

CS6K-270 | 275 | 280M

The high quality and reliability of Canadian Solar's modules is ensured by 15 years of experience in module manufacturing, well-engineered module design, stringent BOM quality testing, an automated manufacturing process and 100% EL testing.



KEY FEATURES



Excellent module efficiency of up to 17.11 %



Outstanding low irradiance performance: 96.5 %



Positive power tolerance of up to 5 W



High PTC rating of up to 90.93 %



IP67 junction box for long-term weather endurance



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa



Salt mist, and ammonia resistance, for seaside, and farm environments*



linear power output warranty



product warranty on materials and workmanship

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2008 / Quality management system

ISO/TS 16949:2009 / The automotive industry 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: VDE / CE / MCS / CEC AU

UL 1703 / IEC 61215 performance: CEC listed (US)

UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE / 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.

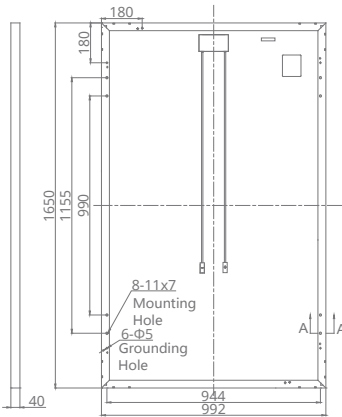
CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading manufacturer of solar modules and PV project developer with over 14 GW of premium quality modules deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

CANADIAN SOLAR (USA) INC.

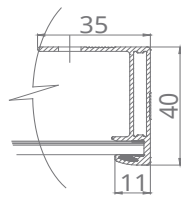
2420 Camino Ramon, Suite 125 San Ramon, CA, USA 94583-4385, www.canadiansolar.com, sales.us@canadiansolar.com

ENGINEERING DRAWING (mm)

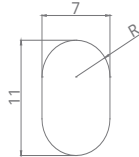
Rear View



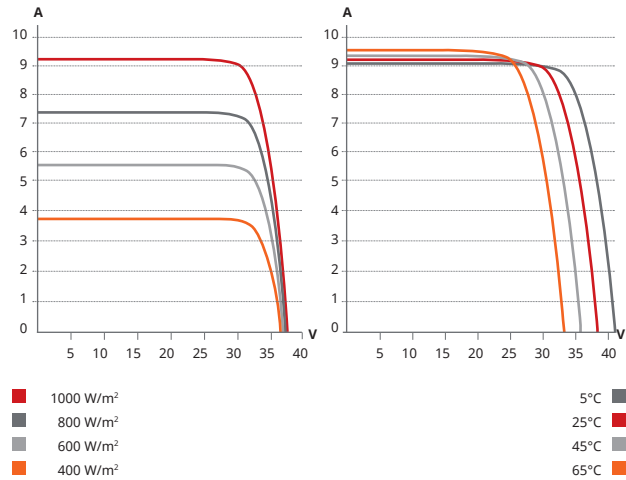
Frame Cross Section A-A



Mounting Hole



CS6K-270M / I-V CURVES



ELECTRICAL DATA / STC*

| CS6K | 270M | 275M | 280M |
|------------------------------|---|---------|---------|
| Nominal Max. Power (Pmax) | 270 W | 275 W | 280 W |
| Opt. Operating Voltage (Vmp) | 31.1 V | 31.3 V | 31.5 V |
| Opt. Operating Current (Imp) | 8.67 A | 8.80 A | 8.89 A |
| Open Circuit Voltage (Voc) | 38.2 V | 38.3 V | 38.5 V |
| Short Circuit Current (Isc) | 9.19 A | 9.31 A | 9.43 A |
| Module Efficiency | 16.50 % | 16.80 % | 17.11 % |
| Operating Temperature | -40°C ~ +85°C | | |
| Max. System Voltage | 1000 V (IEC) or 1000 V (UL) | | |
| Module Fire Performance | TYPE 1 (UL 1703) or CLASS C (IEC 61730) | | |
| 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 / NOCT*

| CS6K | 270M | 275M | 280M |
|------------------------------|--------|--------|--------|
| Nominal Max. Power (Pmax) | 195 W | 199 W | 202 W |
| Opt. Operating Voltage (Vmp) | 28.4 V | 28.5 V | 28.7 V |
| Opt. Operating Current (Imp) | 6.87 A | 6.95 A | 7.04 A |
| Open Circuit Voltage (Voc) | 35.0 V | 35.1 V | 35.3 V |
| Short Circuit Current (Isc) | 7.44 A | 7.54 A | 7.63 A |

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

PERFORMANCE AT LOW IRRADIANCE

Industry leading performance at low irradiance, average relative efficiency of 96.5 % from an irradiance of 1000 W/m² to 200 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.

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 | IP67, 3 diodes |
| Cable | 4 mm ² (IEC) or 4 mm ² & 12 AWG 1000 V (UL), 1000 mm (39.4 in) |
| Connectors | Friends PV2a (IEC), Friends PV2b (IEC / UL) |
| Standard | 26 pieces, 520 kg (1146.4 lbs) |
| Packaging | (quantity & weight per pallet) |
| Module Pieces per Container | 728 pieces (40' HQ) |

TEMPERATURE CHARACTERISTICS

| Specification | Data |
|------------------------------------|--------------|
| Temperature Coefficient (Pmax) | -0.41 % / °C |
| Temperature Coefficient (Voc) | -0.31 % / °C |
| Temperature Coefficient (Isc) | 0.053 % / °C |
| Nominal Operating Cell Temperature | 45±2 °C |

PARTNER SECTION

