SUPERPOWER
CS6K-305|310|315|320MS

Canadian Solar's new SuperPower modules with Mono-PERC cells significantly improve efficiency and reliability. The innovative technology offers superior low irradiance performance in the morning, in the evening and on cloudy days, increasing the energy output of the module and the overall yield of the solar system.

KEY FEATURES

- 11% more power than conventional modules
- High PTC rating of up to: 92.03%
- Improved energy production due to low temperature coefficients
- IP68 junction box for long-term weather endurance
- Heavy snow load up to 6000 Pa, wind load up to 4000 Pa *

MANAGEMENT SYSTEM CERTIFICATES*

- ISO 9001:2015 / Quality management system
- ISO 14001:2015 / Standards for environmental management system
- OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

- IEC 61215 / IEC 61730: VDE / CE / MCS
- UL 1703 / IEC 61215 performance: CEC listed (US)
- UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE
- IEC60068-2-68:SGS
- Take-e-way

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 36 GW deployed around the world since 2001.

* Black frame product can be provided upon request.

*According to the applicable Canadian Solar Limited Warranty Statement.

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

*For detail information, please refer to Installation Manual.
### ELECTRICAL DATA | STC*

<table>
<thead>
<tr>
<th>Model</th>
<th>305MS</th>
<th>310MS</th>
<th>315MS</th>
<th>320MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Max. Power (Pmax)</td>
<td>305 W</td>
<td>310 W</td>
<td>315 W</td>
<td>320 W</td>
</tr>
<tr>
<td>Opt. Operating Voltage (Vmp)</td>
<td>32.7 V</td>
<td>32.9 V</td>
<td>33.1 V</td>
<td>33.3 V</td>
</tr>
<tr>
<td>Opt. Operating Current (Imp)</td>
<td>9.33 A</td>
<td>9.43 A</td>
<td>9.52 A</td>
<td>9.61 A</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc)</td>
<td>39.9 V</td>
<td>40.1 V</td>
<td>40.3 V</td>
<td>41.3 V</td>
</tr>
<tr>
<td>Short Circuit Current (Isc)</td>
<td>9.91 A</td>
<td>9.99 A</td>
<td>10.07 A</td>
<td>10.18 A</td>
</tr>
<tr>
<td>Module Efficiency</td>
<td>18.63%</td>
<td>18.94%</td>
<td>19.24%</td>
<td>19.55%</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C ~ +85°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. System Voltage</td>
<td>1000 V (IEC/UL) or 1500 V (IEC/UL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module Fire Performance</td>
<td>TYPE 1 (UL 1703) or CLASS C (IEC 61730)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

### ELECTRICAL DATA | NMOT*

<table>
<thead>
<tr>
<th>Model</th>
<th>305MS</th>
<th>310MS</th>
<th>315MS</th>
<th>320MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Max. Power (Pmax)</td>
<td>225 W</td>
<td>229 W</td>
<td>233 W</td>
<td>236 W</td>
</tr>
<tr>
<td>Opt. Operating Voltage (Vmp)</td>
<td>30.2 V</td>
<td>30.4 V</td>
<td>30.6 V</td>
<td>30.8 V</td>
</tr>
<tr>
<td>Opt. Operating Current (Imp)</td>
<td>7.46 A</td>
<td>7.54 A</td>
<td>7.61 A</td>
<td>7.69 A</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc)</td>
<td>37.3 V</td>
<td>37.5 V</td>
<td>37.7 V</td>
<td>38.6 V</td>
</tr>
<tr>
<td>Short Circuit Current (Isc)</td>
<td>8.00 A</td>
<td>8.06 A</td>
<td>8.13 A</td>
<td>8.22 A</td>
</tr>
</tbody>
</table>

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

### MECHANICAL DATA

- **Cell Type**: Mono-crystalline, 6 inch
- **Cell Arrangement**: 60 (6 x 10)
- **Dimensions**: 1650 x 992 x 35 mm (65.0 x 39.1 x 1.38 in)
- **Weight**: 18.2 kg (40.1 lbs)
- **Front Cover**: 3.2 mm tempered glass
- **Frame Material**: Anodized aluminium alloy
- **Connector**: T4 series or H4 UTX or MC4-EVO2
- **Per Pallet**: 30 pieces
- **Per Container (40’ HQ)**: 840 pieces

### TEMPERATURE CHARACTERISTICS

- **Temperature Coefficient (Pmax)**: -0.38 % / °C
- **Temperature Coefficient (Voc)**: -0.29 % / °C
- **Temperature Coefficient (Isc)**: 0.05 % / °C
- **Nominal Module Operating Temperature (NMOT)**: 43 ± 3 °C

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Canadian Solar Inc. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

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