Half-cut cell design brings higher efficiency
• Optimized power output under inter-row shading conditions
• Low thermal coefficients for higher energy yield at elevated operating temperatures
• Reduced interconnection losses

120 HALF-CUT MULTICRYSTALLINE CELLS

285-300W POWER OUTPUT RANGE

17.6% MAXIMUM EFFICIENCY

0/+5W POSITIVE POWER TOLERANCE

Ideal for large scale installations
• Reduced BOS costs with higher power bins and 1,500V system voltage
• Consistently high bankability ratings by BNEF, banks and investors

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Highly reliable due to stringent quality control
• Over 30 in-house tests (UV, TC, HF, and many more)
• In-house testing goes well beyond certification requirements
• PID resistant
• 2x 100% inline EL inspection

Certified to withstand challenging environmental conditions
• Salt Mist Corrosion
• Ammonia Corrosion
• Blowing Sand

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

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Comprehensive Product And System Certificates
IEC61215/IEC61701/UL1703
IEC61701 Salt Mist Corrosion
IEC62716 Ammonia Corrosion
IEC60068 Blowing Sand
ISO9001; ISO14001; OHSAS18001

EU-28 WEEE RECyclable
ISO 9001 Quality Management System
www.tuv-sud.com/ms-cert

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10 Year Product Warranty · 25 Year Linear Power Warranty

Additional value from Trina Solar’s linear warranty

Trina standard · Industry standard

Industry standard
TSM-285 PE06H

**ELECTRICAL DATA @ STC**

<table>
<thead>
<tr>
<th></th>
<th>TSM-285 PE06H</th>
<th>TSM-290 PE06H</th>
<th>TSM-295 PE06H</th>
<th>TSM-300 PE06H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts - P_{MAX} (Wp)*</td>
<td>285</td>
<td>290</td>
<td>295</td>
<td>300</td>
</tr>
<tr>
<td>Power Output Tolerance - P_{MAX} (W)</td>
<td>0/+5</td>
<td>0/+5</td>
<td>0/+5</td>
<td>0/+5</td>
</tr>
<tr>
<td>Maximum Power Voltage - U_{MPV} (V)</td>
<td>31.5</td>
<td>31.8</td>
<td>32.1</td>
<td>32.3</td>
</tr>
<tr>
<td>Maximum Power Current - I_{MPV} (A)</td>
<td>9.05</td>
<td>9.12</td>
<td>9.19</td>
<td>9.29</td>
</tr>
<tr>
<td>Open Circuit Voltage - U_{OC} (V)</td>
<td>38.8</td>
<td>39.2</td>
<td>39.5</td>
<td>39.8</td>
</tr>
<tr>
<td>Short Circuit Current - I_{SC} (A)</td>
<td>9.53</td>
<td>9.60</td>
<td>9.67</td>
<td>9.77</td>
</tr>
<tr>
<td>Module Efficiency - η (%)</td>
<td>16.7</td>
<td>17.0</td>
<td>17.3</td>
<td>17.6</td>
</tr>
</tbody>
</table>

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

**ELECTRICAL DATA @ NMOT**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power - P_{MAX} (Wp)</td>
<td>216</td>
<td>219</td>
<td>223</td>
<td>227</td>
</tr>
<tr>
<td>Maximum Power Voltage - U_{MPV} (V)</td>
<td>29.8</td>
<td>30.1</td>
<td>30.4</td>
<td>30.6</td>
</tr>
<tr>
<td>Maximum Power Current - I_{MPV} (A)</td>
<td>7.24</td>
<td>7.29</td>
<td>7.35</td>
<td>7.42</td>
</tr>
<tr>
<td>Open Circuit Voltage - U_{OC} (V)</td>
<td>36.5</td>
<td>36.9</td>
<td>37.2</td>
<td>37.4</td>
</tr>
<tr>
<td>Short Circuit Current - I_{SC} (A)</td>
<td>7.69</td>
<td>7.74</td>
<td>7.80</td>
<td>7.88</td>
</tr>
</tbody>
</table>

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

**MECHANICAL DATA**

- Solar Cells: Multicrystalline
- Cell Orientation: 120 cells (6 x 20)
- Module Dimensions: 1698 x 1004 x 35 mm
- Weight: 18.7 kg
- Glass: 3.2 mm, High Transmission, AR Coated Heat Strengthened Glass
- Encapsulant Material: EVA
- Backsheet: White
- Frame: 35 mm Anodized Aluminium Alloy
- J-Box: IP 68 rated
- Cables: Photovoltaic Cable 4.0mm², Portrait: N 140mm/P 285mm, Landscape: N 1200 mm/P 1200 mm
- Connector: TS4

**TEMPERATURE RATINGS**

- NMOT (Nominal Module Operating Temperature): 41°C (±3K)
- Temperature Coefficient of P_{MAX}: -0.38% K
- Temperature Coefficient of U_{MPV}: -0.31% K
- Temperature Coefficient of I_{MPV}: 0.05% K

**MAXIMUM RATINGS**

- Operational Temperature: -40 to +85°C
- Maximum System Voltage: 1500VDC (IEC), 1500VDC (UL)
- Max Series Fuse Rating: 20A
- Snow Load: 5400 Pa (3600 Pa*)
- Wind Load: 2400 Pa (1500 Pa*)

*Design load with safety factor 1.5
(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

**PACKAGING CONFIGURATION**

- Modules per box: 30 pieces
- Modules per 40’ container: 720 pieces

**WARRANTY**

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

(Additional warranty details can be referred to for further information)

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