THE

DUOMAX™

HALF-CELL DUAL GLASS 72 LAYOUT MODULE

72 LAYOUT

MONOCRYSTALLINE MODULE

390-415W

POWER OUTPUT RANGE

20.4%

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/IEC61701/IEC61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupation Health and Safety Management System

Trina Solar’s DUOMAX Linear Performance Warranty

Additional value from Trina Solar’s DUOMAX warranty

0.5% Annual Degradation

Over 30 years
**ELECTRICAL DATA (STC)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>390</th>
<th>395</th>
<th>400</th>
<th>405</th>
<th>410</th>
<th>415</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts $P_{MAX}$ (Wp)*</td>
<td>390</td>
<td>395</td>
<td>400</td>
<td>405</td>
<td>410</td>
<td>415</td>
</tr>
<tr>
<td>Power Output Tolerance- $P_{MAX}$</td>
<td>0 - 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Voltage $V_{MPV}$ (V)</td>
<td>40.2</td>
<td>40.5</td>
<td>40.8</td>
<td>41.1</td>
<td>41.4</td>
<td>41.7</td>
</tr>
<tr>
<td>Open Circuit Voltage $V_{OC}$ (V)</td>
<td>48.5</td>
<td>48.7</td>
<td>48.9</td>
<td>49.1</td>
<td>49.3</td>
<td>49.5</td>
</tr>
<tr>
<td>Short Circuit Current $I_{SC}$ (A)</td>
<td>10.25</td>
<td>10.29</td>
<td>10.33</td>
<td>10.37</td>
<td>10.41</td>
<td>10.45</td>
</tr>
<tr>
<td>Module Efficiency $\eta_m$ (%)</td>
<td>19.2</td>
<td>19.4</td>
<td>19.7</td>
<td>19.9</td>
<td>20.2</td>
<td>20.4</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
* Measuring tolerance ±3%.

**ELECTRICAL DATA (NMOT)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>294</th>
<th>298</th>
<th>302</th>
<th>305</th>
<th>309</th>
<th>313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power $P_{MAX}$ (Wp)</td>
<td>294</td>
<td>298</td>
<td>302</td>
<td>305</td>
<td>309</td>
<td>313</td>
</tr>
<tr>
<td>Maximum Power Voltage $V_{MPV}$ (V)</td>
<td>37.7</td>
<td>38.0</td>
<td>38.2</td>
<td>38.5</td>
<td>38.8</td>
<td>39.1</td>
</tr>
<tr>
<td>Maximum Power Current $I_{MPV}$ (A)</td>
<td>7.81</td>
<td>7.85</td>
<td>7.89</td>
<td>7.92</td>
<td>7.97</td>
<td>8.01</td>
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<tr>
<td>Open Circuit Voltage $V_{OC}$ (V)</td>
<td>45.6</td>
<td>45.8</td>
<td>46.0</td>
<td>46.2</td>
<td>46.4</td>
<td>46.6</td>
</tr>
<tr>
<td>Short Circuit Current $I_{SC}$ (A)</td>
<td>8.27</td>
<td>8.30</td>
<td>8.33</td>
<td>8.36</td>
<td>8.39</td>
<td>8.43</td>
</tr>
</tbody>
</table>

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

**MECHANICAL DATA**

- **Solar Cells**: Monocrystalline
- **Cell Orientation**: 144 cells (6 × 24)
- **Module Dimensions**:
  - Back View: 2024 × 1004 × 6 mm (79.69 × 39.53 × 0.24 inches)
  - Front View: 2028 × 1008 × 6 mm with edgebanding (79.84 × 39.69 × 0.24 inches)
  - Landscape: 2030 × 1010 × 7.6 mm with corner (79.92 × 39.76 × 0.24 inches)
- **Weight**: 29.2 kg (64.4 lb)
- **Front Glass**: 2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
- **Encapsulant Material**: EVA
- **Back Glass**: 2.5 mm (0.10 inches), Heat Strengthened Glass
- **Frame**: Frameless
- **J-Box**: IP 68 rated
- **Cables**: Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm/55.12/11.22 inches
- **Landscape**: N 1400mm/P 1400mm/55.12/55.12 inches

**DIMENSIONS OF PV MODULE (mm)**

- **Back View**: 2.5 mm (0.10 inches), Heat Strengthened Glass
- **Back Glass**: 2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
- **Front View**: 2024 × 1004 × 6 mm (79.69 × 39.53 × 0.24 inches)
- **Frameless**: 2024 × 1004 × 6 mm (79.69 × 39.53 × 0.24 inches)
- **Encapsulant Material**: EVA
- **Cables**: Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm/55.12/11.22 inches
- **Landscape**: N 1400mm/P 1400mm/55.12/55.12 inches

**TEMPERATURE RATINGS**

- **NMOT Nominal Module Operating Temperature**: 41°C (±3°C)
- **Temperature Coefficient of $P_{MAX}$**: -0.37%/°C
- **Temperature Coefficient of $V_{OC}$**: -0.29%/°C
- **Temperature Coefficient of $I_{SC}$**: 0.05%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

**WARRANTY**

- **10 year Product Workmanship Warranty**
- **30 year Linear Power Warranty**

(Refer to product warranty for details)

**MAXIMUM RATINGS**

- **Operational Temperature**: -40~+85°C
- **Maximum System Voltage**: 1500V DC (IEC)
- **Max Series Fuse Rating**: 20A

**PACKAGING CONFIGURATION**

- **Modules per box**: 33 pieces
- **Modules per 40’ container**: 726 pieces

**CAUTION**: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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