

G12



12-year Warranty for Materials and Processing



25-year Warranty for Extra Linear Power Output

Bifacial / Full Black Module
T80M-G12PB-FB(390-410)

Solar Cells With PERC Technology
High Efficiency MONO Solar Module

FEATURE

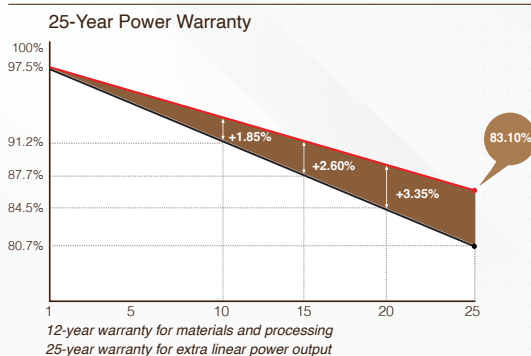
This Module strengthens the module density, greatly improves the power and efficiency. At the same time, it has the advantages of flexible installation, cost saving, good system adaptation. High reliability, easy transportation, environmental protection and so on.

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

QUALITY ASSURANCE



Advance production process
Optimized MBB design
Non-destructive cutting



Superior quality control
Full automatic production line
ISO 9000:2015 Quality Management System
100% three times EL and appearance inspection



Excellent power generation performance
0~+5 positive power tolerance
Improved low light irradiance performance



Stable mechanical performance
Passed rigorous hail test
Withstands 5400 Pa Snow and 2400 Pa wind loads



Long weather resistance
Excellent anti- PID performance
Certified in fireproofing for safety



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T80M-G12PB-FB

G12-80 Half-Cut Cell | MBB BIFACIAL Mono PERC | Full Black Module



ELECTRICAL PARAMETERS

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

Module Type:	T80M-G12PB-		FB390		FB395		FB400		FB405		FB410	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax (W)	390	295	395	298	400	302	405	306	410	310		
Maximum Power Voltage - Vmpp (V)	33.8	31.8	34.0	32.0	34.2	32.2	34.4	32.5	34.6	32.8		
Maximum Power Current - Imp (A)	11.54	9.26	11.62	9.32	11.70	9.38	11.77	9.41	11.84	9.45		
Open Circuit Voltage - Voc (V)	40.8	38.4	41.0	38.6	41.2	38.8	41.4	38.9	41.6	39.1		
Short Circuit Current - Isc (A)	12.14	9.78	12.21	9.84	12.28	9.90	12.34	9.95	12.41	9.99		
Module Efficiency (%)	20.3		20.5		20.8		21.1		21.2			

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

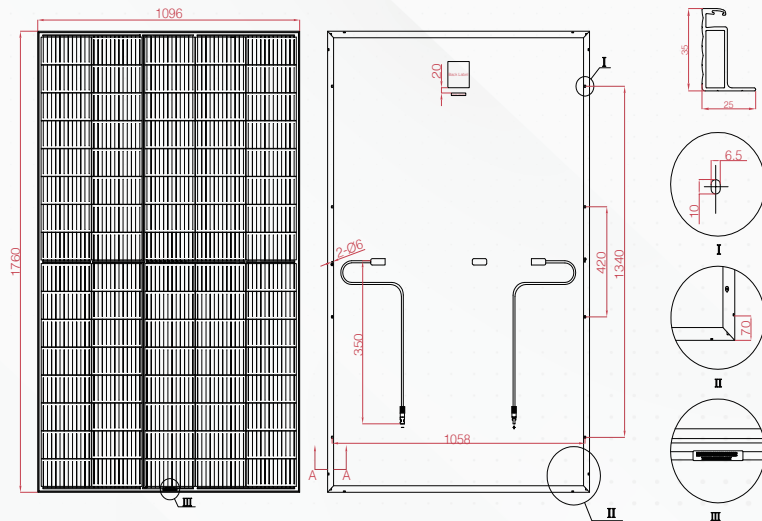
BIFACIAL REAR SIDE POWER GAIN

Electrical characteristics with different rear side power gain for reference to 400W front.

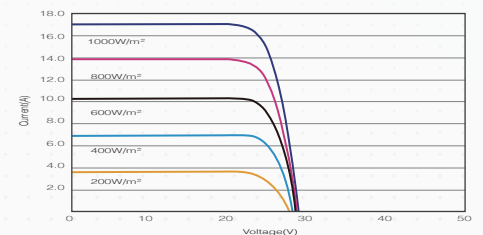
5% Maximum Power-PMAX (Wp)	409.5	420.0	420.0	425.25	430.5
5% Module Efficiency η m (%)	21.32	21.84	21.84	22.15	22.26
15% Maximum Power-PMAX (Wp)	448.5	460	460	465.75	471.5
15% Module Efficiency η m (%)	23.35	23.92	23.92	24.26	24.38
25% Maximum Power-PMAX (Wp)	487.5	500.0	500.0	506.25	512.5
25% Module Efficiency η m (%)	25.38	26.0	26.0	26.38	26.5

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.

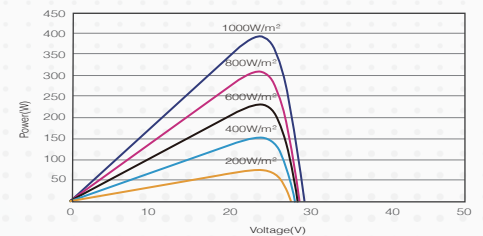
DIMENSIONS OF PV MODULE



I - V CURVES OF PV MODULE



P - V CURVES OF PV MODULE



MECHANICAL DATA

Solar Cells (mm)	210 x 105 Mono Bifacial
Cell Orientation	80 Cells (8 x 10)
Module Dimensions (L*W*H)	1760 x 1096 x 35mm
Weight (Kg)	21.5 kg
Glass	3.2 mm coated tempered glass
Backsheet	Transparent
Frame	Black 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	-0.362%/°C
Temperature Coefficient of Voc	-0.262%/°C
Temperature Coefficient of Isc	+0.042%/°C

MAXIMUM RATING

Operational Temperature (°C)	-40°C to +85°C
Maximum System Voltage (VDC)	1500
Max Series Fuse Rating (A)	30
Mechanical Load Front (Pa)	5,400
Mechanical Load Back (Pa)	2,400

PACKING CONFIGURATION

Module per box: 31 Pieces

MODULE PER CONTAINER

832 PCs / 40'HC

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCTS.

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