Half-cut cell design brings higher efficiency
- Optimized power output under inter-row shading conditions
- Integrated LRF for increased performance
- Low thermal coefficients for higher energy yield at elevated operating temperatures
- Reduced interconnection losses

Higher power for large scale installations
- High performance mono PERC cells
- Reduced BOS costs with higher power bins and 1.500V system voltage
- Consistently high bankability ratings by BNEF, banks and investors

Highly reliable due to stringent quality control
- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 2x 100% inline EL inspection

Certified to withstand challenging environmental conditions
- Salt Mist Corrosion
- Ammonia Corrosion
- Blowing Sand
**ELECTRICAL DATA @ STC**

<table>
<thead>
<tr>
<th>Module</th>
<th>TSM-315 DE06H(II)</th>
<th>TSM-320 DE06H(II)</th>
<th>TSM-325 DE06H(II)</th>
<th>TSM-330 DE06H(II)</th>
<th>TSM-335 DE06H(II)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peak Power Watts-</strong> P&lt;sub&gt;MAX&lt;/sub&gt;(Wp)*</td>
<td>315</td>
<td>320</td>
<td>325</td>
<td>330</td>
<td>335</td>
</tr>
<tr>
<td><strong>Power Output Tolerance-</strong> P&lt;sub&gt;MAX&lt;/sub&gt; (W)</td>
<td>0/+5</td>
<td>0/+5</td>
<td>0/+5</td>
<td>0/+5</td>
<td>0/+5</td>
</tr>
<tr>
<td><strong>Maximum Power Voltage-</strong> U&lt;sub&gt;MP&lt;/sub&gt; (V)</td>
<td>33.4</td>
<td>33.7</td>
<td>34.0</td>
<td>34.3</td>
<td>34.6</td>
</tr>
<tr>
<td><strong>Maximum Power Current-</strong> I&lt;sub&gt;MP&lt;/sub&gt; (A)</td>
<td>9.44</td>
<td>9.50</td>
<td>9.56</td>
<td>9.63</td>
<td>9.69</td>
</tr>
<tr>
<td><strong>Open Circuit Voltage-</strong> U&lt;sub&gt;OC&lt;/sub&gt; (V)</td>
<td>41.1</td>
<td>41.5</td>
<td>41.9</td>
<td>42.2</td>
<td>42.6</td>
</tr>
<tr>
<td><strong>Short Circuit Current-</strong> I&lt;sub&gt;SC&lt;/sub&gt; (A)</td>
<td>9.96</td>
<td>10.01</td>
<td>10.06</td>
<td>10.14</td>
<td>10.20</td>
</tr>
<tr>
<td><strong>Module Efficiency</strong> η (%)</td>
<td>18.5</td>
<td>18.8</td>
<td>19.1</td>
<td>19.4</td>
<td>19.7</td>
</tr>
</tbody>
</table>

* Measuring tolerance: ±3%

**ELECTRICAL DATA @ NMOT**

<table>
<thead>
<tr>
<th>Module</th>
<th>TSM-315 DE06H(II)</th>
<th>TSM-320 DE06H(II)</th>
<th>TSM-325 DE06H(II)</th>
<th>TSM-330 DE06H(II)</th>
<th>TSM-335 DE06H(II)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Power-</strong> P&lt;sub&gt;MAX&lt;/sub&gt; (Wp)</td>
<td>238</td>
<td>242</td>
<td>245</td>
<td>249</td>
<td>253</td>
</tr>
<tr>
<td><strong>Maximum Power Voltage-</strong> U&lt;sub&gt;MP&lt;/sub&gt; (V)</td>
<td>31.5</td>
<td>31.7</td>
<td>31.9</td>
<td>32.1</td>
<td>32.4</td>
</tr>
<tr>
<td><strong>Maximum Power Current-</strong> I&lt;sub&gt;MP&lt;/sub&gt; (A)</td>
<td>7.55</td>
<td>7.59</td>
<td>7.63</td>
<td>7.69</td>
<td>7.74</td>
</tr>
<tr>
<td><strong>Open Circuit Voltage-</strong> U&lt;sub&gt;OC&lt;/sub&gt; (V)</td>
<td>38.8</td>
<td>39.1</td>
<td>39.4</td>
<td>39.7</td>
<td>40.1</td>
</tr>
<tr>
<td><strong>Short Circuit Current-</strong> I&lt;sub&gt;SC&lt;/sub&gt; (A)</td>
<td>8.03</td>
<td>8.07</td>
<td>8.11</td>
<td>8.18</td>
<td>8.22</td>
</tr>
</tbody>
</table>

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

**MECHANICAL DATA**

- **Solar Cells**: Monocrystalline
- **Cell Orientation**: 120 cells (6 x 20)
- **Module Dimensions**: 1698 x 1004 x 35 mm
- **Weight**: 18.7 kg
- **Glass**: 3.2 mm, High Transmission, AR Coated Heat Strengthened Glass
- **Encapsulant Material**: EVA
- **Backsheet**: White
- **Frame**: 35 mm Anodized Aluminium Alloy
- **J-Box**: IP 68 rated
- **Cables**: Photovoltaic Cable 4.0mm², Portrait: N 140mm/P 285mm, Landscape: N 1200 mm / P 1200 mm
- **Connector**: TS4

**TEMPERATURE RATINGS**

- **NMOT (Nominal Module Operating Temperature)**: 41°C (±3K)
- **Temperature Coefficient of P<sub>MAX</sub>**: -0.37%/K
- **Temperature Coefficient of U<sub>OC</sub>**: -0.29%/K
- **Temperature Coefficient of I<sub>SC</sub>**: 0.05%/K

**MAXIMUM RATINGS**

- **Operational Temperature**: -40 to +85°C
- **Maximum System Voltage**: 1500VDC (IEC)
- **Max Series Fuse Rating**: 20 A
- **Snow Load**: 5400 Pa (3600 Pa*)
- **Wind Load**: 2400 Pa (1600 Pa*)

* Design load with safety factor 1.5

(Do not connect fuse in combiner box with two or more strings in parallel connection)

**PACKAGING CONFIGURATION**

- **Modules per box**: 30 pieces
- **Modules per 40’ container**: 720 pieces

**WARRANTY**

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

(please refer to product warranty for details)