THE TALLMAX™ plus
FRAMED 144 HALF-CELL MODULE

144-Cell MONOCRYSTALLINE MODULE

385-400W POWER OUTPUT RANGE

19.7% MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

Increased value
- Reduce BOS cost with high power bin and 1500V system voltage
- Low thermal coefficients for greater energy production at higher temperature

Half-cell design brings higher efficiency
- New cell string layout and split J-box location to reduce the energy loss caused by inter-row shading
- Integrated LRF (Light Redirecting Film) to enhance power, specially for ground-mount applications
- Lower cell connection power losses due to half-cell layout (144 monocrystalline)

Highly reliable due to stringent quality control
- Over 30 in-house tests (UV, TC, HF etc)
- Increased module robustness to minimize micro-cracks
- PID resistant and free of snail trails
- Internal test requirement of Trina more stringent than certification authority

Certified to withstand the most challenging environmental conditions
- 2400 Pa negative load
- 5400 Pa positive load

Trina Solar is the world's leading comprehensive solutions provider for solar energy. Founded in 1997, Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

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
### DIMENSIONS OF PV MODULE (mm)

**A-A**
- Width: 158.75
- Height: 158.75

**B-B**
- Width: 1004
- Height: 959

### I-V CURVES OF PV MODULE (390W)

<table>
<thead>
<tr>
<th>Voltage (V)</th>
<th>Current (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10.03</td>
</tr>
<tr>
<td>100</td>
<td>9.64</td>
</tr>
<tr>
<td>200</td>
<td>9.69</td>
</tr>
<tr>
<td>300</td>
<td>9.74</td>
</tr>
<tr>
<td>400</td>
<td>10.13</td>
</tr>
<tr>
<td>500</td>
<td>10.18</td>
</tr>
</tbody>
</table>

### P-V CURVES OF PV MODULE (390W)

<table>
<thead>
<tr>
<th>Voltage (V)</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>385</td>
</tr>
<tr>
<td>200</td>
<td>390</td>
</tr>
<tr>
<td>300</td>
<td>395</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

### ELECTRICAL DATA (STC)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
<th>Value 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts-PMAX (Wp)*</td>
<td>385</td>
<td>390</td>
<td>395</td>
<td>400</td>
</tr>
<tr>
<td>Power Output Tolerance-PMAX (W)</td>
<td>0</td>
<td>±5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Voltage-VMPP (V)</td>
<td>40.1</td>
<td>40.5</td>
<td>40.8</td>
<td>41.1</td>
</tr>
<tr>
<td>Maximum Power Current-IMPP (A)</td>
<td>9.61</td>
<td>9.64</td>
<td>9.69</td>
<td>9.74</td>
</tr>
<tr>
<td>Open Circuit Voltage-Voc (V)</td>
<td>48.5</td>
<td>49.7</td>
<td>50.1</td>
<td>50.4</td>
</tr>
<tr>
<td>Short Circuit Current-IsC (A)</td>
<td>10.03</td>
<td>10.08</td>
<td>10.13</td>
<td>10.18</td>
</tr>
<tr>
<td>Module Efficiency η (%)</td>
<td>18.9</td>
<td>19.2</td>
<td>19.4</td>
<td>19.7</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>Parameter</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
<th>Value 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power-PMAX (Wp)</td>
<td>291</td>
<td>295</td>
<td>298</td>
<td>302</td>
</tr>
<tr>
<td>Maximum Power Voltage-VMPP (V)</td>
<td>37.9</td>
<td>38.4</td>
<td>38.7</td>
<td>38.9</td>
</tr>
<tr>
<td>Maximum Power Current-IMPP (A)</td>
<td>7.66</td>
<td>7.68</td>
<td>7.71</td>
<td>7.76</td>
</tr>
<tr>
<td>Open Circuit Voltage-Voc (V)</td>
<td>45.6</td>
<td>46.8</td>
<td>47.2</td>
<td>47.4</td>
</tr>
<tr>
<td>Short Circuit Current-IsC (A)</td>
<td>8.09</td>
<td>8.13</td>
<td>8.17</td>
<td>8.21</td>
</tr>
</tbody>
</table>

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

### MECHANICAL DATA

- Solar Cells: Monocrystalline 158.75 × 158.75 mm
- Cell Orientation: 144 cells (6 × 24)
- Module Dimensions: 2024 × 1004 × 35 mm (79.69 × 39.53 × 1.38 inches)
- Weight: 22.8 kg (50.3 lb)
- Glass: 3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
- Encapsulant Material: EVA
- Backsheet: White
- Frame: 35 mm (1.38 inches) Anodized Aluminium Alloy w/ 400 m Mounting Holes
- J-Box: IP 68 rated
- Cables: Photovoltaic Technology Cable 4.0 mm² (0.006 inches²), Portrait: N 140 mm/P 285 mm (5.51/11.22 inches)
- Landscape: N 1400 mm/P 1400 mm (55.12/55.12 inches)
- Connector: Trina T54

### TEMPERATURE RATINGS

- NMOT (Nominal Module Operating Temperature): 41°C (±3°C)
- Temperature Coefficient of PMAX: -0.37%/°C
- Temperature Coefficient of Voc: -0.29%/°C
- Temperature Coefficient of Isc: 0.05%/°C

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

### WARRANTY

- 10 year Product Workmanship Warranty
- 25 year Linear Power Warranty

(Please refer to product warranty for details)

### MAXIMUM RATINGS

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

### PACKAGING CONFIGURATION

- Modules per box: 30 pieces
- Modules per 40’ container: 660 pieces

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