**Outstanding performance with PERC**
Passivated Emitter Rear Contact (PERC) technology provides excellent power output through advanced cell structure.

**Best in class quality**
Mission Solar Energy production lines are fully automated and include multiple quality checks throughout the production process.

**Proven reliability and bankability**
Mission Solar Energy panels have been tested by independent testing centers to meet and exceed IEC standards. Our panels are deployed in projects across North America.

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**Class Leading Output:**
305W power

**Advanced Technology:**
PERC and 4 busbars drive >18% module efficiency

**Certified Reliability:**
3X IEC, salt mist, ammonia

**5600 Pa snow load**
New!

**175 mph wind rating**

**Buy American Act**

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**Proudly assembled in the USA**
Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. Our hardworking team calls Texas home and is devoted to producing high quality solar products and services. Our supply chain includes local and domestic vendors increasing our impact to the U.S. economy.

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**CERTIFICATIONS**
IEC 61215/ IEC 61730/ IEC 61701/ UL 1703

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*As there are different certification requirements in different markets, please contact your local Mission Solar Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.*

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**25-YEAR LINEAR WARRANTY**

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**Assembled in the USA**
### ELECTRICAL SPECIFICATIONS

#### Module parameters at Standard Test Condition (STC)

<table>
<thead>
<tr>
<th>Module Type</th>
<th>MSE295SQ5K</th>
<th>MSE300SQ5K</th>
<th>MSE305SQ5K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output Pmax Wp</td>
<td>295</td>
<td>300</td>
<td>305</td>
</tr>
<tr>
<td>Module Efficiency %</td>
<td>17.82</td>
<td>18.06</td>
<td>18.36</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0% ± 3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Circuit Current Isc A</td>
<td>9.73</td>
<td>9.77</td>
<td>9.81</td>
</tr>
<tr>
<td>Open Circuit Voltage Voc V</td>
<td>39.38</td>
<td>39.72</td>
<td>39.95</td>
</tr>
<tr>
<td>Rated Current Imp A</td>
<td>9.20</td>
<td>9.27</td>
<td>9.36</td>
</tr>
<tr>
<td>Rated Voltage Vmp V</td>
<td>32.19</td>
<td>32.38</td>
<td>32.61</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000 W/m², Cell temperature of 25°C, AM 1.5

#### TEMPERATURE COEFFICIENTS

| Normal Operating Cell Temperature (NOCT) | 44°C (±2°C) |
| Temperature Coefficient of Pmax         | -0.427%/°C  |
| Temperature Coefficient of Voc          | -0.318%/°C  |
| Temperature Coefficient of Isc          | 0.042%/°C   |

#### OPERATING CONDITIONS

- **Maximum System Voltage**: 1,000VDC
- **Operating Temperature Range**: -40°C (-40°F) to +90°C (194°F)
- **Maximum Series Fuse Rating**: 15A
- **Fire Safety Classification**: Type 1, Class C
- **Front & Back Load (UL standard)**: 5600 Pa (117 psf) **New!**
- **Hail Safety Impact Velocity**: 25mm at 23 m/s

#### MECHANICAL DATA

- **Solar Cells**: P-type Mono-crystalline Silicon (156.75mm)
- **Cell orientation**: 60 cells (6x10), 4 busbar
- **Module dimension**: 1664mm x 999mm x 40mm (65.51 in. x 39.33 in. x 1.57 in.)
- **Weight**: 18.2 kg (40.1 lb)
- **Front Glass**: 3.2mm (0.126 in.) tempered, Low-iron, Anti-reflective coating
- **Frame**: Anodized aluminum alloy
- **Encapsulant**: Ethylene vinyl acetate (EVA)
- **J-Box**: Protection class IP67 with 3 bypass-diodes
- **Cables**: PV wire, 1m (39.37 in.), 4mm² / 12 AWG
- **Connector**: MC4 or compatible

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**MSE300SQ5K: 300WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE**

- Current-voltage characteristics with dependence on irradiance and module temperature

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**BASIC DESIGN (UNITS: mm)**

- **Front View**
- **Back View**

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Mission Solar Energy reserves the right to make specification changes without notice.

Rev. 7.03