



**Shingled Technology**  
Innovative structure, low-temperature adhesive bonding, high-density layout.

**Safety and Reliability**  
No hidden welding crack, low operating temperature, high pressure resistance.

# TERRA 5E

## SHINGLED MONOFACIAL MODULE

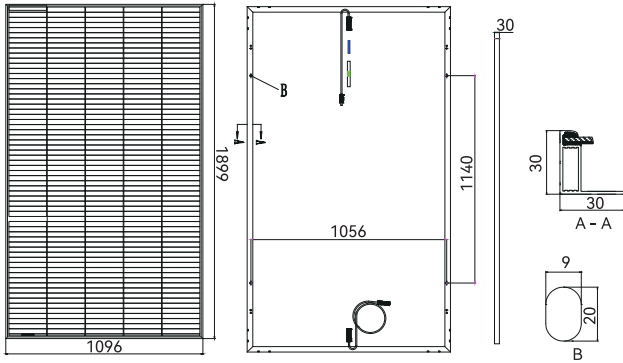
# TH420~445PMB7 46SCF

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**DRAWINGS (Unit: mm)**



**ELECTRICAL CHARACTERISTICS (STC)**

|                                   |       |       |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| Module Type: TH***PMB7-46SCF      | 445   | 440   | 435   | 430   | 425   | 420   |
| Maximum Power: Pmax [W]           | 445   | 440   | 435   | 430   | 425   | 420   |
| Open Circuit Voltage: Voc [V]     | 43.8  | 43.7  | 43.6  | 43.5  | 43.4  | 43.3  |
| Short Circuit Current: Isc [A]    | 13.01 | 12.90 | 12.79 | 12.68 | 12.56 | 12.46 |
| Voltage at Maximum Power: Vmp [V] | 36.4  | 36.3  | 36.2  | 36.1  | 36.0  | 35.9  |
| Current at Maximum Power: Imp [A] | 12.23 | 12.13 | 12.02 | 11.92 | 11.81 | 11.71 |
| Module Efficiency: η [%]          | 21.4  | 21.1  | 20.9  | 20.7  | 20.4  | 20.2  |

**ELECTRICAL CHARACTERISTICS (NMOT)**

|                                   |       |       |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power: Pmax [W]           | 335   | 331   | 328   | 324   | 320   | 316   |
| Open Circuit Voltage: Voc [V]     | 41.8  | 41.7  | 41.6  | 41.5  | 41.4  | 41.3  |
| Short Circuit Current: Isc [A]    | 10.50 | 10.41 | 10.32 | 10.23 | 10.14 | 10.05 |
| Voltage at Maximum Power: Vmp [V] | 34.7  | 34.6  | 34.5  | 34.4  | 34.3  | 34.2  |
| Current at Maximum Power: Imp [A] | 9.66  | 9.57  | 9.49  | 9.41  | 9.32  | 9.24  |

1. Standard Test Conditions [STC]: irradiance 1000 W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;  
 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m<sup>2</sup>; wind speed 1m/s, ambient temperature 20°C.  
 3. Tolerance of Pm: 0~+5W. Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

**TEMPERATURE PARAMETERS**

|                                |                 |
|--------------------------------|-----------------|
| NMOT                           | 42.30 °C (±2°C) |
| Temperature Coefficient of Voc | -0.27%/°C       |
| Temperature Coefficient of Isc | +0.04%/°C       |
| Temperature Coefficient of Pm  | -0.34%/°C       |

**MAXIMUM RATINGS**

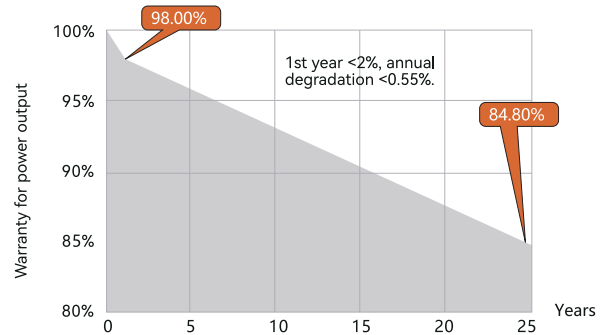
|                                    |   |
|------------------------------------|---|
| Maximum System Voltage [V]         | DC1500 (IEC)  |
| Series Fuse Rating [A]             | 25  |
| Maximum Surface Load Capacity [Pa] | Front 5400 / Back 2400                              |
| Temperature Range [°C]             | -40 ~ + 85  |
| Withstanding Hail                  | Maximum diameter of 25mm with impact speed of 23m/s |

**MECHANICAL PARAMETERS**

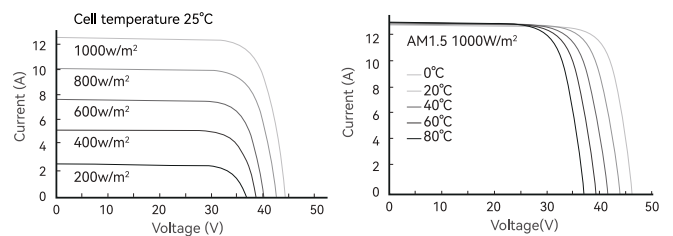
|                  |   |
|------------------|---|
| Dimensions       | 1899 × 1096 × 30mm  |
| Weight           | 21.8kg  |
| Front glass      | tempered glass, 3.2mm   |
| Frame            | Anodized aluminum profile   |
| Cells            | Mono-crystalline solar cell   |
| Cell Orientation | 320 (64 × 5)  |
| Junction Box     | IP68, two diodes  |
| Cable            | 4mm <sup>2</sup> ,+300mm/-1000mm(Vertical), +220mm/-180mm(Horizontal) |
| Packaging        | 36pcs/box; 864pcs/40'container; 1296pcs/flat car                      |

**WARRANTY**

**Linear Power Output Warranty**



**I-V CURVE**



**CERTIFICATIONS**

**Quality Management System and Product Certification**

IEC61215/61730、IEC62804(PID)、IEC61701(Salt)、  
 IEC62716 (Ammonia)、IEC60068-2-68(Sand)  
 ISO 9001:2015 / quality management system  
 ISO 14001:2015 / environmental management system  
 ISO 45001:2018 / occupation health safety management system  
 ISO 50001:2011 / energy management system  
 IEC TS 62941—2016 / PV industry quality management system

