

BM-PM Series

BM182P-156DG

BOAMAX

Bifacial Dual Glass Monocrystalline Module

BM

Dual
glass
series

182P-156DG

Efficient bifacial PERC monocrystalline
silicon half-piece solar module



605 W

Maximum power
output of module



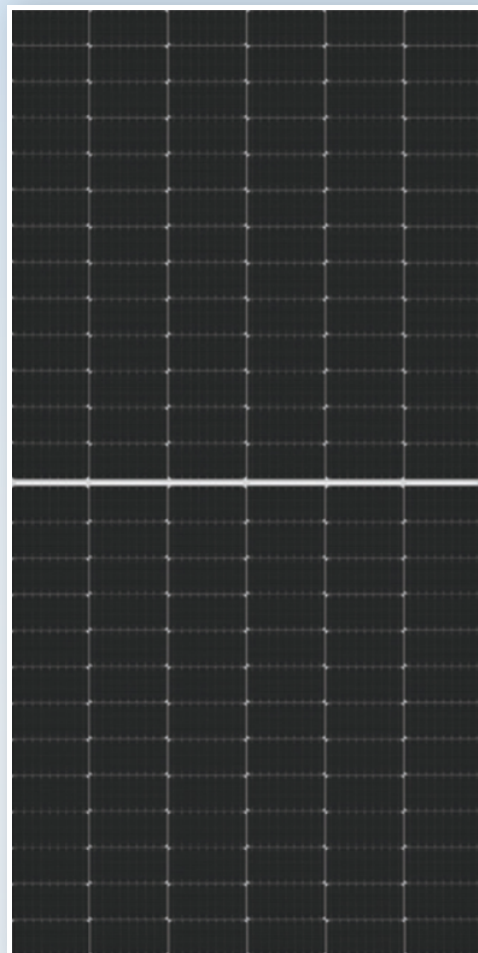
21.64%

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

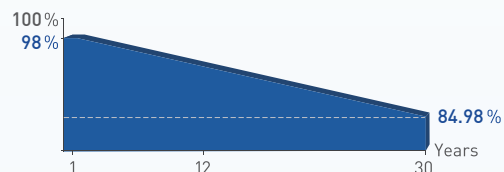


Optimized packaging materials and strict process scheme ensure the PID resistance of modules



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 | P _{max} (W) | 580 | 585 | 590 | 595 | 600 | 605 |
| Operating voltage of maximum power point | V _{mp} (V) | 44.58 | 44.86 | 45.14 | 45.42 | 45.70 | 45.98 |
| Operating current of maximum power point | I _{mp} (A) | 13.01 | 13.04 | 13.07 | 13.10 | 13.13 | 13.16 |
| Open-circuit voltage | V _{oc} (V) | 53.04 | 53.34 | 53.65 | 53.96 | 54.27 | 54.55 |
| Short-circuit current | I _{sc} (A) | 13.73 | 13.78 | 13.83 | 13.88 | 13.93 | 13.98 |
| Module efficiency | (%) | 20.75 | 20.93 | 21.11 | 21.29 | 21.46 | 21.64 |
| 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) | 435 | 440 | 445 | 450 | 455 | 460 |
| Operating voltage of maximum power point | V _{mp} (V) | 41.42 | 41.66 | 41.90 | 42.14 | 42.38 | 42.62 |
| Operating current of maximum power point | I _{mp} (A) | 10.50 | 10.56 | 10.62 | 10.68 | 10.74 | 10.79 |
| Open-circuit voltage | V _{oc} (V) | 50.06 | 50.35 | 50.64 | 50.93 | 51.22 | 51.51 |
| Short-circuit current | I _{sc} (A) | 11 | 11.04 | 11.08 | 11.12 | 11.16 | 11.2 |

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

Electrical performance parameters

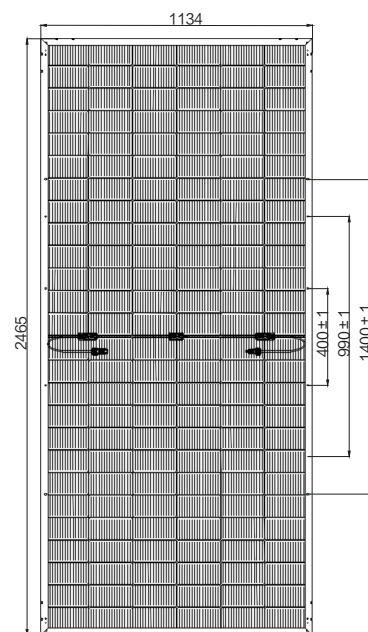
Bifacial power gain (taking back irradiation ratio of 10 % as an example)

| | | | | | | |
|--|----------------------|-------|-------|-------|-------|-------|
| Power output | P _{max} (W) | 672 | 677 | 683 | 688 | 693 |
| Operating voltage of maximum power point | V _{mp} (V) | 47.84 | 48.07 | 48.30 | 48.52 | 48.75 |
| Operating current of maximum power point | I _{mp} (A) | 14.07 | 14.11 | 14.15 | 14.19 | 14.23 |
| Open-circuit voltage | V _{oc} (V) | 56.62 | 56.82 | 57.02 | 57.22 | 57.42 |
| Short-circuit current | I _{sc} (A) | 14.57 | 14.61 | 14.65 | 14.69 | 14.73 |
| Module efficiency | (%) | 24.03 | 24.22 | 24.42 | 24.61 | 24.80 |
| Irradiation ratio | sc(A) | 10% | | | | |

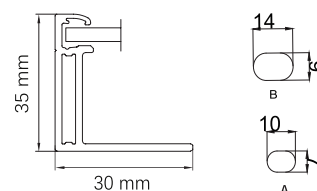
Electrical performance parameters

| | |
|-----------------------------|---|
| Cell arrangement | 156 pieces (6*26) |
| Module dimension | 2465*1134*35mm |
| Weight | 34.5kg |
| 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 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 |

Module dimension

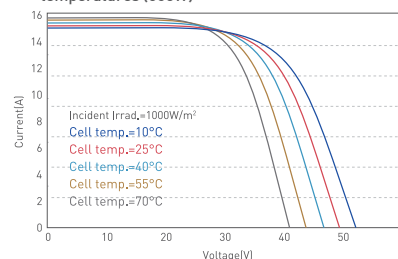


Rear view

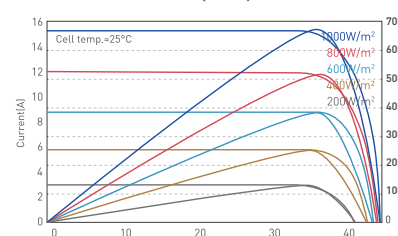


Curve chart

Current and voltage curves at different temperatures (605W)



Current and voltage curves/power voltage curves at different irradiance (605W)



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 | 30A |

Packing method

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|--|------------|
| Pieces per box | 31 pieces |
| Loading capacity of 17.5 m flatbed trailer | 806 pieces |

Optional configuration

| | |
|-----------|--------------------------------------|
| Connector | <input type="checkbox"/> Original PV |
|-----------|--------------------------------------|