

GI

12 YEARS
Guarantee on product material and workmanship

25 YEARS
Linear power output warranty

Bifacial Module
NB144M-G1PB-A(390~410)
Solar Cells With PERC Technology
High Efficiency MONO Solar Module

The modules adopt MBB, PERC cells and half-cut technology. The technology can reduce BOS cost for per wattage, at the same time, the half-cut technology can effectively reduce the heat spot risk of high power modules and show better power generation performance and reliability in system application.



Mono MBB half cut technology
Double-sided electricity generation



Production process reliability test



3 times EL test to ensure best quality



Competitive low light performance



Less mismatch to get more power



Less power loss by minimizing the shading impact

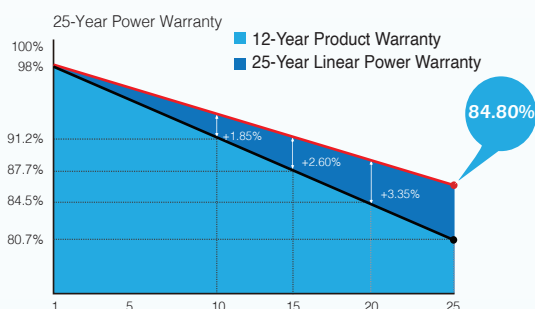


Ideal choice for utility and commercial scale projects by reduced BOS and improved ROI



Outstanding reliability proven by PVEL for stringent environment condition: Sand, Acid, Salt, Hailstones Anti-PID

QUALITY ASSURANCE



CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
GB/T 19001-2016 / ISO 9001:2015
GB/T 24001-2016 / ISO 14001:2015
CHSAS: 18001:2007
CNAS-CL01: ISO/IEC 17025:2017



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NB144M-G1PB-A

G1-144 Half-Cut Cell | MBB Mono PERC | Bifacial Module

ELECTRICAL PARAMETERS

* Measurement tolerance: Pmax:±3%, Voc:±3%, Isc:±5%.

Module Type	NB144M-G1PB-		A390		A395		A400		A405		A410	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax (W)	390	296	395	299.79	400	303.59	405	307.38	410	311.18		
Maximum Power Voltage - Vmpp (V)	41.11	39.03	41.42	39.33	41.71	39.6	42.05	39.92	42.39	40.25		
Maximum Power Current - Imp (A)	9.49	7.55	9.54	7.59	9.59	7.63	9.64	7.67	9.68	7.7		
Open Circuit Voltage - Voc (V)	49.15	47.86	49.52	48.22	49.86	48.55	50.27	48.95	50.68	49.35		
Short Circuit Current - Isc (A)	10.17	8.04	10.22	8.08	10.28	8.13	10.33	8.17	10.37	8.2		
Module Efficiency	19.39		19.64		19.89		20.13		20.38			

STC: irradiance 1,000 W/m²; Spectra at AM 1.5; module temperature 25°C. Power output tolerance: 0~+5W. Measuring tolerance of power: ±3%
 NMOT: irradiance 800 W/m²; Spectra at AM 1.5; Cell temperature 45°C; Ambient temperature 20°C. Wind speed 1m/s

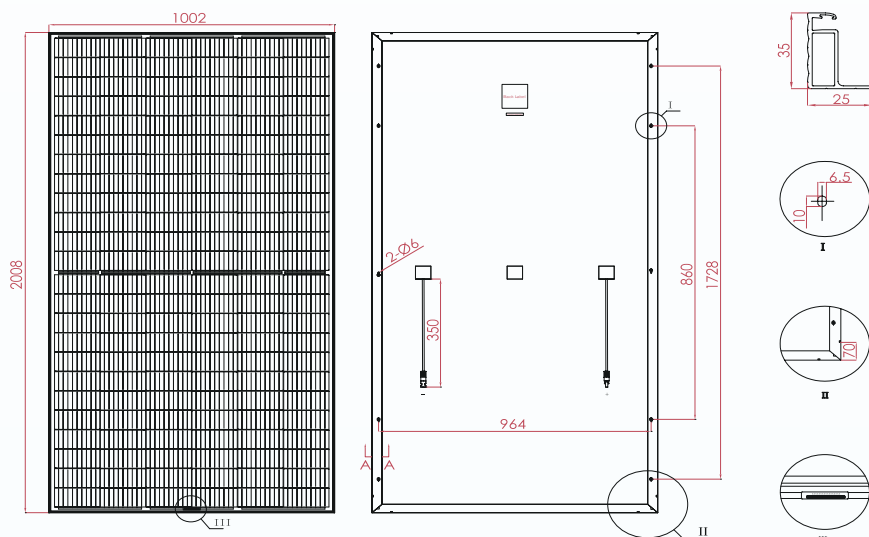
BIFACIAL REAR SIDE POWER GAIN

Electrical characteristics with different rear side power gain for reference to 340W front.

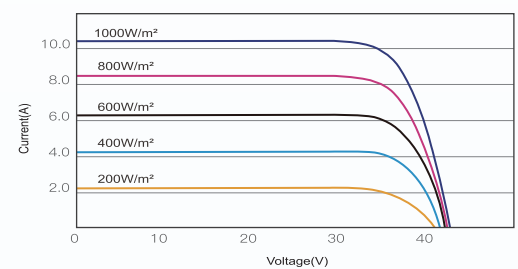
Maximum Power	Pmax Gain	Voc/V	Isc/A	Vmp/V	Imp/A
440W	10%	50.8	11.15	41.71	10.55
460W	15%	50.82	11.66	41.72	11.03
480W	20%	50.83	12.17	41.73	11.51
500W	25%	50.84	12.67	41.74	11.98

Bifacial gain: the additional gain from the rear side compared to the power of the front side at the standard test condition.
 It depends on mounting (structure, height, tilt angle, etc.) and albedo of the ground.

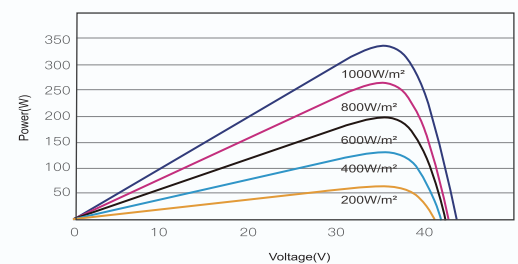
DIMENSIONS OF PV MODULE



I - V CURVES OF PV MODULE



P - V CURVES OF PV MODULE



MECHANICAL DATA

Solar Cells (mm)	158.75 x 79.375 Mono Bifacial
Cell Orientation	144 Cells (6 x 24)
Module Dimensions (L*W*H)	2008 x 1002 x 35mm
Weight (Kg)	22.4 kg
Glass	3.2 mm coated tempered glass
Backsheet	White
Frame	Silver anodized aluminum alloy
J-Box	IP68, 3 bypass diodes
Cables	Length 350mm, 1x4.0mm ²
Connector	MC4 and MC4 Compatible

TEMPERATURE RATINGS

NMOT	45°C (±2°C)
Temperature Coefficient of Pmax	-0.387%/°C
Temperature Coefficient of Voc	-0.282%/°C
Temperature Coefficient of Isc	+0.041%/°C

MAXIMUM RATING

Operational Temperature (°C)	-40°C to +85°C
Maximum System Voltage (VDC)	1000 / 1500
Max Series Fuse Rating (A)	15 / 20
Mechanical Load Front (Pa)	5,400
Mechanical Load Back (Pa)	2,400

PACKING CONFIGURATION

Module per box: 31 Pieces

MODULE PER CONTAINER

748 Pieces