BM-PM Series | BM182P-144DG

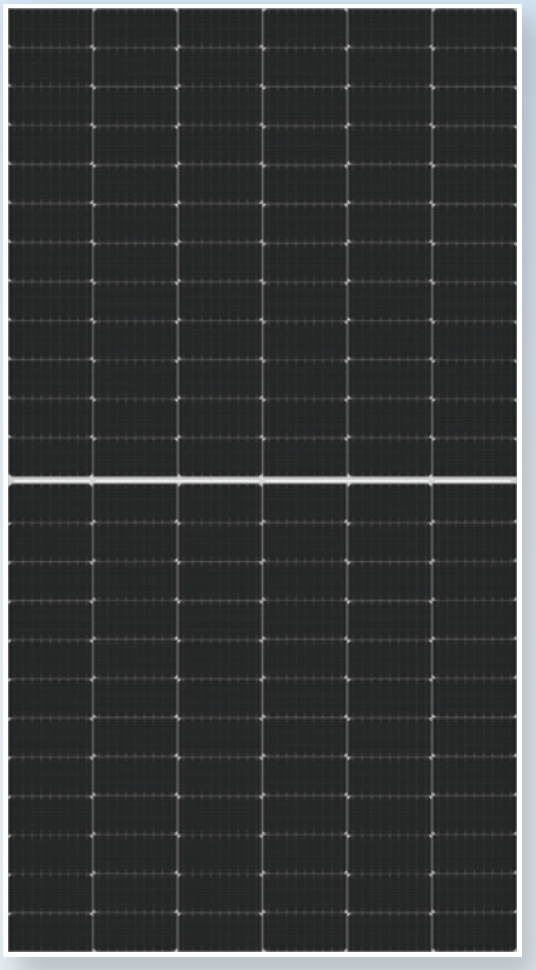
Bifacial Dual Glass Monocrystalline Module

BOAMAX

BM 182P-144DG

Dual glass series

Efficient bifacial PERC monocrystalline silicon half-piece solar module



570 W
Maximum power output of module

22.07%
Maximum module efficiency

0~+5W
Power tolerance

Boamax's long-term stable quality is trustworthy

- Automatic production line and leading photovoltaic technology
- Passed various long-term reliability tests
- EL testing is performed before and after lamination, effectively ensuring the reliability of the components.
- 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

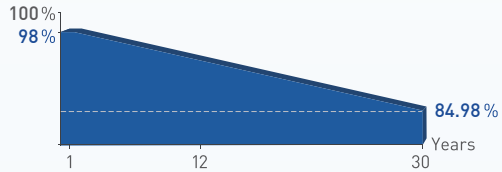
The battery slicing technology greatly reduces the series current and the internal damage of the modules, thus effectively reducing BOS and LCOE

PID

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%

CE ISO TÜV

BM-PM Series BM182P-144DG | Bifacial Dual Glass Monocrystalline Module | 530-570W

Electrical performance parameters STC

Power output	Pmax(W)	530	535	540	545	550	555	560	565	570
Operating voltage of maximum power point	Vmp(V)	41.28	41.45	41.61	41.76	41.92	42.08	42.24	42.4	42.56
Operating current of maximum power point	Imp(A)	12.84	12.91	12.98	13.05	13.12	13.19	13.26	13.33	13.4
Open-circuit voltage	Voc(V)	48.68	48.96	49.24	49.52	49.8	50.08	50.45	50.6	50.75
Short-circuit current	Isc(A)	13.68	13.73	13.78	13.83	13.88	13.93	13.87	13.95	14.02
Module efficiency	(%)	20.52	20.71	20.90	21.10	21.29	21.48	21.68	21.87	22.07
Power tolerance	(W)	0~+5								

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

Electrical performance parameters NMOT

Power output	Pmax (W)	401	405	409	412	416	420	424	428	431
Operating voltage of maximum power point	Vmp (V)	38.00	38.23	38.45	38.67	38.90	39.12	39.34	39.56	39.78
Operating current of maximum power point	Imp (A)	10.56	10.59	10.63	10.66	10.70	10.74	10.77	10.81	10.84
Open-circuit voltage	Voc(V)	45.95	46.21	46.48	46.74	47.01	47.28	47.55	47.82	48.09
Short-circuit current	Isc (A)	10.96	11.00	11.04	11.08	11.12	11.16	11.20	11.24	11.28

*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)	567	572	578	583	589	594	599	604	609
Operating voltage of maximum power point	Vmp(V)	40.96	41.22	41.45	41.7	41.93	42.18	42.43	42.68	42.93
Operating current of maximum power point	Imp(A)	13.85	13.89	13.94	13.98	14.04	14.08	14.12	14.16	14.20
Open-circuit voltage	Voc(V)	48.68	48.96	49.24	49.28	49.8	50.08	50.36	50.64	50.92
Short-circuit current	Isc(A)	14.63	14.69	14.75	14.8	14.85	14.91	14.97	15.03	15.09
Module efficiency	(%)	21.95	22.14	22.37	22.57	22.80	22.99	23.19	23.38	23.57
Irradiation ratio	sc(A)	10%								

Electrical performance parameters

Cell arrangement	144 pieces [6*24]
Module dimension	2278*1134*35mm
Weight	32.0kg
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	4mm², 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

Limit parameters

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

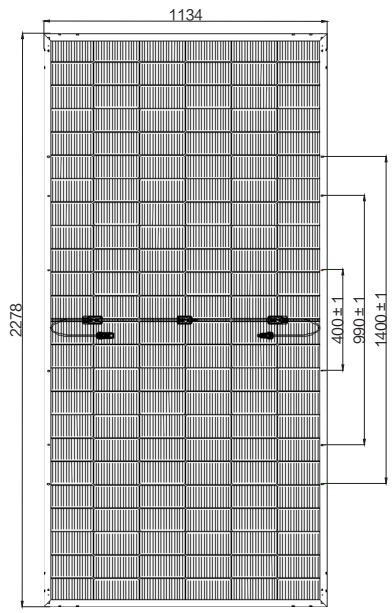
Packing method

Pieces per box	31 pieces
Loading capacity of 17.5 m flatbed trailer	868 pieces

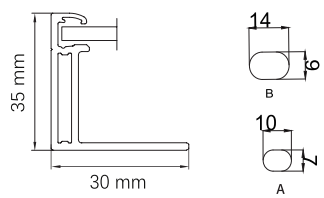
Optional configuration

Connector	☐ Original PV

Module dimension

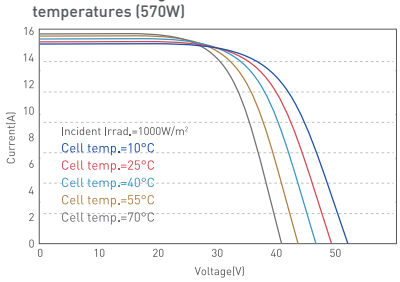


Rear view



Curve chart

Current and voltage curves at different temperatures (570W)



Current and voltage curves/power voltage curves at different irradiance (570W)