

Single Glass Monocrystalline Module

BM

Single glass series

182T-120HW

Efficient bifacial Topcon monocrystalline silicon half-piece solar module



480 W

Maximum power output of module



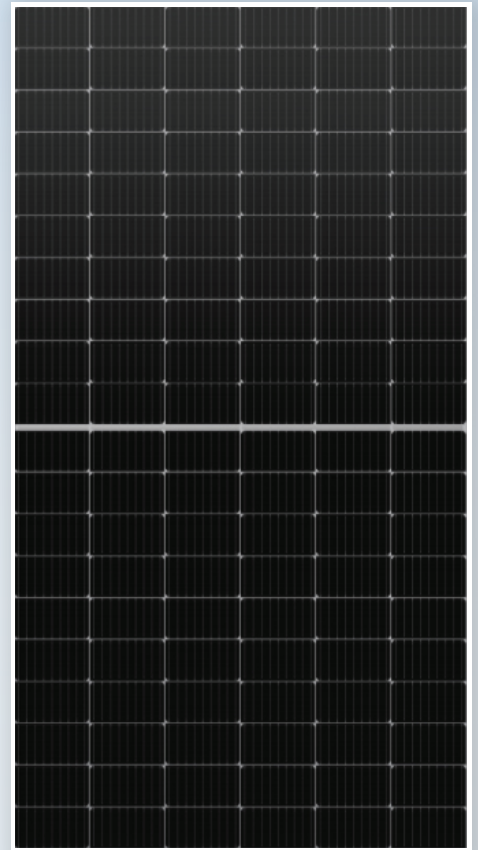
22.24%

Maximum module 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 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

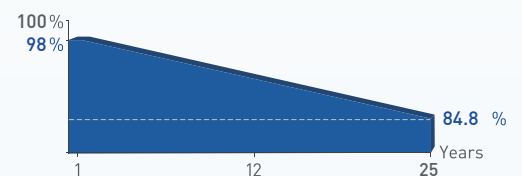


The battery slicing technology greatly reduces the series current and the internal damage of the modules, thus effectively reducing BOS and LCOE



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

Industry leading linear warranty



12-year warranty on materials and process **25-year linear warranty**

Excellent warranty, with a commitment to a 25-year power warranty and a linear power attenuation of 0.55%

Electrical performance parameters STC

Power output	P _{max} (W)	460	465	470	475	480
Operating voltage of maximum power point	V _{mp} (V)	35.22	35.37	35.52	35.68	35.83
Operating current of maximum power point	I _{mp} (A)	13.06	13.15	13.23	13.31	13.40
Open-circuit voltage	V _{oc} (V)	42.31	42.46	42.62	42.77	42.92
Short-circuit current	I _{sc} (A)	13.87	13.95	14.03	14.11	14.19
Module efficiency	(%)	21.32	21.55	21.78	22.01	22.24
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	P _{max} (W)	350	353	356	359	362
Operating voltage of maximum power point	V _{mp} (V)	33.03	33.06	33.09	33.13	33.27
Operating current of maximum power point	I _{mp} (A)	10.59	10.67	10.75	10.82	10.87
Open-circuit voltage	V _{oc} (V)	40.18	40.33	40.48	40.62	40.77
Short-circuit current	I _{sc} (A)	11.31	11.36	11.41	11.46	11.51

*NMOT testing conditions: irradiance 800 W/m² ambient temperature 20 °C, wind speed 1 m/s

Electrical performance parameters

Cell arrangement	120 pieces (6*20)
Module dimension	1908*1134*35mm
Weight	25.1kg
Front glass	3.2mm, high transparency coated glass
Back plate	White
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	2400Pa/5400Pa
Connector	PV-H4

Temperature characteristic

Nominal operating temperature of cell	45±2°C
Temperature coefficient (I _{sc})	+0.05%/C
Temperature coefficient (V _{oc})	-0.28%/C
Temperature coefficient (P _{max})	-0.34%/C

Limit parameters

Operating temperature	-40~+85°C
Maximum system voltage	1500V DC
Maximum rated current of fuse	25A

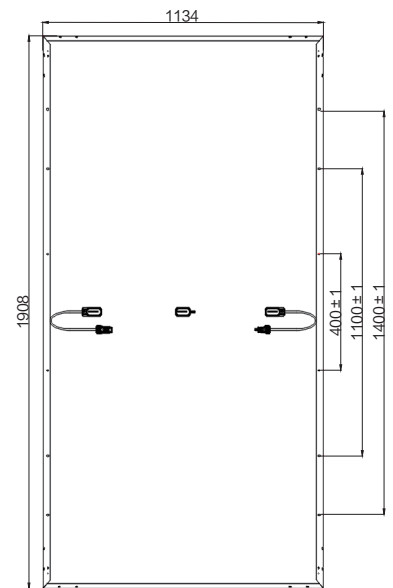
Packing method

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

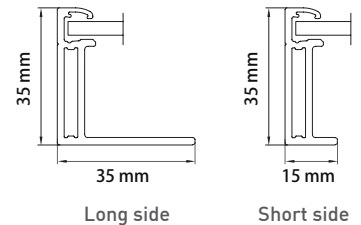
Optional configuration

Connector	Original PV
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Module dimension

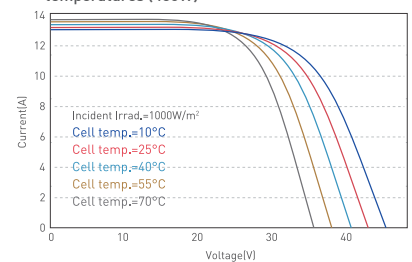


Rear view



Curve chart

Current and voltage curves at different temperatures (480W)



Current and voltage curves/power voltage curves at different irradiance (480W)

