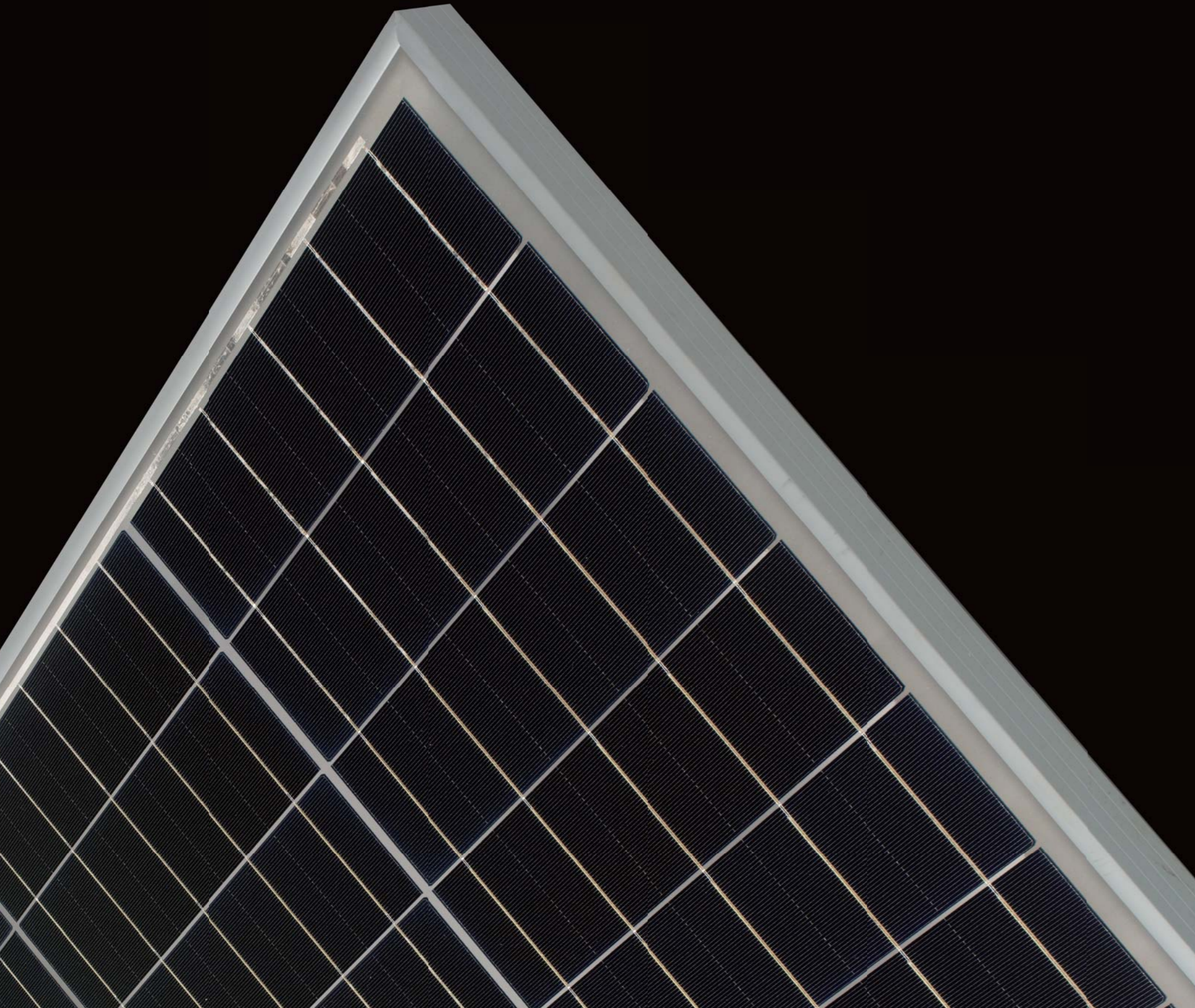


Light-Weight, Easy to Install

Decrease of labor costs
(related to module installation)

Reduction of BOS cost

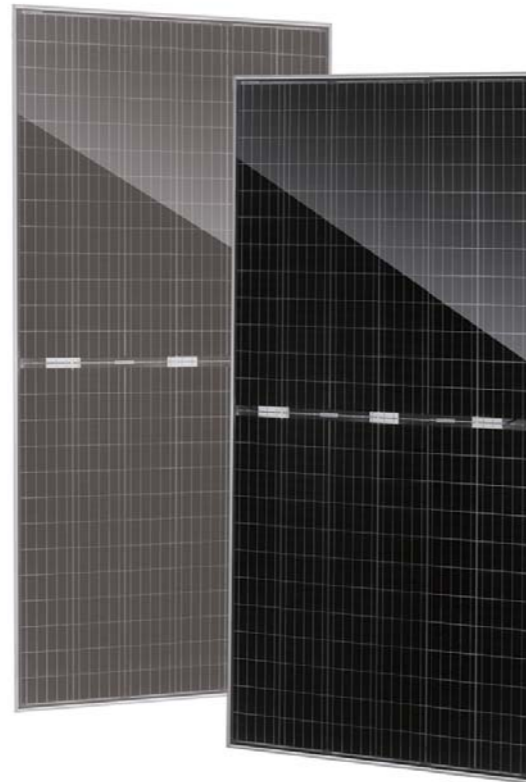
Minimizing LCOE and
maximizing IRR



Enhanced Reliability

30-year PV module
performance warranty

JinkoSolar Swan Bifacial Module



Product Profile

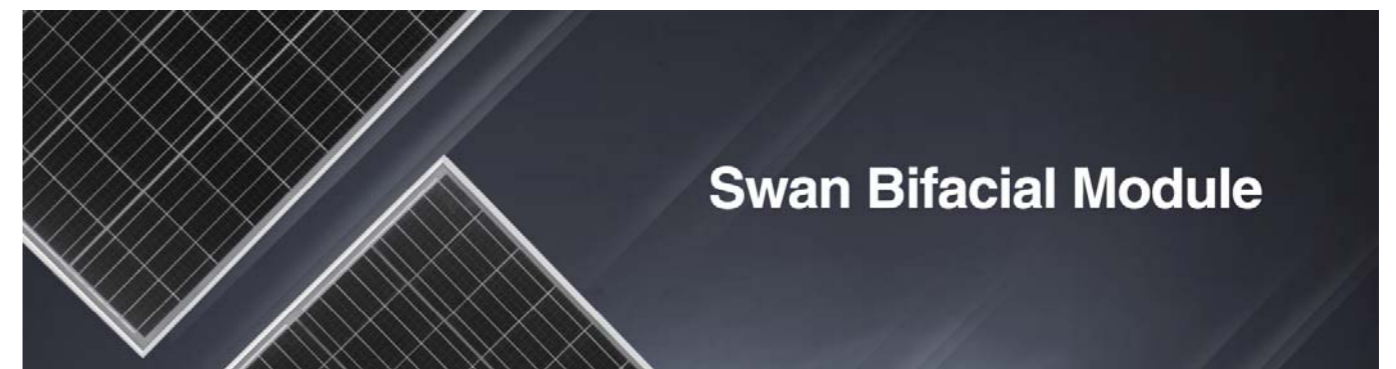
Jinko's bifacial module with transparent backsheet has been developed out of the necessity to support the energy market transition from feed-in tariffs and governmental subsidies towards IPP/PPA schemes and grid parity scenario, which requires maximizing kWh yield and PV plant performance while limiting complexity. Bifacial technology is at present the solution that allows a step change in LCOE reduction.

Swan module achieves the same power output and rear-side power gain as with a dual-glass bifacial module, combining the benefits and extra yield of bifacial technology and the simplicity and easy installation of standard- glass backsheet modules. It reduces BOS costs thanks to its lighter weight and easier installation method which is identical to traditional glass-backsheet, framed modules.

Technological Advancement

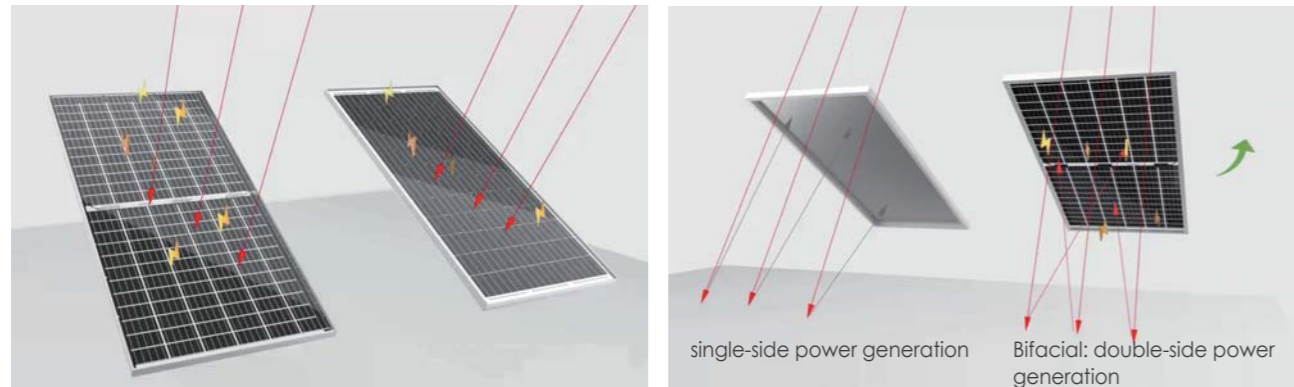
The p-type bifacial big cells module with DuPont™ Clear Tedlar® technology is produced for the first time in the market by Jinko and represents the union between bifacial technological advancement and standard module structure simplicity. Swan uses high-efficiency Jinko Solar high performance Mono big cell technology which enables bifacial module to reach high power output. Swan module production is highly compatible with standard production processes, thus GW-scale capacity is achievable at competitive manufacturing costs.

Swan bifacial module with 158.75mm cell size can reach up to 405/440Wp front side, also combined with Jinko half-cell technology, which reduces power loss and the possibility of hot spots, enabling to Improving the module power and reliability . Bifacial with transparent backsheet assures lightweight modules like traditional glass-backsheet laminates and the framed structure simplifies their handling and installation , while mesh clear backsheet improves the internal reflection in the glass-cell-backsheet interlayered structure.



Technological Benefits to Ensure High IRR

1. Bifacial energy generation



Up to 25% power gain depending on albedo and PV system design

2. Lower LCOE

- > 3% BOS cost savings ,
- > 20% reduction of labor cost related to module installation



Bifacial module with transparent backsheet



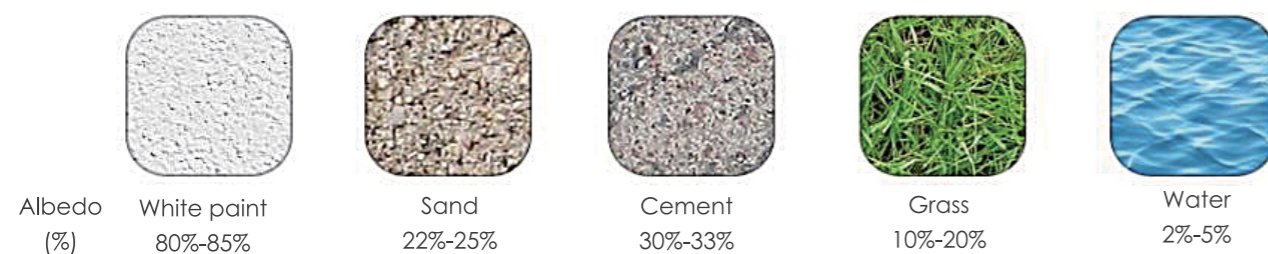
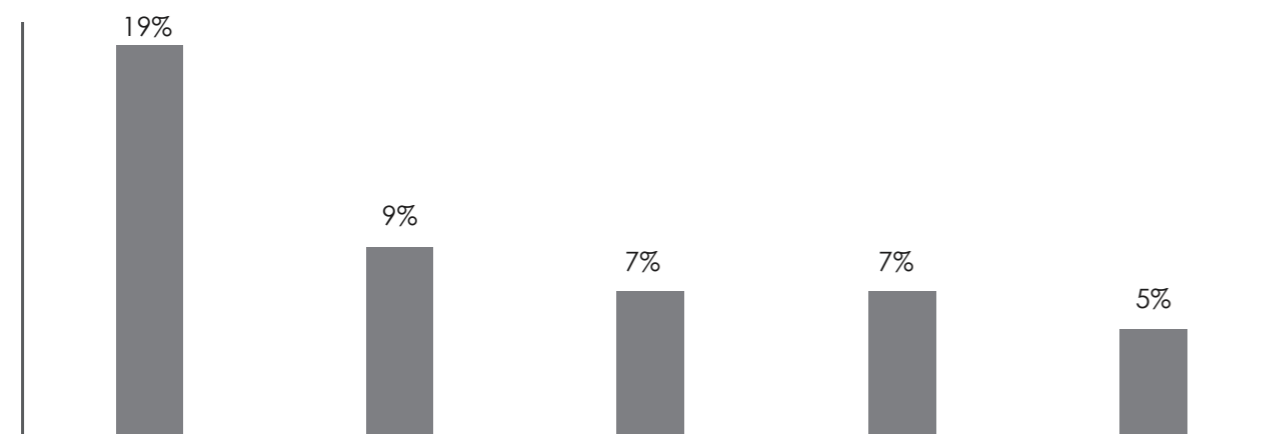
Bifacial module with dual glass



Saving labor cost related to module installation by **over 20%** using bifacial modules with transparent backsheet!

Real Energy Generation Gain

Energy Generation Gain (%)



-> 15% mounting structure cost saving

Bifacial with transparent backsheet



- Fewer supporting structures
- Compatible with the system of monofacial modules;
- Saving more than 15% mounting construction cost

Bifacial with dual glass

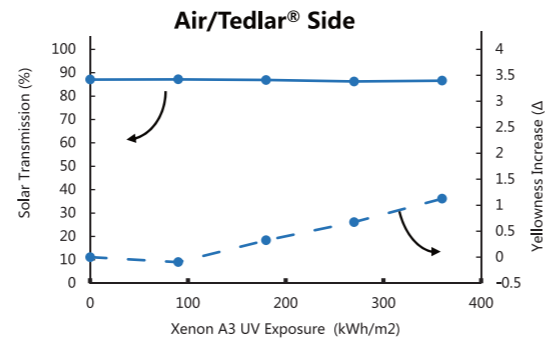
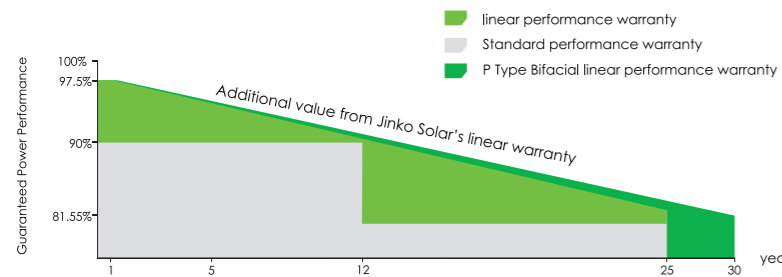


- More supporting structures
- Incompatible with the system of monofacial modules;
- Stronger load-bearing structure is requested

3. Enhanced Reliability of DuPont Clear Tedlar® Backsheet

LINEAR PERFORMANCE WARRANTY

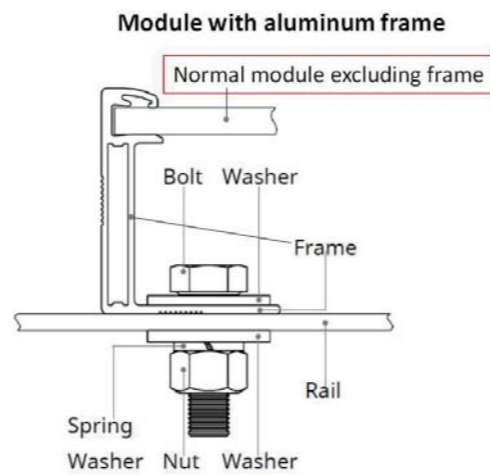
12 Year Product Warranty • 30 Year Linear Power Warranty
0.55% Annual Degradation Over 30 years



30-year PV module performance warranty .(high and stable visible-light transmission rate around 90%, after 300 kWh/m2 UV exposure)

4. Frame Design - Higher structure strength

Frame Design → Common installation method



Installation convenience

Labor Cost

Mounting Construction Cost

Framed modules are less prone to bending and cracking during transportation and installation than frameless ones.

5. Light-weight , easy to install

<p>Swan+</p> <p>Weight Lighter Installation Standardized</p> <p>Bifacial with Transparent backsheet</p> <p>24.8kg</p>	<p>Swan</p> <p>Weight Lighter Installation Standardized</p> <p>Bifacial with Dual glass</p> <p>29.1 Kg</p>	<p>Swan+</p> <p>Weight Lighter Installation Standardized</p> <p>Bifacial with Transparent backsheet</p> <p>23.3kg</p>	<p>Swan</p> <p>Weight Lighter Installation Standardized</p> <p>Bifacial with Dual glass</p> <p>26.6 Kg</p>
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6. Superior stain resistance

The hydrophobic surface of the transparent DuPont Tedlar film backsheet outer layer, offers excellent anti-staining performance, making cleaning of the modules easier, and reducing O&M costs and reducing water waste.

