

# G12



12-year Warranty for Materials and Processing



25-year Warranty for Extra Linear Power Output

**Black Frame Module  
T80M-G12P-B(390-410)**

**Solar Cells With PERC Technology  
High Efficiency MONO Solar Module**

## FEATURE

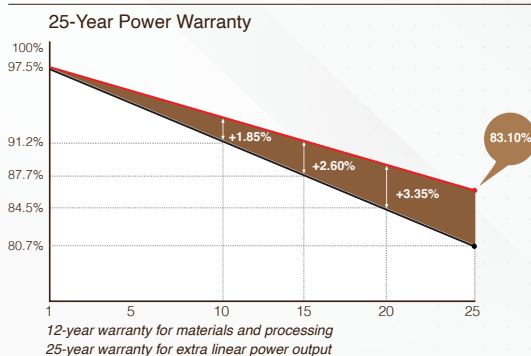
This Module strengthens the module density, greatly improves the power and efficiency. At the same time, it has the advantages of flexible installation, cost saving, good system adaptation. High reliability, easy transportation, environmental protection and so on.

## 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-G12P-B

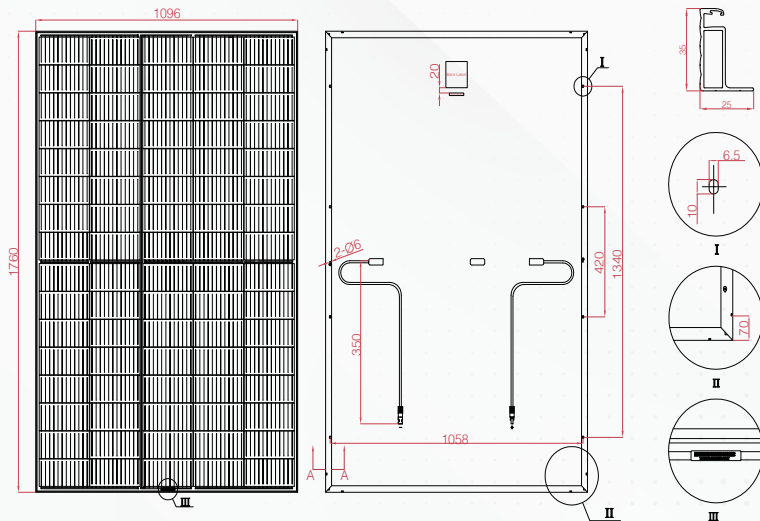
G12-80 Half-Cut Cell | MBB Mono PERC | Black Frame

## ELECTRICAL PARAMETERS

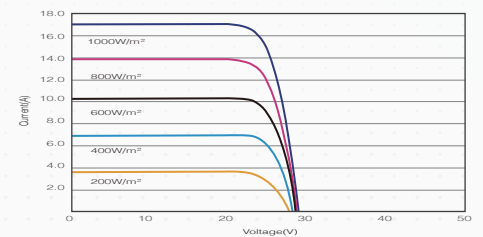
\* Measurement tolerance: Pmax:±3%, Voc:±3%, Isc:±5%.

Module Type	T80M-G12P-	B390	B395	B400	B405	B410
<b>STC</b> AM1.5, 1000W/m <sup>2</sup> Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	390	395	400	405	410
	Output Tolerance (W)	0+5	0+5	0+5	0+5	0+5
	Max. Power Voltage (Vmp/V)	24.0	24.2	24.4	24.6	24.8
	Max. Power Current (Imp/A)	16.26	16.32	16.39	16.45	16.54
	Open Circuit Voltage (Voc/V)	28.9	29.1	29.4	29.6	29.8
	Short Circuit Current (Isc/A)	17.26	17.33	17.40	17.47	17.51
	Module Efficiency (%)	20.2	20.5	20.7	21.0	21.2
<b>NOCT</b> AM1.5, 800W/m <sup>2</sup> Ambient Temperature 20°C Wind Speed 1m/s	Max. Power at NOCT (Pmpp/W)	295	299	302	306	309
	Max. Power Voltage (Vmp/V)	22.3	22.5	22.7	22.9	23.1
	Max. Power Current (Imp/A)	13.22	13.27	13.33	13.37	13.38
	Open Circuit Voltage (Voc/V)	27.2	27.5	27.7	27.9	28.1
	Short Circuit Current (Isc/A)	13.91	13.96	14.02	14.07	14.13

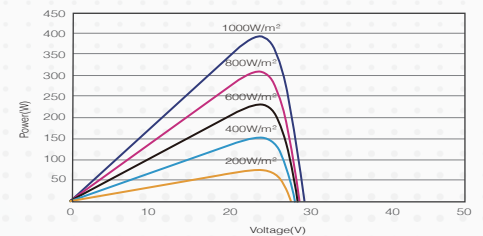
## DIMENSIONS OF PV MODULE



## I - V CURVES OF PV MODULE



## P - V CURVES OF PV MODULE



## MECHANICAL DATA

Solar Cells (mm)	210 x 105 Mono PERC
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	White
Frame	Black anodized aluminum alloy
J-Box	IP68, 3 bypass diodes
Cables	Length 350mm, 1x4.0mm <sup>2</sup>
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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