



G12 SERIES

ET132HBG 695~720W

N-type TOPCon Bifacial
Double-Glass PV Module

M10 series

Utilizing N-type TOPCon battery technology and integrating SMBB with half-cell module technology, these modules offer enhanced reliability and lower LID/ETID degradation.

Product Features



Utilizing N-type TOPCon Multi-busbar (SMBB) cell technology to achieve lower resistance and effectively enhance product power output.



Enhanced reliability and lower LID (Light Induced Degradation) effects.



Superior temperature coefficient ensuring higher power generation in extreme temperature regions.



Adoption of 40.24mm ribbon to effectively reduce shading and improve module efficiency.



Half-cell technology for better mechanical load performance.



The entire module has passed certification for a front-side snow load of 5400Pa and a wind load of 2400Pa.

Management System



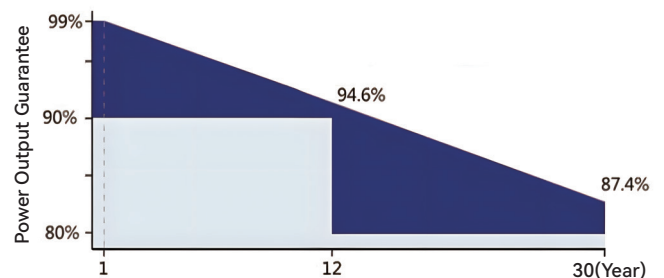
ISO9001:2015
ISO14001:2015
ISO45001:2018

Product Certification



Our products are widely used in residential, commercial, and ground-mounted photovoltaic power generation systems. We adhere to strict quality inspection standards and continuously strive for zero-defect products to ensure that our solar modules deliver superior power output and high reliability.

Product Warranty



12-year product quality and workmanship warranty

30-year linear power output warranty

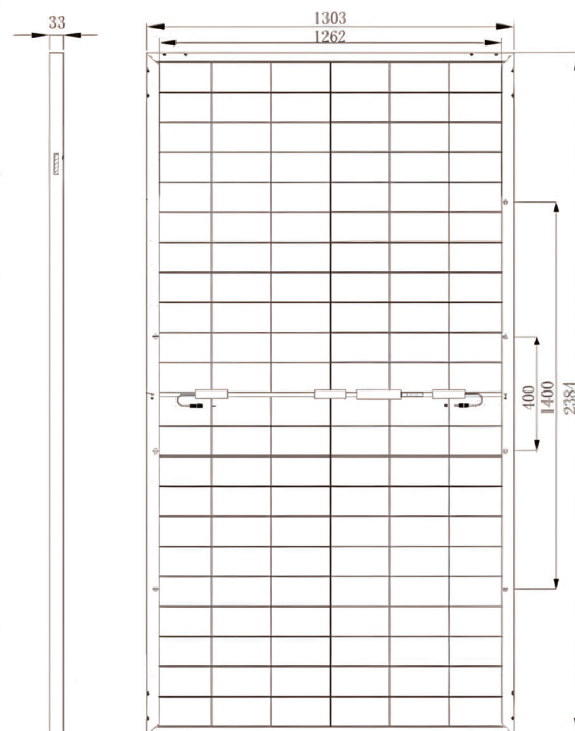
1% first-year degradation, **0.4%** subsequent annual power degradation

Electrical Parameters @ STC

Maximum Power	P _{max} (Wp)	695	700	705	710	715	720
Power Tolerance	(%)	0~+3					
Maximum Power Voltage	V _{mp} (V)	40.30	40.50	40.70	40.90	41.10	41.30
Maximum Power Current	I _{mp} (A)	17.25	17.29	17.33	17.37	17.41	17.45
Open Circuit Voltage	V _{oc} (V)	48.40	48.60	48.80	49.00	49.20	49.40
Short Circuit Current	I _{sc} (A)	18.28	18.32	18.36	18.40	18.44	18.48
Module Efficiency	(%)	22.37	22.53	22.70	22.86	23.02	23.18
Bifacial Factor Reference	(%)	80±5					
5% P _{max}	P _{max} (Wp)	730	735	740	746	751	756
5% Module Efficiency	(%)	23.49	23.66	23.83	24.00	24.17	24.34
15% P _{max}	P _{max} (Wp)	799	805	811	817	822	828
15% Module Efficiency	(%)	25.73	25.91	26.10	26.28	26.47	26.66
25% P _{max}	P _{max} (Wp)	869	875	881	888	894	900
25% Module Efficiency	(%)	27.97	28.17	28.37	28.57	28.77	28.97

STC: Irradiance 1000 W/m², Module Temperature 25°C, Air Mass 1.5.

Module Dimensions (mm)



Electrical Parameters @ NMOT

Maximum Power	P _{max} (Wp)	531	535	539	543	547	551
Maximum Power Voltage	V _{mp} (V)	37.93	38.12	38.31	38.50	38.68	38.87
Maximum Power Current	I _{mp} (A)	14.02	14.05	14.08	14.11	14.15	14.18
Open Circuit Voltage	V _{oc} (V)	45.98	46.17	46.36	46.55	46.74	46.93
Short Circuit Current	I _{sc} (A)	14.74	14.77	14.80	14.83	14.87	14.90

NMOT: Irradiance 800 W/m², Ambient Temperature 20°C, Air Mass 1.5, Wind Speed 1 m/s.

Temperature Coefficients

Temperature Coefficient of Maximum Power (P _{max})	-0.29%/°C
Temperature Coefficient of Open Circuit Voltage (V _{oc})	-0.24%/°C
Temperature Coefficient of Short Circuit Current (I _{sc})	+0.04%/°C

Mechanical Parameters

Cell Type	N-type TOPCon Mono 210×105mm
Number of Cells	132 (6x22)
Module Dimensions (Length x Width x Height)	2384x1303x33mm
Module Weight	38.5kg
Frame Material	Anodized Aluminum Frame
Junction Box	IP68
Cable Cross-Section/Length	4mm ² /300mm

Operating Conditions

Maximum System Voltage	1500V DC
Operating Temperature	-40~+85°C
Maximum Wind Load / Snow Load	2400/5400 Pa
Maximum Protection Current	35A
Application Class	Class A
Fire Rating	Class B
Nominal Module Operating Temperature (NMOT)	42±3°C

Packaging Information

Single Package	33 pcs/pallet
17.5m / 13.5m / 40HQ	792 pcs / 600 pcs / 594 pcs

Current-Voltage Curve / I-V Curve

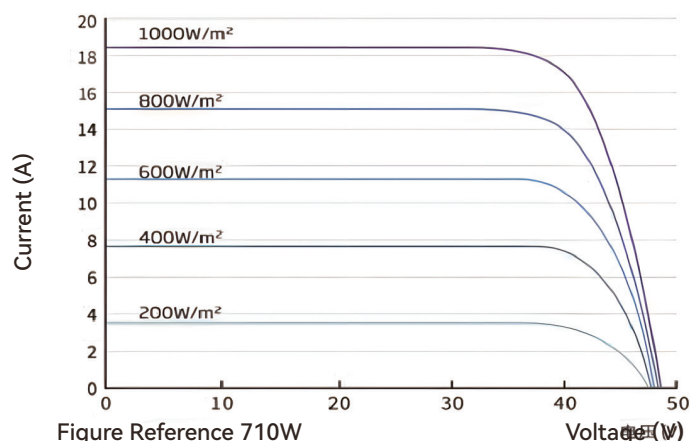


Figure Reference 710W

Power-Voltage Curve / P-V Curve

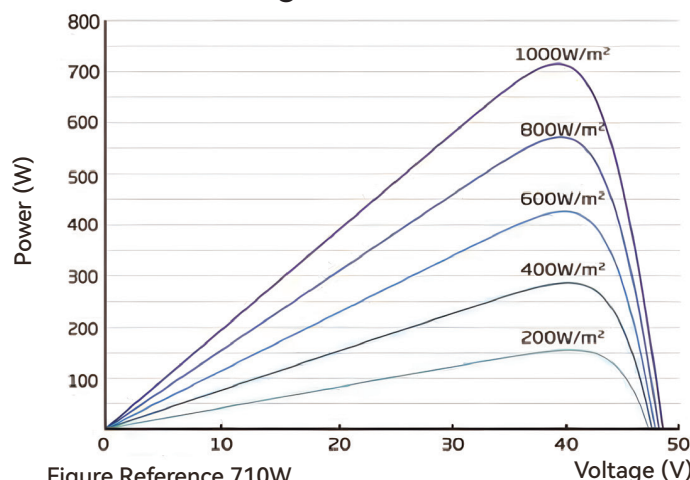


Figure Reference 710W

*Power measurement tolerance: ±3%

*Product specifications are subject to change without prior notice.