

# CS6K-270 | 275 | 280 P

Canadian Solar's modules use the latest innovative cell technology, increasing module power output and system reliability, ensured by 16 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 %



High PTC rating of up to: 92.14 %



Outstanding low irradiance performance of up to: 96.5%



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: VDE / CE / MCS / INMETRO / CQC UL 1703 / IEC 61215 performance: CEC listed (US) / FSEC (US Florida) UL 1703: CSA / UNI 9177 Reaction to Fire: Class 1 Take-e-way















\* If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Canadian Solar sales and technical representatives.

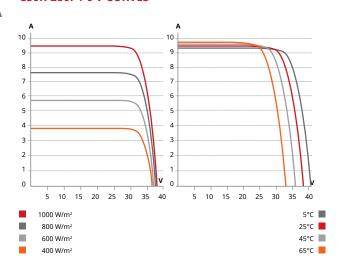
CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 24 GW deployed around the world since 2001, Canadian Solar Inc. is one of the most bankable solar companies worldwide.

<sup>\*</sup>For detailed information, please refer to the Installation Manual.

### **ENGINEERING DRAWING (mm)**

# Rear View Frame Cross Section A-A 30 30 Section A-A Mounting Hole Grounding Hole 40 992

### CS6K-280P / I-V CURVES



### **ELECTRICAL DATA | STC\***

CS6K	270P	275P	280P
Nominal Max. Power (Pmax)	270 W	275 W	280 W
Opt. Operating Voltage (Vmp)	30.8 V	31.0 V	31.3 V
Opt. Operating Current (Imp)	8.75 A	8.88 A	8.95 A
Open Circuit Voltage (Voc)	37.9 V	38.0 V	38.2 V
Short Circuit Current (Isc)	9.32 A	9.45 A	9.52 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 (II	EC 61730)	
Max. Series Fuse Rating	15 A		
Application Classification	Class A		
Power Tolerance	0 ~ + 5 W		

<sup>\*</sup> Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

## **MECHANICAL DATA**

Specification	Data
Cell Type	Poly-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 <sup>2</sup> (IEC), 12 AWG (UL),
	1000 mm (39.4 in)
Connector	T4 series or MC4 series
Per Pallet	27 pieces, 538 kg (1186.1 lbs)
Per Container (40' HQ)	756 pieces

### **ELECTRICAL DATA | NMOT\***

CS6K	270P	275P	280P
Nominal Max. Power (Pmax)	199 W	202 W	206 W
Opt. Operating Voltage (Vmp)	28.3 V	28.5 V	28.8 V
Opt. Operating Current (Imp)	7.01 A	7.10 A	7.16 A
Open Circuit Voltage (Voc)	35.3 V	35.4 V	35.6 V
Short Circuit Current (Isc)	7.52 A	7.63 A	7.68 A

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

### **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.40 % /°C
Temperature Coefficient (Voc)	-0.31 % /°C
Temperature Coefficient (Isc)	0.05 % /°C
Nominal Module Operating Temperature (NMOT)	43 ± 2 °C

# PERFORMANCE AT LOW IRRADIANCE

Outstanding performance at low irradiance, with an average relative efficiency of 96.5 % for irradiances between 200 W/m² and 1000 W/m² (AM 1.5, 25°C).

# PARTNER SECTION



<sup>\*</sup> 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.