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.

Comprehensive Products and System Certificates
IEC61215/IEC61701/IEC61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 14064: Greenhouse Gases Emissions Verification
ISO 45001: Occupation Health and Safety Management System

THE
HoneyBlack™
BACKSHEET MONOCRYSTALLINE MODULE

120 LAYOUT
MONOCRYSTALLINE MODULE

310-335W
POWER OUTPUT RANGE

19.9%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Outstanding visual appearance
• Designed with aesthetics in mind
• Excellent cell color control by dedicated cell blackening treatment and machine selection.
• Thinner wires that appear all black at a distance

High power
• Up to 335W front power and 19.9% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
• Lower resistance of half-cut and good reflection effect of MBB 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 temp coefficient (-0.36%) and NMOT bring more energy leading to lower LCOE
• Better anti-shading performance and lower operating temperature

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 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- $V_{MAX}$ (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>10.00</td>
<td>10.10</td>
<td>10.20</td>
<td>10.30</td>
<td>10.39</td>
<td>10.48</td>
</tr>
<tr>
<td>Module Efficiency $\eta$ (m (%))</td>
<td>18.4</td>
<td>18.7</td>
<td>19.0</td>
<td>19.3</td>
<td>19.6</td>
<td>19.9</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- $V_{MAX}$ (V)</td>
<td>30.9</td>
<td>31.1</td>
<td>31.3</td>
<td>31.4</td>
<td>31.6</td>
<td>31.7</td>
</tr>
<tr>
<td>Maximum Power Current- $I_{MAX}$ (A)</td>
<td>7.59</td>
<td>7.66</td>
<td>7.74</td>
<td>7.83</td>
<td>7.91</td>
<td>7.99</td>
</tr>
<tr>
<td>Open Circuit Voltage- $V_{OC}$ (V)</td>
<td>37.7</td>
<td>37.9</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>8.05</td>
<td>8.13</td>
<td>8.21</td>
<td>8.29</td>
<td>8.36</td>
<td>8.44</td>
</tr>
</tbody>
</table>

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 3m/s.

**MECHANICAL DATA**

- **Solar Cells**: Monocrystalline
- **Cell Orientation**: 120 cells (6 × 20)
- **Module Dimensions**: 1690 × 996 × 35 mm (66.54 × 39.21 × 1.38 inches)
- **Weight**: 18.0 kg (39.7 lb)
- **Glass**: 3.2mm (0.13 inches), High Transmission, AR Coated Tempered Glass
- **Encapsulant Material**: EVA
- **Backsheet**: Black-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 / TS4*

- **Peak Power Watts- $P_{MAX}$ (Wp)**
- **Power Tolerance- $P_{MAX}$ (W)**
- **Maximum Power Voltage- $V_{MAX}$ (V)**
- **Maximum Power Current- $I_{MAX}$ (A)**
- **Open Circuit Voltage- $V_{OC}$ (V)**
- **Short Circuit Current- $I_{SC}$ (A)**
- **Module Efficiency $\eta$ (m (%))**
- **Temperature Coefficient of $P_{MAX}$**
- **Temperature Coefficient of $V_{OC}$**
- **Temperature Coefficient of $I_{SC}$**

**TEMPERATURE RATINGS**

- NMOT (Nominal Module Operating Temperature) 41°C (±3°C)
- Temperature Coefficient of $P_{MAX}$ -0.96%/°C
- Temperature Coefficient of $V_{OC}$ -0.26%/°C
- Temperature Coefficient of $I_{SC}$ 0.04%/°C

**MAXIMUM RATINGS**

- **Operational Temperature** -40~+85°C
- **Maximum System Voltage** 1000V 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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Version number: TSM_EN_2020_B
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