THE RESIDENTIAL MODULE

MULTI-BUSBAR 120 HALF-CELL BOB MODULE

120-Cell MONOCRYSTALLINE MODULE

310-335W POWER OUTPUT RANGE

19.7% MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar 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.

High power output
- Reduce BOS cost with high power bin and module efficiency
- New cell string layout and split J-box location reduces the energy loss caused by inter-row shading
- Lower resistance of half-cut cells and increased MBB (Multi Busbar) reflectance ensure higher power

High energy generation, low LCOE
- Excellent 3rd party validated IAM and low light performance with cell process and module material optimization
- Low Pmax temp coefficient (-0.36%) increases energy production
- Better anti-shading performance and lower operating temperature

Outstanding visual appearance, easy to install
- Designed for superior rooftop aesthetics
- Thinner wires give a eye catching all black look
- Safe and easy to transport, handle, and install

Certified to perform in highly challenging environments
- High PID resistance through cell process and module material control
- Resistant to salt, acid, sand, and ammonia
- Over 30 in-house tests (UV, TC, HF etc)
- Certified to 5400 Pa positive load and 2400 Pa negative load

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 0.6%.
ELECTRICAL DATA (STC)

<table>
<thead>
<tr>
<th>Peak Power Watts - P_{MAX} (Wp)*</th>
<th>310</th>
<th>315</th>
<th>320</th>
<th>325</th>
<th>330</th>
<th>335</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output Tolerance - P_{MAX} (W)</td>
<td>0 ~ +5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Voltage - V_{MPPT} (V)</td>
<td>33.0</td>
<td>33.2</td>
<td>33.4</td>
<td>33.6</td>
<td>33.8</td>
<td>34.0</td>
</tr>
<tr>
<td>Open Circuit Voltage - V_{OC} (V)</td>
<td>39.9</td>
<td>40.1</td>
<td>40.3</td>
<td>40.4</td>
<td>40.6</td>
<td>40.7</td>
</tr>
<tr>
<td>Short Circuit Current - I_{SC} (A)</td>
<td>10.03</td>
<td>10.12</td>
<td>10.20</td>
<td>10.30</td>
<td>10.40</td>
<td>10.50</td>
</tr>
<tr>
<td>Module Efficiency - η (m%)</td>
<td>18.2</td>
<td>18.5</td>
<td>18.8</td>
<td>19.1</td>
<td>19.4</td>
<td>19.7</td>
</tr>
</tbody>
</table>

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

ELECTRICAL DATA (NMOT)

<table>
<thead>
<tr>
<th>Maximum Power - P_{MAX} (Wp)</th>
<th>235</th>
<th>238</th>
<th>242</th>
<th>246</th>
<th>250</th>
<th>254</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power Voltage - V_{MPPT} (V)</td>
<td>31.0</td>
<td>31.2</td>
<td>31.4</td>
<td>31.6</td>
<td>31.7</td>
<td>31.9</td>
</tr>
<tr>
<td>Maximum Power Current - I_{SC} (A)</td>
<td>7.57</td>
<td>7.64</td>
<td>7.71</td>
<td>7.79</td>
<td>7.86</td>
<td>7.94</td>
</tr>
<tr>
<td>Open Circuit Voltage - V_{OC} (V)</td>
<td>37.6</td>
<td>37.8</td>
<td>38.0</td>
<td>38.1</td>
<td>38.3</td>
<td>38.4</td>
</tr>
<tr>
<td>Short Circuit Current - I_{SC} (A)</td>
<td>8.08</td>
<td>8.15</td>
<td>8.22</td>
<td>8.30</td>
<td>8.38</td>
<td>8.46</td>
</tr>
</tbody>
</table>

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

MECHANICAL DATA

- Solar Cells: Monocrystalline
- Cell Orientation: 120 cells (6 × 20)
- Module Dimensions: 1698 × 1004 × 35 mm (66.85 × 39.53 × 1.38 inches)
- Weight: 18.7kg (41.2lb)
- Glass: 3.2mm (0.13 inches), High Transmission, AR Coated Tempered Glass
- Encapsulant Material: EVA
- Backsheet: Black
- Frame: 35 mm (1.38 inches) Anodized Aluminum Alloy
- J-Box: IP 68 rated
- Cables: Photovoltaic Technology Cable 4.0mm² (0.006 inches²)
  - Portrait: N 140mm/P 285mm (5.51/11.22 inches)
  - Landscape: N 1200 mm / P 1200 mm (47.24/47.24 inches)
- Connector: MC4

TEMPERATURE RATINGS

- NMOT (Nominal Module Operating Temperature): 41°C (±3°C)
- Temperature Coefficient of P_{MAX}: -0.36%/°C
- Temperature Coefficient of V_{OC}: -0.26%/°C
- Temperature Coefficient of I_{SC}: 0.04%/°C

MAXIMUM RATINGS

- Operational Temperature: -40°C to +85°C
- Maximum System Voltage: 1000V DC (IEC)
- Max Series Fuse Rating: 20A

WARRANTY

- 12 year Product Workmanship Warranty
- 25 year Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

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

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