**Outstanding Visual Appearance**
- Designed with aesthetics in mind
- Ultra-thin, virtually invisible busbars
- Excellent cell color control by machine selection

**Small in size, big on power**
- Generates up to 400 W, 20.8 % module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping, lower series resistance, improved current collection and enhanced reliability
- Excellent low light performance (IAM) with cell process and module material optimization

**Universal solution for residential and C&I rooftops**
- Designed for compatibility with existing mainstream inverters, optimizers and mounting systems
- Perfect size and low weight for easy handling. Optimized transportation cost
- Reduces installation cost with higher power bin and efficiency
- Flexible installation solutions for system deployment

**High Reliability**
- 6,000 Pa snow load (test load)
- 4,000 Pa wind load (test load)

---

**Extended Vertex S Warranty**

- **2 %**  
  1st year max. degradation

- **0.55 %**  
  Max. annual degradation from year 2 to 25

- **15 Years**  
  Product Workmanship Warranty

---

**Comprehensive Product and System Certificates**

IEC61215/IEC61730/IEC61701/IEC62716  
ISO 9001: Quality Management System  
ISO 14001: Environmental Management System  
ISO14064: Greenhouse Gases Emissions Verification  
ISO45001: Occupational Health and Safety Management System
**DIMENSIONS OF PV MODULE (mm)**

- **Front View**
  - Nameplate
  - 6-0.9-14 Installing Hole
  - 6-0.4-3 Grounding Hole
  - 12-Drain Hole

- **Rear View**
  - Junction Box
  - 30 mm Anodized Aluminium Alloy

**ELECTRICAL DATA (STC)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSM-380 DE09.05</td>
<td>380</td>
<td>0/+5</td>
<td>33.4</td>
<td>11.38</td>
<td>40.4</td>
<td>12.00</td>
<td>19.8</td>
</tr>
<tr>
<td>TSM-385 DE09.05</td>
<td>385</td>
<td>0/+5</td>
<td>33.6</td>
<td>11.46</td>
<td>40.6</td>
<td>12.07</td>
<td>20.0</td>
</tr>
<tr>
<td>TSM-390 DE09.05</td>
<td>390</td>
<td>0/+5</td>
<td>33.8</td>
<td>11.54</td>
<td>40.8</td>
<td>12.14</td>
<td>20.3</td>
</tr>
<tr>
<td>TSM-395 DE09.05</td>
<td>395</td>
<td>0/+5</td>
<td>34.0</td>
<td>11.62</td>
<td>41.0</td>
<td>12.21</td>
<td>20.5</td>
</tr>
<tr>
<td>TSM-400 DE09.05</td>
<td>400</td>
<td>0/+5</td>
<td>34.2</td>
<td>11.70</td>
<td>41.2</td>
<td>12.28</td>
<td>20.8</td>
</tr>
</tbody>
</table>

**ELECTRICAL DATA (NOCT)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSM-380 DE09.05</td>
<td>286</td>
<td>31.4</td>
<td>9.12</td>
<td>38.0</td>
<td>9.67</td>
</tr>
<tr>
<td>TSM-385 DE09.05</td>
<td>290</td>
<td>31.6</td>
<td>9.18</td>
<td>38.2</td>
<td>9.73</td>
</tr>
<tr>
<td>TSM-390 DE09.05</td>
<td>294</td>
<td>31.8</td>
<td>9.24</td>
<td>38.4</td>
<td>9.78</td>
</tr>
<tr>
<td>TSM-395 DE09.05</td>
<td>298</td>
<td>31.9</td>
<td>9.32</td>
<td>38.6</td>
<td>9.84</td>
</tr>
<tr>
<td>TSM-400 DE09.05</td>
<td>302</td>
<td>32.1</td>
<td>9.38</td>
<td>38.8</td>
<td>9.90</td>
</tr>
</tbody>
</table>

**MECHANICAL DATA**

- **Solar Cells**
  - Monocrystalline
- **No. of cells**
  - 120 cells
- **Module Dimensions**
  - 1754 × 1096 × 30 mm
- **Weight**
  - 21.0 kg
- **Glass**
  - 3.2 mm, High Transmission, AR Coated Heat Strengthened Glass
- **Encapsulant material**
  - EVA/POE
- **Backsheet**
  - Black-White
- **Frame**
  - 30 mm Anodized Aluminium Alloy
- **Cables**
  - Photovoltaic Technology Cable 4.0 mm²
  - Landscape: 1100/1100 mm
  - Portrait: 280/280 mm
- **Connector**
  - TS4/MC4 EVO2

**TEMPERATURE RATINGS**

- **NOCT (Nominal Operating Cell Temperature)**
  - -43 °C (±2 K)
- **Temperature Coefficient of Pmax**
  - -0.34 %/K
- **Temperature Coefficient of Voc**
  - -0.25 %/K
- **Temperature Coefficient of Isc**
  - 0.04 %/K

**WARRANTY**

- **15 Year product workmanship warranty**
- **25 Year power warranty**
- **2% First year degradation**
- **0.55% Annual power degradation**

**MAXIMUM RATINGS**

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

**PACKAGING CONFIGURATION**

- **Modules per box**
  - 36 pieces
- **Modules per 40’ container**
  - 936 pieces

---

**CAUTION:** READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© 2021 Trina Solar Limited, All rights reserved. Specifications included in this datasheet are subject to change without notice.

Version number: TSM_EN_2021_C

www.trinasolar.com