Founded in 1997, Trina Solar is a vertically integrated PV manufacturer, involved in the production of ingots, wafers and cells to the assembly of high quality modules, using both mono and multi-crystalline technologies. As of June 2012, the Company has already achieved an annualized nameplate module capacity of approximately 2.4GW. Trina Solar’s wide range of products are used in residential, commercial, industrial and public utility applications throughout the world.

Only by matching an efficient cost-structure with proven performance will we as an industry achieve grid parity. And at Trina Solar, we have both.

Trina Solar Limited
www.trinasolar.com
Recyclable packaging

CERTIFICATION

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

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ELECTRICAL DATA @ STC

<table>
<thead>
<tr>
<th>TSM-230 PC05/05.08</th>
<th>TSM-235 PC05/05.08</th>
<th>TSM-240 PC05/05.08</th>
<th>TSM-245 PC05/05.08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts-P_{MAX} (Wp)</td>
<td>230</td>
<td>235</td>
<td>240</td>
</tr>
<tr>
<td>Power Output Tolerance-P_{MAX} (%)</td>
<td>0/+3</td>
<td>0/+3</td>
<td>0/+3</td>
</tr>
<tr>
<td>Maximum Power Voltage-V_{PP} (V)</td>
<td>29.2</td>
<td>29.3</td>
<td>29.7</td>
</tr>
<tr>
<td>Maximum Power Current-I_{PP} (A)</td>
<td>7.90</td>
<td>8.03</td>
<td>8.10</td>
</tr>
<tr>
<td>Open Circuit Voltage-V_{OC} (V)</td>
<td>37.1</td>
<td>37.2</td>
<td>37.3</td>
</tr>
<tr>
<td>Short Circuit Current-I_{SC} (A)</td>
<td>8.53</td>
<td>8.55</td>
<td>8.62</td>
</tr>
<tr>
<td>Module Efficiency η [%]</td>
<td>14.1</td>
<td>14.4</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

ELECTRICAL DATA @ NOCT

<table>
<thead>
<tr>
<th>TSM-230 PC05/05.08</th>
<th>TSM-235 PC05/05.08</th>
<th>TSM-240 PC05/05.08</th>
<th>TSM-245 PC05/05.08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power-P_{MAX} (Wp)</td>
<td>167</td>
<td>171</td>
<td>174</td>
</tr>
<tr>
<td>Maximum Power Voltage-U_{PP} (V)</td>
<td>26.3</td>
<td>26.4</td>
<td>26.6</td>
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<tr>
<td>Maximum Power Current-I_{PP} (A)</td>
<td>6.35</td>
<td>6.48</td>
<td>6.55</td>
</tr>
<tr>
<td>Open Circuit Voltage-U_{OC} (V)</td>
<td>33.9</td>
<td>34.0</td>
<td>34.1</td>
</tr>
<tr>
<td>Short Circuit Current-I_{SC} (A)</td>
<td>6.95</td>
<td>6.97</td>
<td>7.04</td>
</tr>
</tbody>
</table>

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

MECHANICAL DATA

- Solar cells: Multicrystalline 156 x 156mm (6 inches)
- Cell orientation: 60 cells (6 x 10)
- Module dimension: 1650 x 992 x 40mm (64.95 x 39.05 x 1.57 inches)
- Weight: 19.5kg (43.0 lb)
- Glass: High transparency solar glass 3.2mm (0.13 inches)
- Frame: Anodized aluminium alloy (TSM-PC05.08: in black)
- J-Box: IP 65 rated
- Cables: Photovoltaic Technology cable 4.0mm² (0.006 inches²), 1000mm (39.4 inches)
- Connector: Original MC4

TEMPERATURE RATINGS

- Nominal Operating Cell Temperature (NOCT): 45°C (±2°C)
- Temperature Coefficient of P_{MAX}: -0.43%/K
- Temperature Coefficient of V_{OC}: -0.32%/K
- Temperature Coefficient of I_{SC}: 0.04%/K

MAXIMUM RATINGS

- Operational Temperature: -40 to +85°C
- Maximum System Voltage: 1000V DC (IEC)
- Max Series Fuse Rating: 15A

WARRANTY

- 10 year workmanship warranty
- 25 year linear performance warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

- Modules per box: 24 pcs
- Modules per 40' container: 672 pcs

Average efficiency reduction of 4.5% at 200W/m² according to EN 60904-1.