THE DUOMAX™
HALF-CELL DUAL GLASS 144 LAYOUT MODULE

144 LAYOUT
MONOCRYSTALLINE MODULE

380-410W
POWER OUTPUT RANGE

20.2%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

High power
• Up to 410W front power and 20.2% module efficiency with half-cut technology bringing more BOS savings
• Lower resistance of half-cut ensure high power

High reliability
• Ensured PID resistance through cell process and module material control
• Resistant to salt, acid and ammonia
• Proven to be reliable in high temperature and humidity areas
• Certified to fire class A
• Minimizes micro-crack and snail trails
• Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

High energy generation
• Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
• Lower temp coefficient (-0.35%) and NMOT bring more energy leading to lower LCOE
• Better anti-shading performance and lower operating temperature

Easy to install
• Frame design makes module compatible with all racking and installation methods
• Easy to handle and install as normal framed module during transportation

Comprehensive Products and System Certificates
IEC61215/UL1703/IEC61730/IEC61701/IEC62716
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 Performance Warranty

From the 2nd year to the 30th year, the average annual power decline will be no more than 0.5%.
### ELECTRICAL DATA (STC)

<table>
<thead>
<tr>
<th>Peak Power Watts-PMAX (Wp)*</th>
<th>380</th>
<th>385</th>
<th>390</th>
<th>395</th>
<th>400</th>
<th>405</th>
<th>410</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output Tolerance-PMAX (W)</td>
<td>0~+5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Voltage-VMPP (V)</td>
<td>39.6</td>
<td>40.1</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-VOC (V)</td>
<td>48.1</td>
<td>48.5</td>
<td>49.7</td>
<td>50.1</td>
<td>50.4</td>
<td>50.8</td>
<td>51.2</td>
</tr>
<tr>
<td>Short Circuit Current-ISC (A)</td>
<td>9.99</td>
<td>10.03</td>
<td>10.08</td>
<td>10.13</td>
<td>10.18</td>
<td>10.23</td>
<td>10.29</td>
</tr>
<tr>
<td>Module Efficiency ηm (%)</td>
<td>18.7</td>
<td>19.0</td>
<td>19.2</td>
<td>19.5</td>
<td>19.7</td>
<td>20.0</td>
<td>20.2</td>
</tr>
</tbody>
</table>

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

*Measurement tolerance: ±3%.

### ELECTRICAL DATA (NMOT)

<table>
<thead>
<tr>
<th>Maximum Power-PMAX (Wp)</th>
<th>287</th>
<th>291</th>
<th>295</th>
<th>299</th>
<th>303</th>
<th>306</th>
<th>310</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power Voltage-VMPP (V)</td>
<td>37.5</td>
<td>37.9</td>
<td>38.5</td>
<td>38.8</td>
<td>39.0</td>
<td>39.3</td>
<td>39.6</td>
</tr>
<tr>
<td>Maximum Power Current-IMPP (A)</td>
<td>7.64</td>
<td>7.68</td>
<td>7.67</td>
<td>7.71</td>
<td>7.75</td>
<td>7.79</td>
<td>7.83</td>
</tr>
<tr>
<td>Open Circuit Voltage-VOC (V)</td>
<td>45.3</td>
<td>45.7</td>
<td>46.8</td>
<td>47.2</td>
<td>47.4</td>
<td>47.8</td>
<td>48.2</td>
</tr>
<tr>
<td>Short Circuit Current-ISC (A)</td>
<td>8.06</td>
<td>8.09</td>
<td>8.13</td>
<td>8.17</td>
<td>8.21</td>
<td>8.25</td>
<td>8.30</td>
</tr>
</tbody>
</table>

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

*Measurement tolerance: ±3%.

### MECHANICAL DATA

- **Solar Cells**: Monocrystalline
- **Cell Orientation**: 144 cells (6 × 24)
- **Module Dimensions**: 2024 × 1002 × 30 mm (79.69 × 39.45 × 1.18 inches)
- **Weight**: 26.0 kg (57.3 lb)
- **Front Glass**: 2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
- **Back Glass**: 2.0 mm (0.08 inches), Heat Strengthened Glass
- **Encapsulant Material**: EVA
- **Frame**: 30 mm (1.18 inches) Anodized Aluminium Alloy
- **J-Box**: IP 68 rated
- **Cables**: Photovoltaic Technology Cable 4.0mm² (0.006 inches²),
  - Portrait: N 140mm/P 285mm (5.51/11.22 inches)
  - Landscape: N 1700 mm /P 1700 mm (66.93/66.93 inches)
- **Connector**: MC4 / TS4*

*Please refer to regional datasheet for specified connector.

### TEMPERATURE RATINGS

- **NMOT: Nominal Module Operating Temperature**: 41°C (±3°C)
- **Temperature Coefficient of PMAX**: -0.35%/°C
- **Temperature Coefficient of VOC**: -0.25%/°C
- **Temperature Coefficient of ISC**: 0.04%/°C

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

### MAXIMUM RATINGS

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

### WARRANTY

- **12 year Product Workmanship Warranty**
- **30 year Power Warranty**

(Please refer to product warranty for details)

### PACKAGING CONFIGURATION

- Modules per box: 35 pieces
- Modules per 40’ container: 770 pieces

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

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