

BM 210P-120DG

Efficient bifacial PERC monocrystalline silicon half-piece solar module



615 W

Maximum power output of module



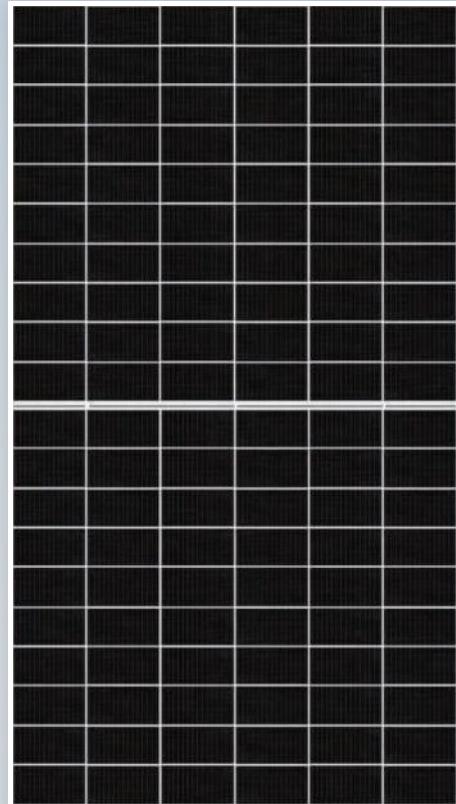
21.73%

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

Additional safety brought by fire rating A

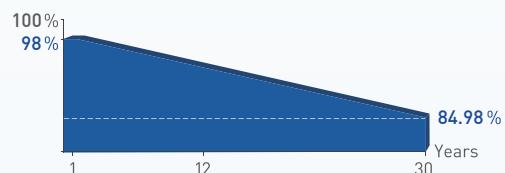
Optimized packaging materials and strict process scheme ensure the PID resistance of modules

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

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

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

Industry leading linear warranty



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

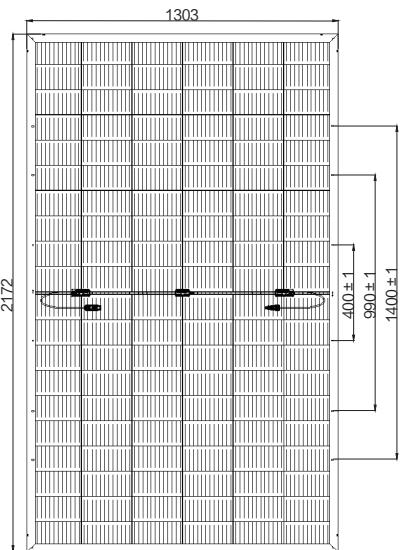
Excellent warranty, with a commitment to a 30-year power warranty and a linear power attenuation of 0.45%

Electrical performance parameters STC

Power output	Pmax(W)	580	585	590	595	600	605	610	615
Operating voltage of maximum power point	Vmp(V)	33.60	33.80	34.00	34.20	34.40	34.60	34.80	35.00
Operating current of maximum power point	Imp(A)	17.26	17.31	17.35	17.40	17.44	17.49	17.53	17.57
Open-circuit voltage	Voc(V)	40.70	40.90	41.10	41.30	41.50	41.70	41.90	42.10
Short-circuit current	Isc(A)	18.33	18.37	18.42	18.47	18.52	18.57	18.63	18.69
Module efficiency	(%)	20.49	20.67	20.85	21.02	21.20	21.38	21.55	21.73
Power tolerance	(W)	0~+5							

*STC testing conditions: atmospheric quality AM1.5, irradiance 1000 W/m², cell temperature 25 °C

Module dimension



Electrical performance parameters NMOT

Power output	Pmax (W)	436	441	445	449	453	457	460	465
Operating voltage of maximum power point	Vmp (V)	31.84	31.97	32.11	32.25	32.38	32.52	32.65	32.78
Operating current of maximum power point	Imp (A)	13.69	13.80	13.85	13.92	13.99	14.05	14.10	14.17
Open-circuit voltage	Voc(V)	38.86	39.03	39.19	39.35	39.52	39.68	39.84	40.00
Short-circuit current	Isc (A)	14.57	14.61	14.65	14.69	14.73	14.77	14.81	14.85

*NMOT testing conditions: irradiance 800 W/m², 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)	631	634	638	641	645	649	653	657
Operating voltage of maximum power point	Vmp(V)	34.32	34.44	34.55	34.67	34.79	34.91	35.03	35.15
Operating current of maximum power point	Imp(A)	18.38	18.41	18.47	18.48	18.55	18.59	18.64	18.69
Open-circuit voltage	Voc(V)	41.21	41.39	41.57	41.75	41.94	42.12	42.30	42.48
Short-circuit current	Isc(A)	19.58	19.64	19.49	19.55	19.61	19.67	19.73	19.79
Module efficiency	(%)	22.28	22.40	22.55	22.65	22.81	22.94	23.07	23.21
Irradiation ratio	sc(A)	10%							

Electrical performance parameters

Cell arrangement	120 pieces (6*20)
Module dimension	2172*1303*35mm
Weight	35.3kg
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 ² , with a positive wire length of 300mm and a negative wire length of 300mm
Number of diodes	3
Wind pressure/snow pressure	2400 Pa/5400 Pa
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	806 pieces

Limit parameters

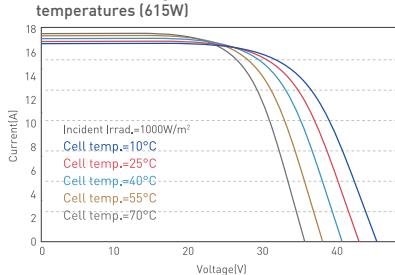
Operating temperature	-40~+85°C
Maximum system voltage	1500V DC
Maximum rated current of fuse	30A

Optional configuration

Connector	<input type="checkbox"/> Original PV
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Curve chart

Current and voltage curves at different temperatures (615W)



Current and voltage curves/power voltage curves at different irradiance (615W)

