

MBB Half-cell Monofacial Module (72)<sup>35</sup>

# TW535~560MAP

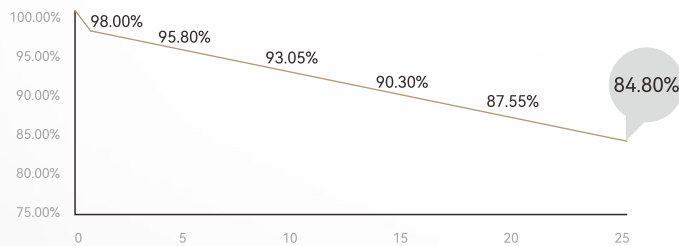
## M10-144-H

### PRODUCT FEATURES



### POWER WARRANTY

1st year <2%, 0.55% power degradation per year from 2 to 25 years



**12** 12-year warranty for materials

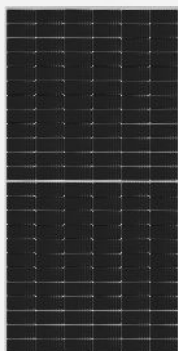
**25** 25-year warranty for linear power output

### PRODUCT CERTIFICATIONS

ISO9001: 2015/Quality Management System

ISO14001: 2015/Environment Management System

ISO45001: 2018/Occupational Health and Safety



Front



Rear



## Electrical Characteristics (STC)

Module type: TW\*\*\*MAP-144-H

|  |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|
| Maximum power: Pm (W)                  | 535   | 540   | 545   | 550   | 555   | 560   |
| Open circuit voltage: Voc (V)          | 49.51 | 49.75 | 49.98 | 50.22 | 50.45 | 50.68 |
| Short circuit current: Isc (A)         | 13.60 | 13.63 | 13.66 | 13.70 | 13.73 | 13.76 |
| Voltage at maximum power point: Vm (V) | 41.77 | 42.06 | 42.35 | 42.64 | 42.93 | 43.22 |
| Current at maximum power point: Im (A) | 12.81 | 12.84 | 12.87 | 12.90 | 12.93 | 12.96 |
| Module efficiency: $\eta$ (%)          | 20.7  | 20.9  | 21.1  | 21.3  | 21.5  | 21.7  |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass1.5, Measuring tolerance:  $\pm 3\%$

## Electrical Characteristics (NMOT)

|  |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|
| Maximum power: Pm (W)                  | 404.8 | 408.6 | 412.4 | 416.2 | 420.0 | 423.8 |
| Open circuit voltage: Voc (V)          | 46.74 | 46.96 | 47.18 | 47.40 | 47.62 | 47.85 |
| Short circuit current: Isc (A)         | 10.89 | 10.92 | 10.94 | 10.97 | 10.99 | 11.02 |
| Voltage at maximum power point: Vm (V) | 38.74 | 39.01 | 39.28 | 39.55 | 39.82 | 40.09 |
| Current at maximum power point: Im (A) | 10.45 | 10.47 | 10.50 | 10.52 | 10.55 | 10.57 |

NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 °C, Wind Speed 1m/s

## Mechanical Parameters

|                |  |
|----------------|--|
| Cells          | Monocrystalline silicon cell                                     |
| Orientation    | 144 (6×24)   |
| Size           | 2278±2×1134±2×35mm   |
| Weight         | 27.8kg   |
| Glass          | 3.2mm high transmittance, AR coated heat strengthened glass      |
| Backsheet      | White  |
| Frame          | Anodized aluminum alloy frame                                    |
| Junction Box   | IP68, 3 diodes   |
| Cable          | 4.0mm <sup>2</sup> , Landscape: 1200/1200mm, Portrait: 280/280mm |
| Connector      | MC4 Compatible   |
| Wind/Snow Load | 2400Pa/5400Pa  |
| Packaging      | 31pcs per pallet, 620pcs per 40HC                                |

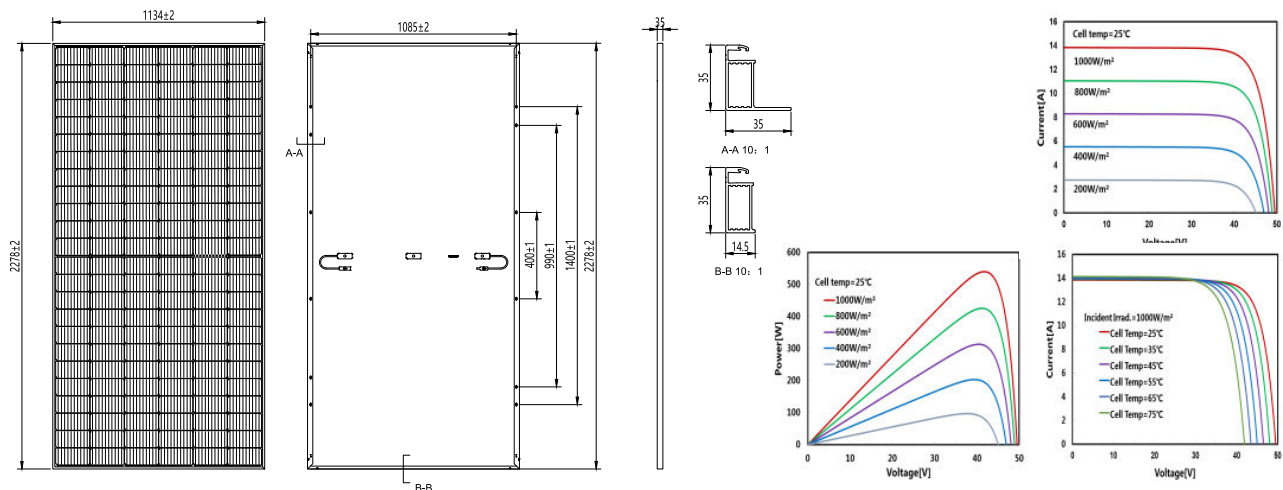
## Operating Parameters

|                            |             |
|----------------------------|-------------|
| Operational Temperature    | -40°C~+85°C |
| Maximum System Voltage     | 1500V DC    |
| Maximum Series Fuse Rating | 25A         |
| Power Output Tolerance     | 0~+5W       |

## Temperature Ratings

|                                |           |
|--------------------------------|-----------|
| Temperature Coefficient (Pmax) | -0.35%/°C |
| Temperature Coefficient (Voc)  | -0.27%/°C |
| Temperature Coefficient (Isc)  | 0.045%/°C |
| NMOT                           | 43±2°C    |

## Drawings (Unit: mm)



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With technological progress and product updates, there may be deviations between the technical parameters of Tongwei's module products and the technical parameters contained in this specification, and Tongwei Solar has the right to adjust the technical parameters at any time without notifying the customer, the final interpretation of the technical specification is vested in Tongwei Solar.