

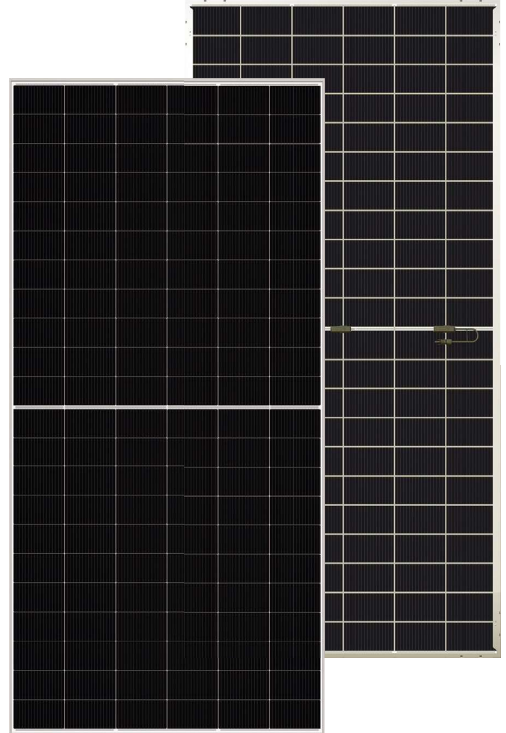
TC210R66H 625-650W

650W

P_{max}

Max. Eff.

24.1%



Core technological advantages

TOPCon Advanced Battery Technology

Based on the N-type TOPCon tunneling oxide passivation contact process, it enhances resistance to PID/LeTID degradation, resulting in better low-irradiance and low-light power generation performance and higher ultimate conversion efficiency, bringing long-term high-stability power generation gains.

SMBB multi-gate technology

The design employs multiple main busbars and finer, denser circular solder strips to reduce internal shading and resistance loss, optimize light absorption and current convergence, and improve module power output, resistance to hot spots, resistance to microcracks, and long-term reliability.

Extreme environmental tolerance

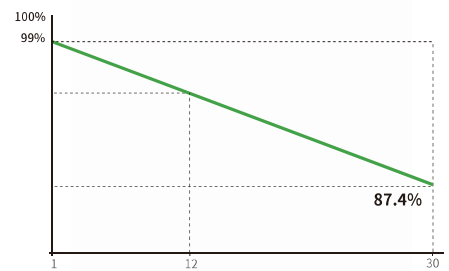
Certified through rigorous testing—including 5,400 Pa front-side snow load, 2,400 Pa rear-side wind load, salt mist, ammonia, and sand/dust exposure—ensuring resilience against harsh environmental conditions.

Bifacial power generation gain (bifacial type only)

With a bifaciality of up to 80%±5% and excellent wide-spectrum response, it can still efficiently capture back-reflected light in low-light environments such as early morning, evening, and rainy days, significantly improving the total life cycle power generation, enhancing the system's all-weather power generation capability, effectively reducing the levelized cost of electricity (LCOE), and achieving higher investment returns.



30-Year Linear Power Warranty



• 12-year warranty on craftsmanship, materials, and comprehensive component quality.

• 30-year industry-leading N-type linear power output guarantee.

• First-year degradation ≤ 1.0%, average degradation ≤ 0.4% from year 2 to 30.

Comprehensive Quality Management System and Product Certification

IEC 61215/61730

EN IEC 61215/61730

Salt spray IEC 61701

Ammonia resistance IEC 62716

Dust and sand IEC 60068

UL 61215/61730

CAN/CSA-IEC 61215

CSA C22.2 No. 61730

ISO 9001/14001

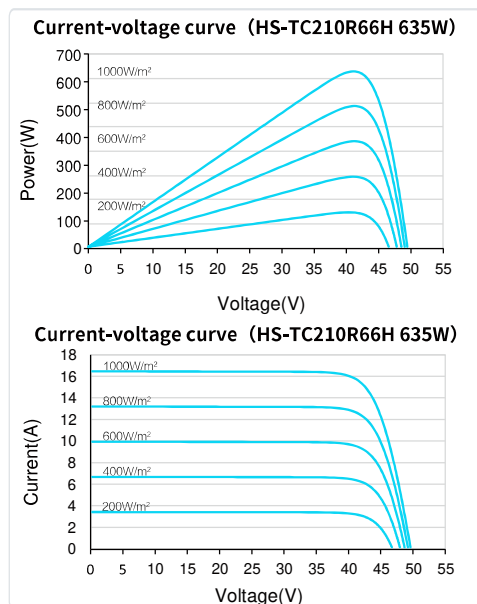


Electrical performance parameters Standard test conditions (STC)

Product Model (Electrical parameters)	HISEM-620	HISEM-625	HISEM-630	HISEM-635	HISEM-640	HISEM-645	HISEM-650
Rated Max-Power - P_{mpp} (Wp)	620	625	630	635	640	645	650
Voltage at Max-Power - V_{mpp} (V)	40.74	40.88	41.02	41.16	41.30	41.44	41.58
Current at Max-Power - I_{mpp} (A)	15.22	15.29	15.36	15.43	15.50	15.57	15.64
Open Circuit Voltage - V_{oc} (V)	49.08	49.28	49.48	49.68	49.88	50.08	50.28
Short-Circuit Current - I_{sc} (A)	16.08	16.14	16.20	16.26	16.32	16.38	16.44
Module Eff. (%)	22.95	23.14	23.32	23.51	23.69	23.88	24.06

* STC standard test conditions: Illumination intensity 1000W/m², battery temperature 25°C, atmospheric quality AM1.5. Power measurement error range: 0 ~ ±3%.

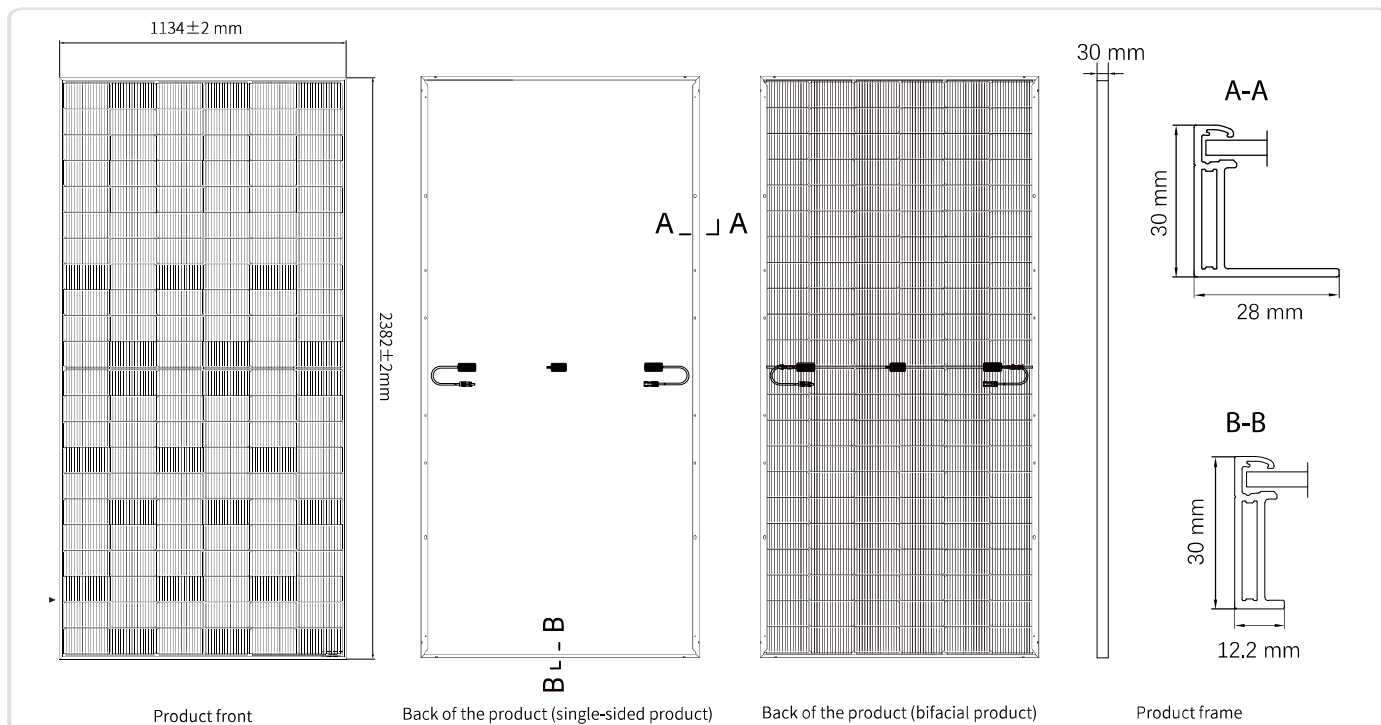
Characteristic curves



Mechanical structure

Cell type	Mono N-type TOPCon cell
Number of half-cell	132 (6*22)
Panel size	2382×1134×30 mm
Panel weight	27.9kg
Front cover glass	3.2mm anti-reflective coated tempered glass
Back panel	White/Transparent/All Black
Frame	Anodized aluminum alloy /Other materials
Junction Box	IP68, 3 bypass diodes
Connector	MC4 QC4.10-35(1500V)
Output wires	4mm (IEC),12AWG(UL) 300mm (+) / 300mm (-)

Engineering shape and pattern

Extreme operating safety indicators
and global one-stop storage and transportation specifications

Operating environment limit parameters and coefficients		International standardized packaging and consolidation specifications	
System operating temperature range	-40° C ~ +85° C	Unit standardized packaging quantity	36(*38)pieces/pallet
System maximum safe voltage	1500 V DC (IEC Standard)	Pallet total package dimensions	2396 × 1120 (*1200) × 1251 mm
Maximum series fuse rated current	35 A	Pallet total gross weight	1060 (*1110) kg
Temperature coefficient of rated power	-0.29% / ° C	17.5-meter trailer domestic loading capacity	1064 pieces/cart (Total 28 large pallets)
Open-circuit voltage temperature coefficient	-0.25% / ° C	40HQ container shipping volume	720 pieces/cabinet (Total 20 large pallets)
Short-circuit current temperature coefficient	+0.045% / ° C	Container interior space utilization	A maximum load ratio of 98.5%