THE Honey FRAMED 120 LAYOUT MODULE

120 LAYOUT MULTICRYSTALLINE

285-300W POWER OUTPUT RANGE

17.8% MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

High power
- Up to 300W front power and 17.8% 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
- 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 NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature

Trina Solar was founded in 1997 and is the world’s leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates
- IEC61215/IEC61730/UL1703/IEC61701/IEC62716
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO14064: Greenhouse Gases Emissions Verification
- ISO45001: Occupation Health and Safety Management System

PERFORMANCE WARRANTY

12 Year Product Warranty · 25 Year Power Warranty

From the 2nd year to the 25th year, the average annual power decline will be no more than 0.65%.
**DIMENSIONS OF PV MODULE (mm)**

- **Width**: 1690 mm
- **Height**: 996 mm
- **Depth**: 35 mm

**I-V CURVES OF PV MODULE (290W)**

<table>
<thead>
<tr>
<th>Voltage (V)</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current (A)</td>
<td>0</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**P-V CURVES OF PV MODULE (290W)**

<table>
<thead>
<tr>
<th>Voltage (V)</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (W)</td>
<td>0</td>
<td>100</td>
<td>200</td>
<td>300</td>
<td>400</td>
</tr>
</tbody>
</table>

**ELECTRICAL DATA (STC)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>285</th>
<th>290</th>
<th>295</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Power Watts - P_{PAXX} (Wp)*</td>
<td>285</td>
<td>290</td>
<td>295</td>
<td>300</td>
</tr>
<tr>
<td>Power Tolerance - P_{TAXX} (W)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maximum Power Voltage - V_{MPPP} (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_{MPPP} (A)</td>
<td>9.05</td>
<td>9.12</td>
<td>9.19</td>
<td>9.29</td>
</tr>
<tr>
<td>Open Circuit Voltage - V_{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 - \eta (%)</td>
<td>16.9</td>
<td>17.2</td>
<td>17.5</td>
<td>17.8</td>
</tr>
</tbody>
</table>

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

**ELECTRICAL DATA (NMOT)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>216</th>
<th>219</th>
<th>223</th>
<th>227</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power Voltage - V_{MPPP} (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_{MPPP} (A)</td>
<td>7.24</td>
<td>7.29</td>
<td>7.35</td>
<td>7.42</td>
</tr>
<tr>
<td>Open Circuit Voltage - V_{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>

**MECHANICAL DATA**

- **Solar Cells**: Multicrystalline
- **Cell Orientation**: 120 cells (6 x 20)
- **Module Dimensions**: 1690 x 996 x 35 mm (66.54 x 39.21 x 1.38 inches)
- **Weight**: 18.0 kg (39.7 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
- **J-Box**: IP 68 rated
- **Cables**: Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 280mm/P 280mm (11.02/11.02 inches), Landscape: N 1200 mm /P 1200 mm (47.24/47.24 inches)
- **Connector**: MC4 EVO2 / TS4*

*Please refer to regional datasheet for specified connector.

**TEMPERATURE RATINGS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMOT (Nominal Module Operating Temperature)</td>
<td>41°C (±3°C)</td>
</tr>
<tr>
<td>Temperature Coefficient of P_{PAXX}</td>
<td>-0.38% /°C</td>
</tr>
<tr>
<td>Temperature Coefficient of V_{OC}</td>
<td>-0.31% /°C</td>
</tr>
<tr>
<td>Temperature Coefficient of I_{SC}</td>
<td>0.05% /°C</td>
</tr>
</tbody>
</table>

**MAXIMUM RATINGS**

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

**WARRANTY**

- 12 year Product Workmanship Warranty
- 25 year Power Warranty

**PACKAGING CONFIGURATION**

- Modules per box: 30 pieces
- Modules per 40’ container: 780 pieces

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

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