

## Why Heterojunction Technology (HJT)?

**Peak Performance:** HJT cells have achieved an unprecedented efficiency of 26.7%, setting a new standard for single-junction cells.

**Exceptional Durability:** HJT ensures cells last longer with a very low rate of efficiency loss over time.

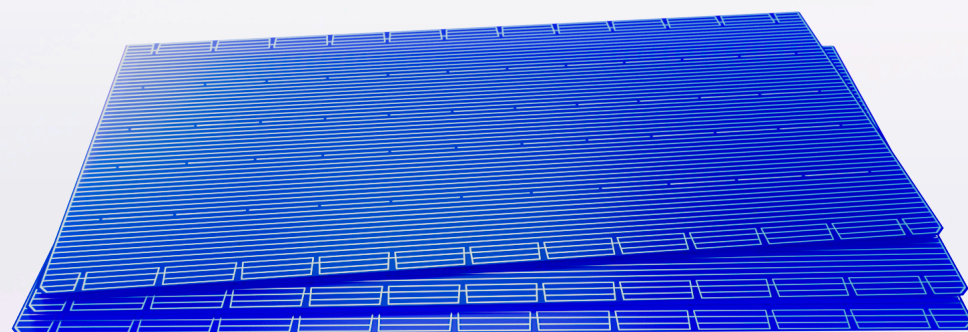
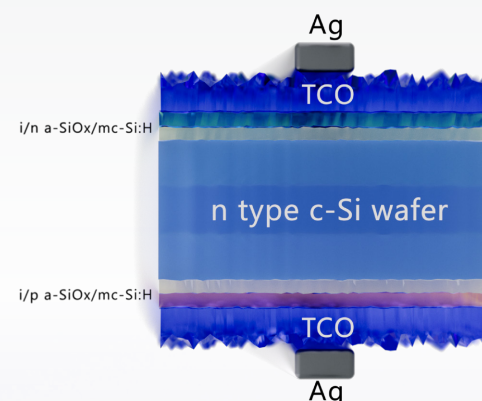
**Streamlined Smart Manufacturing:** The production of HJT cells is simplified to a 4-step process (vs >10-steps for PERC/TOPCon).

**High Bifacial Performance:** Bifacial efficiency can reach up to 95%, enhancing power generation by utilizing light from both sides of the cell.

**Efficiency in Large-Scale Manufacturing:** HJT cells consistently achieve average production efficiencies over 25.5%.

**Reduced Heat Sensitivity:** Thermal coefficient is under 0.3%/°C, making these cells exceptionally suited for areas with high temperatures.

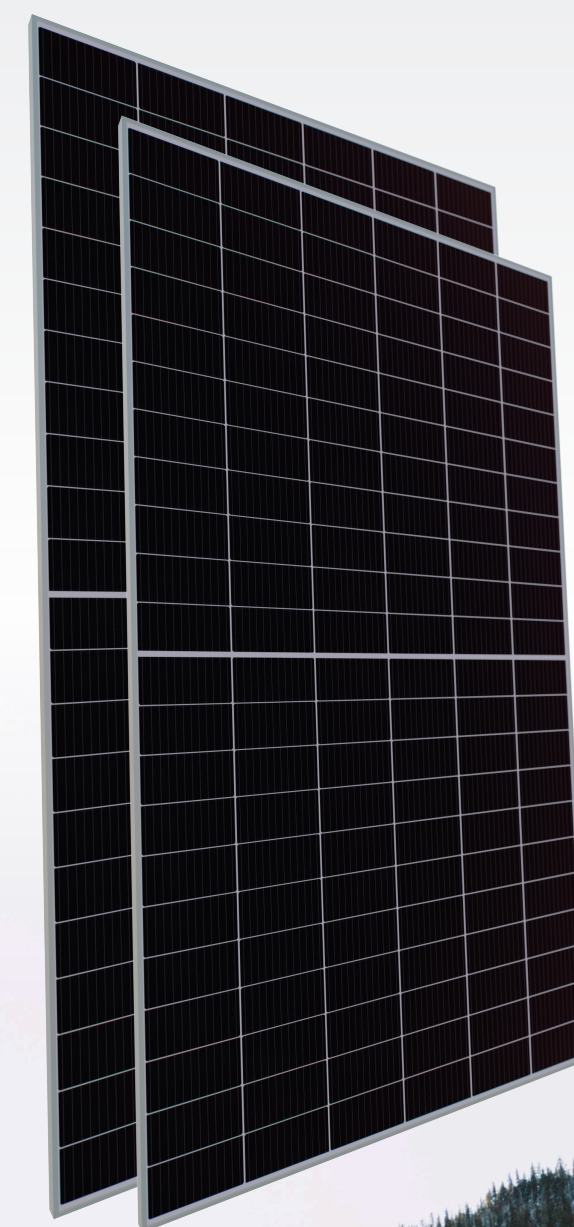
**Use of Thinner Silicon Wafers:** Feasibility of using wafers thinner than 90  $\mu\text{m}$ , reducing costs and improving production efficiency.



Designed with  
Power, Reliability,  
Performance and  
Affordability in Mind.

Modules Powered by  
HJT X3 Cell Technology

Maximizing Energy Output  
with Bifacial Technology







We are an **American owned company**, redefining the solar industry through cutting-edge heterojunction module and cell\* manufacturing, bringing **Made-In-America** quality and reliability to developers that exceed expectations on performance and efficiency.

\*X3 Cells manufactured by our sister company Hybrid Cell Technology

Delivering Innovation for the Long-Term

- State of the Art R&D and Testing Center
- X3 Heterojunction Cell Technology (HJT)
- Tandem HJT Cells and Modules
- BIPV and Architectual designs
- Delivering a lower LCOE
- Greater resistance to (PID) & (LID)

Utility

Glass / Backsheet  
or Glass / Glass

132 Half-Cut G12 Cells  
**740W**

144 Half-Cut G12 Cells  
**810W**

20 years

Product Warranty

35 years

Performance Warranty

Commercial & Industrial

Glass / Backsheet  
or Glass / Glass

120 Half-Cut G12 Cells  
**675W**

132 Half-Cut G12 Cells  
**740W**

UL

CEC

CERTIFIED ISO 9001

PTL US

Residential

Glass / Backsheet  
or Glass / Glass

108 Half-Cut G12 Cells  
**610W**

120 Half-Cut G12 Cells  
**675W**

UL

CEC

CERTIFIED ISO 9001

PTL US



Module and Cell Manufacturing Facility

- HJT X3 Bifacial Half Cut Cells**  
25.5%+ efficient n-type HJT Cells featuring zero-busbar (OBB) VHF-PECV deposited a-SiOx:H(i) and microcrystalline mc-Si(Ox):H(n/p) layers.\*
- US Domestic Content Certified**  
Our sister company (Hybrid Cell Technology) manufactures the HJT cells in the same facility as our modules qualifying them for the 40% ITC.
- 20 yr Product & 35 yr Performance Warranties**  
We stand behind our product with our module reliability and a company warranty. The result is a system that can yield you up to 45% more power under our warranty vs. our competitors 25yrs.
- Zero Busbar (OBB) interconnection Technology**  
Improved reliability, with up to 15X more connection points verses traditional busbar modules, by reducing microcracking and hotspot effects.
- 0.25%/C Pmax Temp. Coefficient**  
The lower temperature coefficient of HJT cells produces a module that operates more efficiently, producing more power in high temperature environments.
- Higher Reliability and Maximum Power**  
Designed for maximum power output over time, with fewer performance issues. No LID and PID results in an increase in power of up to 9% more than P-Type (PERC cells) after 25 yrs.

**2.5GW**  
HJT Module and Solar Cell Production

**±1,337,000**  
SF of Manufacturing, R & D Lab, and Office Space

Investment Tax Credit

NuVision HJT Solar Modules are Manufactured to **exceed** the **70% Domestic Content** requirements for the Solar Investment Tax Credits (ITC). This provides our Customers with the benefit of an **additional 10% ITC.**

