

BM-TM Series

BM182T-132HW

Single Glass Monocrystalline Module

BM

Single
glass
series

182T-132HW

Efficient bifacial Topcon monocrystalline silicon half cells PV module



530 W

Maximum output power



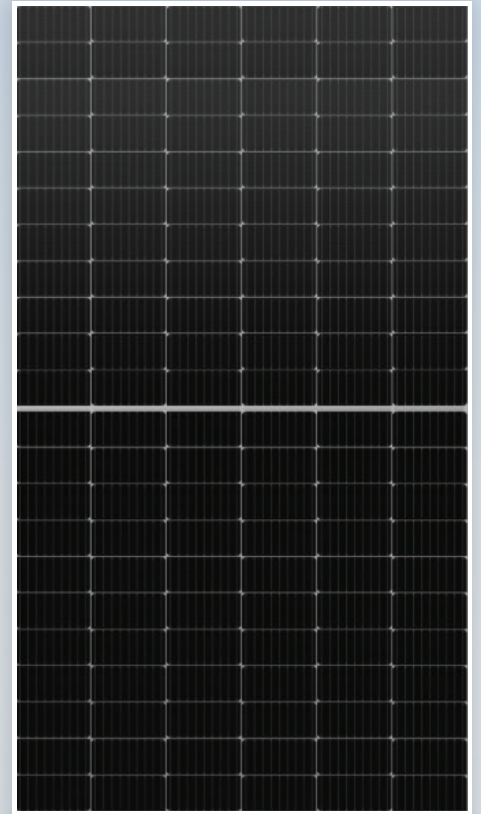
22.32%

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



EVA 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

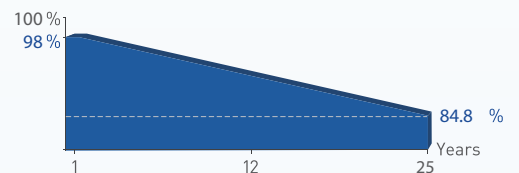


Optimized packaging materials and strict process scheme ensure the PID resistance of modules



Advanced non-destructive slicing technology, with small cell damage and reduce the risk of cracking

Industry leading linear warranty



12year Product Warranty **25**year Power warranty

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



Electrical Data (STC)

| | | | | | | |
|-----------------------|----------------------|-------|-------|-------|-------|-------|
| Peak Power | P _{max} (W) | 510 | 515 | 520 | 525 | 530 |
| Maximum Power Voltage | V _{mp} (V) | 38.74 | 38.91 | 39.08 | 39.24 | 39.41 |
| Maximum Power Current | I _{mp} (A) | 13.17 | 13.24 | 13.31 | 13.38 | 13.45 |
| Open Circuit Voltage | V _{oc} (V) | 46.54 | 46.71 | 46.88 | 47.05 | 47.22 |
| Short Circuit Current | I _{sc} (A) | 14.12 | 14.15 | 14.18 | 14.21 | 14.24 |
| Module Efficiency | (%) | 21.48 | 21.69 | 21.90 | 22.11 | 22.32 |
| Power Tolerance | (W) | 0~+5 | | | | |

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

Electrical Data (NMOT)

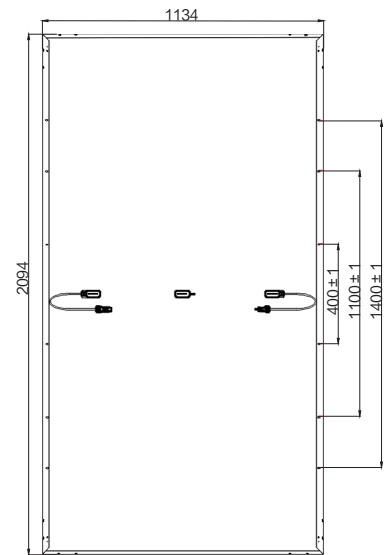
| | | | | | | |
|-----------------------|----------------------|-------|-------|-------|-------|-------|
| Peak Power | P _{max} (W) | 385 | 388 | 391 | 394 | 398 |
| Maximum Power Voltage | V _{mp} (V) | 36.33 | 36.37 | 36.40 | 36.44 | 36.60 |
| Maximum Power Current | I _{mp} (A) | 10.59 | 10.67 | 10.75 | 10.82 | 10.87 |
| Open Circuit Voltage | V _{oc} (V) | 44.20 | 44.36 | 44.52 | 44.69 | 44.85 |
| Short Circuit Current | I _{sc} (A) | 11.31 | 11.36 | 11.41 | 11.46 | 11.51 |

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

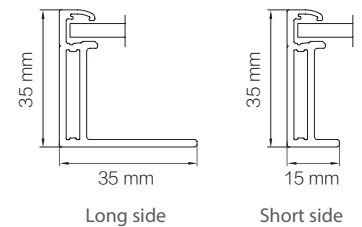
Structural Parameters

| | |
|-----------------------------|--|
| Number of Cells | 132 pieces [6*22] |
| Module Dimension | 2094*1134*35mm |
| Weight | 26.3kg |
| Front Glass | 3.2mm, high transparency coated glass |
| Rear Panel | White |
| 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 |

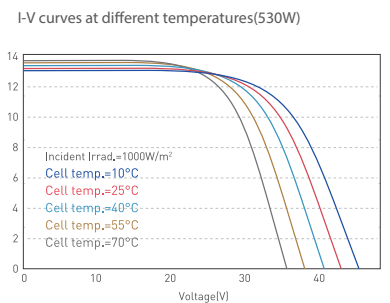
Module Dimension



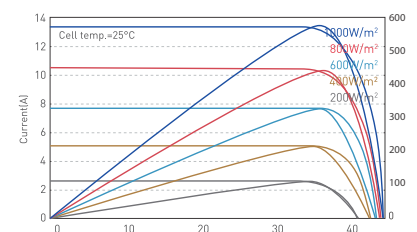
Back View



Curve Chart



I-V curves/P-V curves at different irradiance (530W)



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 | 25A |

Packing Method

| | |
|---------------------------|------------|
| Pieces per box | 31 pieces |
| Modules per 40' container | 682 pieces |

Optional Configuration

| | |
|-----------|-------------|
| Connector | Original PV |
|-----------|-------------|