THE TALLMAX™ FRAMED 252 LAYOUT MODULE

252 LAYOUT MONOCRYSTALLINE MODULE

470-490W POWER OUTPUT RANGE

20.8% MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world’s leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates
IEC61215/IEC61730/IEC61701/IEC61701/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO45001: Occupation Health and Safety Management System

• Up to 490W front power and 20.8% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings

High reliability
• Ensured PID resistance through cell process and module material control
• Resistant to salt, acid and ammonia
• Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

High energy generation
• Excellent IAM by 3rd party with cell process and module material optimization
• Better anti-shading performance and lower operating temperature

PERFORMANCE WARRANTY

Trina standard

Guaranteed Power

90.0%

99.0%

84.8%

Trina standard

Years 5 10 15 20 25

90.0%

Guaranteed Power

Trina standard
**I-V CURVES OF PV MODULE (480W)**

**P-V CURVES OF PV MODULE (480W)**

*Measuring tolerance: ±3%.

**Operational Temperature**

-40~+85

**Maximum System Voltage**

- 1500V DC (IEC)
- 1500V DC (UL)

(Please refer to product warranty for details)

<table>
<thead>
<tr>
<th>Modules per box</th>
<th>31 pieces</th>
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<tbody>
<tr>
<td>Modules per 40' container</td>
<td>620 pieces</td>
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</table>

**Solar Cells**

- Monocrystalline

**Cell Orientation**

- 252 cells (12 × 21)

**Module Dimensions**

- 2315 × 1016 × 35 mm (91.14× 40× 1.38 inches)

**Weight**

- 26.0 kg (57.3 lb)

**Glass**

- 3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass

**Backsheet**

- White

**IP 68 rated**

**Portrait:**

- N 450 mm / P 450 mm (17.72/17.72 inches)

**Landscape:**

- N 1400 mm / P 1400 mm (55.12/55.12 inches)

**Encapsulant Material**

- EVA

**Backsheet**

- White

**Frame**

- 35 mm (1.38 inches) Anodized Aluminium Alloy

**J-Box**

- IP 68 rated

**Cables**

- Photovoltaic Technology Cable 4.0mm² (0.006 inches²),
  - Portrait: N 450 mm/P 450 mm (17.72/17.72 inches)
  - Landscape: N 1400 mm/P 1400 mm (55.12/55.12 inches)

**Connector**

- MC4 EVO2 / TS4*

*Please refer to regional datasheet for specified connector.

**Electrical Data (STC)**

- **Peak Power Watts (Wp)**: 470, 475, 480, 485, 490
- **Power Tolerance**: ±5 W
- **Maximum Power Voltage (V)**: 36.1, 36.2, 36.3, 36.4, 36.5
- **Maximum Power Current (A)**: 13.02, 13.12, 13.23, 13.33, 13.43
- **Open Circuit Voltage (V)**: 43.0, 43.1, 43.2, 43.3, 43.4
- **Short Circuit Current (A)**: 13.73, 13.80, 13.92, 13.97, 14.07
- **Module Efficiency**: 20.0, 20.2, 20.4, 20.6, 20.8

*STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

**Electrical Data (NOCT)**

- **Maximum Power (Wp)**: 354, 358, 362, 365, 369
- **Maximum Power Voltage (V)**: 33.6, 33.8, 33.9, 34.0, 34.1
- **Maximum Power Current (A)**: 10.53, 10.59, 10.68, 10.72, 10.80
- **Open Circuit Voltage (V)**: 40.5, 40.6, 40.7, 40.7, 40.8
- **Short Circuit Current (A)**: 11.06, 11.12, 11.22, 11.26, 11.34

*NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

**Mechanical Data**

- **Temperatures (°C)**
  - NOCT: 43°C (±2°C)
  - Temperature Coefficient of P (°C/°C)
    - 0.34%/°C (±0.3%)
  - Temperature Coefficient of V (°C/°C)
    - -0.25%/°C (±0.3%)
  - Temperature Coefficient of I (°C/°C)
    - 0.04%/°C (±0.3%)

*Do not connect Fuse in Combiner Box with two or more strings in parallel connection.

**Warranty**

- 12 year Product Workmanship Warranty
- 25 year Power Warranty

*Please refer to product warranty for details.

**Packaging Configuration**

- Modules per box: 31 pieces
- Modules per 40' container: 620 pieces

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