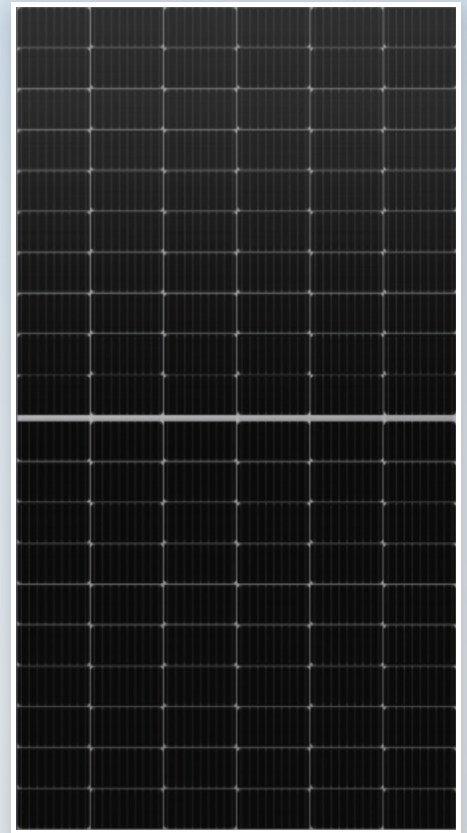


BM-HM Series BM182H-120DG

Bifacial Dual Glass Monocrystalline Module

# BM Dual glass series 182H-120DG

Efficient bifacial HJT monocrystalline silicon half cells PV module



**480 W**  
Maximum output power



**22.24%**  
Maximum efficiency



**0~+5 W**  
Power tolerance

## Boamax's long-term stable quality is trustworthy

- Automatic production line and leading photovoltaic technology
- EL testing is performed respectively before and after lamination, ensuring the reliability of the modules.
- Passed various long-term reliability tests
- Strict execute international standard management systems, including ISO 9001, ISO 14001, and ISO 45001.



Multi-Busbar welding design, optimizes optical and electrical properties of modules



POE sealing, enables effective resistance to various harsh environments



Fire-proof grade A, ensure more safety



The cell slicing technology. Significantly reduces the string current, reduces the loss of internal conversion efficiency, and effectively reduces BOS and LCOE

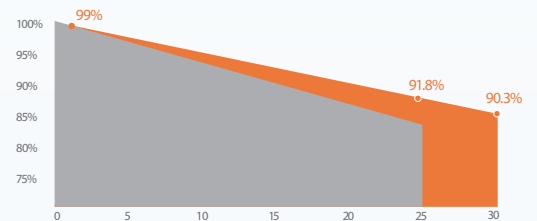


Optimized packaging materials and strict process scheme ensure the PID resistance of modules



Advanced non-destructive slicing technology, with small cell damage and reduce the risk of cracking

## Industry leading linear warranty



**15**year Product Warranty **30**year Power warranty

The attenuation in the first year is 1%, and from the second year onwards, the annual attenuation does not exceed 0.30%.



Electrical Data (STC)

Peak Power	P <sub>max</sub> (W)	460	465	470	475	480
Maximum Power Voltage	V <sub>mp</sub> (V)	34.72	34.89	35.05	35.21	35.38
Maximum Power Current	I <sub>mp</sub> (A)	13.25	13.33	13.41	13.49	13.57
Open Circuit Voltage	V <sub>oc</sub> (V)	42.05	42.22	42.38	42.54	42.71
Short Circuit Current	I <sub>sc</sub> (A)	13.99	14.07	14.15	14.23	14.31
Module Efficiency	(%)	21.32	21.55	21.78	22.01	22.24
Power Tolerance	(W)	0~+5				

\*STC: atmospheric mass AM1.5, irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C

Electrical Data (NMOT)

Peak Power	P <sub>max</sub> (W)	351	354	358	360	363
Maximum Power Voltage	V <sub>mp</sub> (V)	32.83	32.93	33.04	33.15	33.23
Maximum Power Current	I <sub>mp</sub> (A)	10.69	10.75	10.82	10.86	10.94
Open-Circuit Voltage	V <sub>oc</sub> (V)	48.13	48.32	48.51	48.7	48.89
Short-circuit current	I <sub>sc</sub> (A)	11.41	11.46	11.51	11.56	11.61

\*NMOT: irradiance 800 W/m<sup>2</sup> ambient temperature 20 °C, wind speed 1 m/s

Electrical Data

Bifacial power gain (reference to 10 % irradiance ratio)

Peak Power	P <sub>max</sub> (W)	517	521	525	529	533
Maximum Power Voltage	V <sub>mp</sub> (V)	36.80	36.98	37.15	37.33	37.50
Maximum Power Current	I <sub>mp</sub> (A)	14.07	14.11	14.15	14.19	14.23
Open-Circuit Voltage	V <sub>oc</sub> (V)	52.62	52.82	53.02	53.22	53.42
Short Circuit Current	I <sub>sc</sub> (A)	14.57	14.61	14.65	14.69	14.73
Module Efficiency	(%)	23.94	24.13	24.33	24.52	24.71
Irradiation Ratio	sc(A)	10%				

Structural Parameters

Number of Cells	120 pieces (6*20)
Module Dimension	1903*1134*35mm
Weight	27.5kg
Front Glass	2.0mm, High transmission coated glass
Back Glass	2.0mm, Semi-tempered glass
Frame	Anodized Aluminum alloy
Junction box	IP68 rated
Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Number of Diodes	3
Wind Pressure/Snow Pressure	2400 Pa/5400 Pa
Connector	MC4

Temperature characteristic

Nominal operating cell temperature	45±2°C
Temperature coefficient (I <sub>sc</sub> )	+0.05%/°C
Temperature coefficient (V <sub>oc</sub> )	-0.28%/°C
Temperature coefficient (P <sub>max</sub> )	-0.34%/°C

Limit Parameters

Operating temperature	-40~+85°C
Maximum system voltage	1500V DC
Maximum rated current of fuse	30A

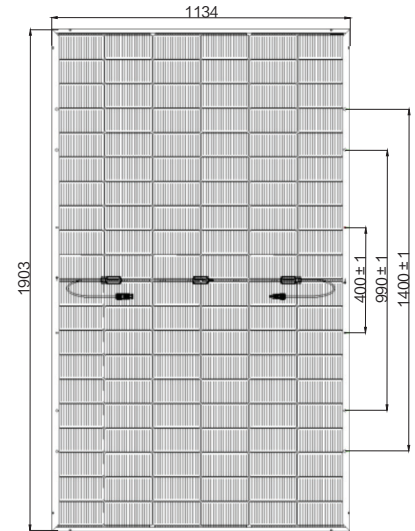
Packing Method

Modules per box	31 pieces
Modules per 40' container	744 pieces

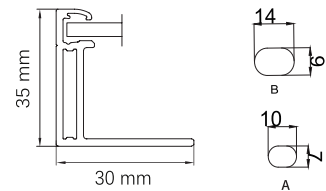
Optional Configuration

Connector	Original PV
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Module Dimension

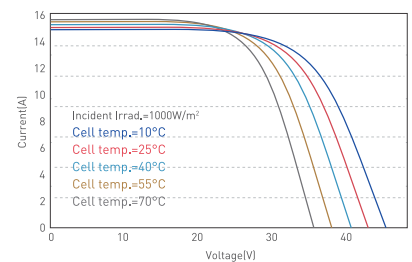


Back View



Curve Chart

I-V curves at different temperatures (480W)



I-V curves/P-V curves at different irradiance (480W)

