Maximize Limited Space

- 60-cell module power output up to 285 W
- Up to 174 W/m² power density

Excellent low light performance on cloudy days, mornings and evenings

- Advanced surface texturing
- Back surface field
- Selective emitter

Maximize Limited Space

- 60-cell module power output up to 285 W
- Up to 174 W/m² power density

Highly reliable due to stringent quality control

- All modules have to pass electroluminescence (EL) inspection
- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 1000 V UL/1000 V IEC certified

Certified to withstand challenging environmental conditions

- 130 km/h wind load (2400 Pa)
- 900 kg snow load per module (5400 Pa)
- 35 mm hail stones at 97 km/h
- Ammonia resistance
- Salt mist resistance
- Resistance to sand and dust abrasion

10 Year Product Warranty · 25 Year Linear Power Warranty

Guaranteed Power

Additional value from Trina Solar’s linear warranty

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

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DIMENSIONS OF PV MODULE

ELECTRICAL DATA @ STC

<table>
<thead>
<tr>
<th>Model</th>
<th>TSM-270 PD05</th>
<th>TSM-275 PD05</th>
<th>TSM-280 PD05</th>
<th>TSM-285 PD05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts-P_MAX (Wp)*</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>285</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-VPP (V)</td>
<td>30.9</td>
<td>31.1</td>
<td>31.4</td>
<td>31.6</td>
</tr>
<tr>
<td>Maximum Power Current-I_PP (A)</td>
<td>8.73</td>
<td>8.84</td>
<td>8.92</td>
<td>9.02</td>
</tr>
<tr>
<td>Open Circuit Voltage-V_OC (V)</td>
<td>37.9</td>
<td>38.1</td>
<td>38.2</td>
<td>38.3</td>
</tr>
<tr>
<td>Short Circuit Current-I_SC (A)</td>
<td>9.22</td>
<td>9.32</td>
<td>9.40</td>
<td>9.49</td>
</tr>
<tr>
<td>Module Efficiency η (%)</td>
<td>16.5</td>
<td>16.8</td>
<td>17.0</td>
<td>17.4</td>
</tr>
</tbody>
</table>

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

* Measuring tolerance: ±3%

ELECTRICAL DATA @ NOCT

<table>
<thead>
<tr>
<th>Model</th>
<th>TSM-270 PD05</th>
<th>TSM-275 PD05</th>
<th>TSM-280 PD05</th>
<th>TSM-285 PD05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power-P_MAX (Wp)</td>
<td>200</td>
<td>204</td>
<td>208</td>
<td>211</td>
</tr>
<tr>
<td>Maximum Power Voltage-U_PP (V)</td>
<td>28.6</td>
<td>28.8</td>
<td>29.0</td>
<td>29.2</td>
</tr>
<tr>
<td>Maximum Power Current-I_PP (A)</td>
<td>7.00</td>
<td>7.09</td>
<td>7.15</td>
<td>7.23</td>
</tr>
<tr>
<td>Open Circuit Voltage-U_OC (V)</td>
<td>35.1</td>
<td>35.3</td>
<td>35.4</td>
<td>35.5</td>
</tr>
<tr>
<td>Short Circuit Current-I_SC (A)</td>
<td>7.44</td>
<td>7.52</td>
<td>7.59</td>
<td>7.66</td>
</tr>
</tbody>
</table>

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

MECHANICAL DATA

- Solar Cells: Multicrystalline 156.75 × 156.75 mm
- Cell Orientation: 60 cells (6 x 10)
- Module Dimensions: 1650 × 992 × 35 mm
- Weight: 18.6 kg
- Glass: 3.2 mm, high transparency, AR coated and heat tempered solar glass
- Backsheet: White
- Frame: Silver Anodized Aluminium Alloy
- J-Box: IP 67 or IP 68 rated
- Cables: Photovoltaic Technology Cable 4.0mm², 1000 mm
- Connector: EU Countries: 28 MC4 / UTX / TS4, Non-EU Countries: 28 QC4 / TS4

TEMPERATURE RATINGS

- Nominal Operating Cell Temperature (NOCT): 44°C (±2K)
- Temperature Coefficient of P_MAX: -0.41%/K
- Temperature Coefficient of V_OC: -0.32%/K
- Temperature Coefficient of I_SC: 0.05%/K

MAXIMUM RATINGS

- Operational Temperature: -40 to +85°C
- Maximum System Voltage: 1000VDC (IEC) 1000VDC (UL)
- Max Series Fuse Rating*: 15 A
- Mechanical Load: 5400 Pa
- Wind Load: 2400 Pa

* DO NOT connect fuse in combiner box with two or more strings in parallel connection

WARRANTY

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

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

- Modules per box: 30 pieces
- Modules per 40' container: 840 pieces

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