

SUPERPOWER CS6K-290|295|300|305MS

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



Excellent performance at low irradiance of up to: 97.5 %



High PTC rating of up to: 91.90 %



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 *



linear power output warranty



product warranty on materials and workmanship

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2008 / Quality management system

ISO 14001:2004 / Standards for environmental management system OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: TÜV-Rheinland / VDE / CE / MCS / CEC AU / JET UL 1703 / IEC 61215 performance: CEC listed (US) / FSEC (US Florida) UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE

UNI 9177 Reaction to Fire: Class 1

IEC 60068-2-68: SGS

Take-e-way













* 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.

CANADIAN SOLAR (USA), INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 21 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

^{*}For detail information, please refer to Installation Manual.

ENGINEERING DRAWING (mm)

Rear View Frame Cross Section A-A **Mounting Hole** 992

ELECTRICAL DATA | STC*

| CS6K | 290MS | 295MS | 300MS | 305MS |
|------------------------------|---------|-----------|----------|--------|
| Nominal Max. Power (Pmax) | 290 W | 295 W | 300 W | 305 W |
| Opt. Operating Voltage (Vmp) | 32.1 V | 32.3 V | 32.5 V | 32.7 V |
| Opt. Operating Current (Imp) | 9.05 A | 9.14 A | 9.24 A | 9.33 A |
| Open Circuit Voltage (Voc) | 39.3 V | 39.5 V | 39.7 V | 39.9 V |
| Short Circuit Current (Isc) | 9.67 A | 9.75 A | 9.83 A | 9.91 A |
| Module Efficiency | 17.72% | 18.02% | 18.33% | 18.63% |
| Operating Temperature | -40°C ~ | +85°C | | |
| Max. System Voltage | 1000 V | (IEC) or | 1000 V (| UL) |
| Module Fire Performance | TYPE 1 | (UL 1703 | 3) or | |
| | CLASS | C (IEC 61 | 1730) | |
| Max. Series Fuse Rating | 15 A | | | |
| Application Classification | Class A | | | |
| Power Tolerance | 0~+5 | W | | |

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

ELECTRICAL DATA | NMOT*

| CS6K | 290MS | 295MS | 300MS | 305MS |
|------------------------------|--------|--------|--------|--------|
| Nominal Max. Power (Pmax) | 215 W | 218 W | 222 W | 226 W |
| Opt. Operating Voltage (Vmp) | 29.7 V | 29.8 V | 30.0 V | 30.2 V |
| Opt. Operating Current (Imp) | 7.24 A | 7.32 A | 7.40 A | 7.48 A |
| Open Circuit Voltage (Voc) | 36.8 V | 37.0 V | 37.2 V | 37.3 V |
| Short Circuit Current (Isc) | 7.81 A | 7.87 A | 7.93 A | 8.00 A |

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

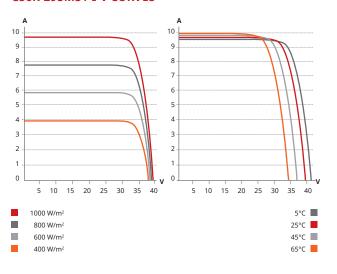
PERFORMANCE AT LOW IRRADIANCE

Excellent performance at low irradiance, with an average relative efficiency of 97.5 % for irradiances between 200 W/ m2 and 1000 W/m2 (AM 1.5, 25°C).

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.

CS6K-295MS / I-V CURVES



MECHANICAL DATA

| Specification | Data |
|------------------------|---|
| Cell Type | Mono-crystalline, 6 inch |
| Cell Arrangement | 60 (6×10) |
| Dimensions | 1650×992×40 mm |
| | (65.0 ×39.1 × 1.57 in) |
| Weight | 18.2 kg (40.1 lbs) |
| Front Cover | 3.2 mm tempered glass |
| Frame Material | Anodized aluminium alloy |
| J-Box | IP68, 3 diodes |
| Cable | 4.0 mm ² (IEC), 12 AWG (UL), |
| | 1000 mm (39.4 in) |
| Connector | T4 series |
| Per Pallet | 27 pieces, 538 kg (1186.1 lbs) |
| Per Container (40' HQ) | 756 pieces |

TEMPERATURE CHARACTERISTICS

| Specification | Data |
|---|-------------|
| Temperature Coefficient (Pmax) | -0.39 % /°C |
| Temperature Coefficient (Voc) | -0.29 % /°C |
| Temperature Coefficient (Isc) | 0.05 % /°C |
| Nominal Module Operating Temperature (NMOT) | 42±2 °C |

PARTNER SECTION

