

BM-HM Series

BM182H-144DG

Stock code: 002514

BOAMAX

Bifacial Dual Glass Monocrystalline Module

BM

182H-144DG

Dual
glass
seriesEfficient bifacial HJT monocrystalline silicon
half cells PV module**585 W**

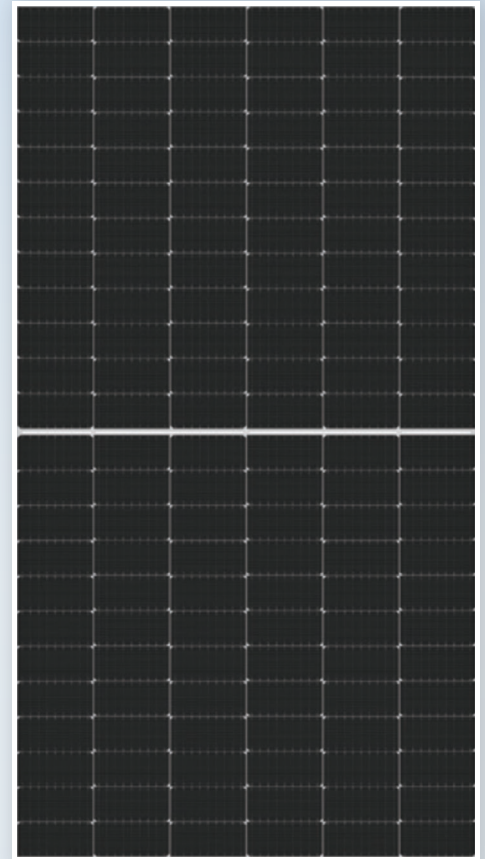
Maximum output power

**22.65%**

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

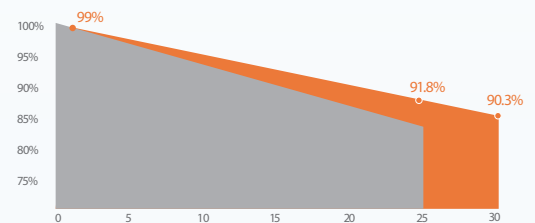


Optimized packaging materials and strict process scheme ensure the PID resistance of modules



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 _{max} (W)	560	565	570	575	580	585
Maximum Power Voltage	V _{mp} (V)	41.95	42.14	42.29	42.44	42.59	42.74
Maximum Power Current	I _{mp} (A)	13.35	13.41	13.48	13.55	13.62	13.69
Open Circuit Voltage	V _{oc} (V)	50.67	50.87	51.07	51.27	51.47	51.67
Short Circuit Current	I _{sc} (A)	14.13	14.19	14.25	14.31	14.37	14.43
Module Efficiency	(%)	21.68	21.87	22.07	22.26	22.45	22.65
Power Tolerance	(W)	0~+5					

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

Electrical Data (NMOT)

Peak Power	P _{max} (W)	421	425	429	432	436	440
Maximum Power Voltage	V _{mp} (V)	39.39	39.52	39.65	39.78	39.87	39.96
Maximum Power Current	I _{mp} (A)	10.69	10.75	10.82	10.86	10.94	11.01
Open-Circuit Voltage	V _{oc} (V)	48.13	48.32	48.51	48.7	48.89	49.08
Short-circuit current	I _{sc} (A)	11.41	11.46	11.51	11.56	11.61	11.66

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

Electrical Data

Bifacial power gain (reference to 10 % irradiance ratio)

Peak Power	P _{max} (W)	620	625	630	635	640	645
Maximum Power Voltage	V _{mp} (V)	44.16	44.37	44.58	44.79	45	45.21
Maximum Power Current	I _{mp} (A)	14.07	14.11	14.15	14.19	14.23	14.27
Open-Circuit Voltage	V _{oc} (V)	52.62	52.82	53.02	53.22	53.42	53.62
Short Circuit Current	I _{sc} (A)	14.57	14.61	14.65	14.69	14.73	14.77
Module Efficiency	(%)	24.00	24.19	24.39	24.58	24.77	24.97
Irradiation Ratio	sc(A)	10%					

Structural Parameters

Number of Cells	144 pieces [6*24]
Module Dimension	2278*1134*30mm
Weight	32.0kg
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 ² , 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 _{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	30A

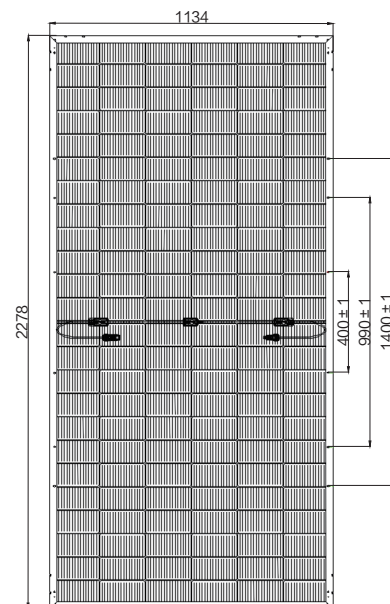
Packing Method

Modules per box	36 pieces
Modules per 40' container	720 pieces

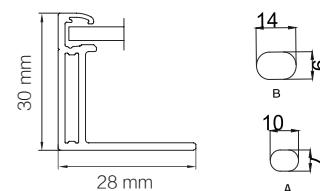
Optional Configuration

Connector	Original PV
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Module Dimension

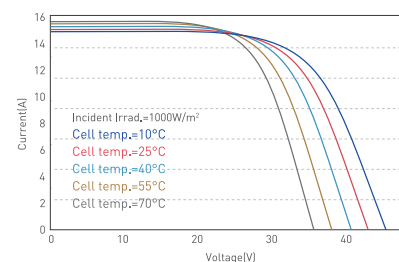


Back View



Curve Chart

I-V curves at different temperatures (585W)



I-V curves/P-V curves at different irradiance (585W)

