



# 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 \*

\*Black frame product can be provided upon request.

25 years linear power output warranty

10 years 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  
ULI 9177 Reaction to Fire: Class 1  
IEC 60068-2-68: SGS

Take-e-way



\* Please contact your local Canadian Solar sales representative for the specific product certificates applicable in your market.

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 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.

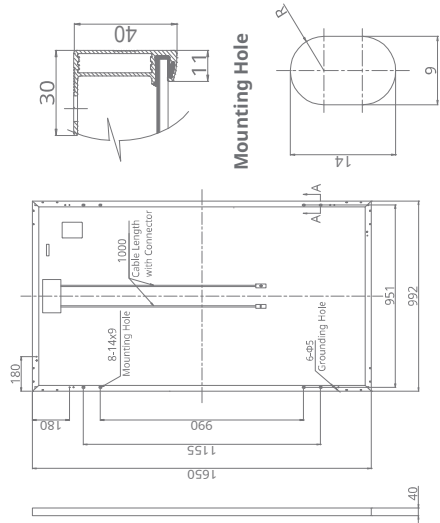
CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, [www.canadiansolar.com](http://www.canadiansolar.com), [support@canadiansolar.com](mailto:support@canadiansolar.com)

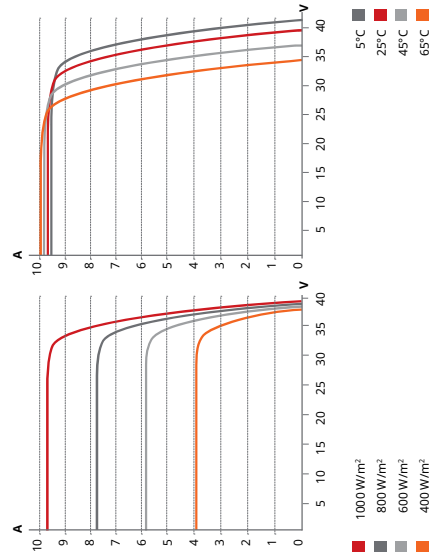
### ENGINEERING DRAWING (mm)

Rear View

Frame Cross Section A-A



### CS6K-295MS / I-V CURVES



### 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) 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 | 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	37.4 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 aforesaid datasheet only provides the general information on Canadian Solar products and, due to the on-going innovation and improvement, please always contact your local Canadian Solar sales representative for the updated information on specifications, key features and certification requirements of Canadian Solar products in your region.

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.

### 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 mm² (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



CANADIAN SOLAR INC. Aug. 2017. All rights reserved, PV Module Product Datasheet V5.551\_EN