

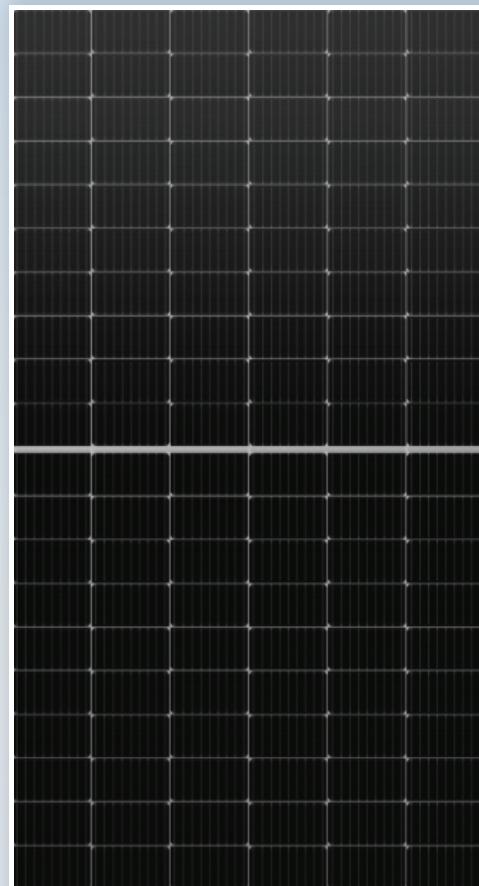
BM

Dual  
glass  
series

182P-120DG

Efficient bifacial PERC monocrystalline  
silicon half-piece solar module**470 W**Maximum power  
output of module**21.78%**Maximum module  
efficiency**0~+5W**

Power tolerance

Boamax's long-term stable  
quality is trustworthy

- Automatic production line and leading photovoltaic technology

- EL testing is performed before and after lamination, effectively ensuring the reliability of the components.

- Passed various long-term reliability tests

- Strict international standard management systems are adopted, including ISO 9001, ISO 14001, and ISO 45001.



MBB welding strip design optimizes optical and electrical properties of modules



The adoption of dual glass POE packaging enables effective resistance to various harsh outdoor environments



Additional safety brought by fire rating A



The battery slicing technology greatly reduces the series current and the internal damage of the modules, thus effectively reducing BOS and LCOE

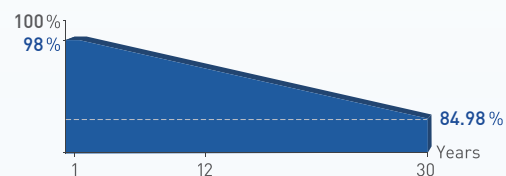


Optimized packaging materials and strict process scheme ensure the PID resistance of modules



Advanced non-destructive slicing technology, with small battery damage and low impact of cracking

## Industry leading linear warranty



**12**-year warranty on materials and process **30**-year linear warranty

Excellent warranty, with a commitment to a 30-year power warranty and a linear power attenuation of 0.45%

## Electrical performance parameters STC

Power output	Pmax[W]	445	450	455	460	465	470
Operating voltage of maximum power point	Vmp[V]	34.29	34.51	34.72	34.94	35.15	35.37
Operating current of maximum power point	Imp[A]	12.98	13.04	13.10	13.16	13.23	13.29
Open-circuit voltage	Voc[V]	40.80	41.03	41.27	41.51	41.74	41.96
Short-circuit current	Isc[A]	13.73	13.78	13.83	13.88	13.93	13.98
Module efficiency	(%)	20.62	20.85	21.08	21.32	21.55	21.78
Power tolerance	[W]	0~+5					

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

## Electrical performance parameters NMOT

Power output	Pmax [W]	335	338	342	346	350	354
Operating voltage of maximum power point	Vmp [V]	31.86	32.05	32.23	32.42	32.60	32.78
Operating current of maximum power point	Imp [A]	10.50	10.56	10.62	10.68	10.74	10.79
Open-circuit voltage	Voc[V]	38.51	38.73	38.95	39.18	39.40	39.62
Short-circuit current	Isc [A]	11	11.04	11.08	11.12	11.16	11.2

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

## Electrical performance parameters

## Bifacial power gain (taking back irradiation ratio of 10 % as an example)

Power output	Pmax[W]	479	483	487	490	495	498
Operating voltage of maximum power point	Vmp[V]	34.35	34.56	34.75	34.94	35.15	35.37
Operating current of maximum power point	Imp[A]	13.95	13.98	14.01	14.04	14.08	14.09
Open-circuit voltage	Voc[V]	40.81	40.81	48.77	49.05	49.32	48.68
Short-circuit current	Isc[A]	14.67	14.73	14.79	14.85	14.91	14.97
Module efficiency	(%)	22.21	22.39	22.56	22.73	22.93	23.10
Irradiation ratio	sc(A)	10%					

## Electrical performance parameters

Cell arrangement	120 pieces [6*20]
Module dimension	1903*1134*35mm
Weight	27.5kg
Front glass	2.0mm, high transparency coated glass
Rear glass	2.0mm, semi-tempered glass
Frame	Aluminum alloy with anode oxide film
Junction box	Protection level IP68
Cable	4mm <sup>2</sup> , with a positive wire length of 300mm and a negative wire length of 300mm
Number of diodes	3
Wind pressure/snow pressure	2400Pa/5400Pa
Connector	PV-H4

## Temperature characteristic

Nominal operating temperature of cell	45±2°C
Temperature coefficient (Isc)	+0.05%/C
Temperature coefficient (Voc)	-0.28%/C
Temperature coefficient (Pmax)	-0.34%/C

## Packing method

Pieces per box	31 pieces
Loading capacity of 17.5 m flatbed trailer	1054 pieces

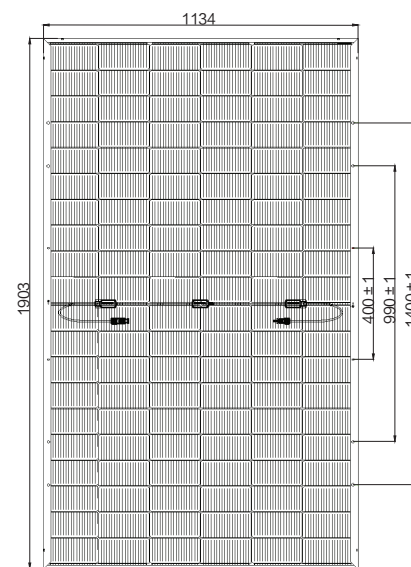
## Limit parameters

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

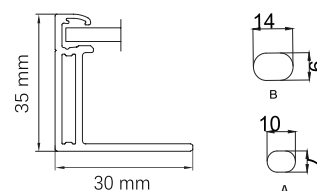
## Optional configuration

Connector	<input type="checkbox"/> Original PV
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## Module dimension

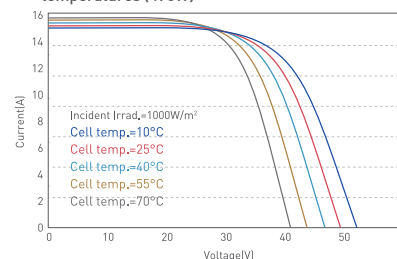


## Rear view



## Curve chart

Current and voltage curves at different temperatures (470W)



Current and voltage curves/power voltage curves at different irradiance (470W)

