

# **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.



\*Black frame product can be provided upon request.

25 years

linear power output warranty



product warranty on materials and workmanship

### **KEY FEATURES**



11 % more power than conventional modules



High PTC rating of up to: 91.90 %



Improved energy production due to low temperature coefficients



IP68 junction box for longterm weather endurance



Heavy snow load up to 6000 Pa, wind load up to 4000 Pa \*

#### **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





\* 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 25 GW deployed around the world since 2001, Canadian Solar Inc. is one of the most bankable solar companies worldwide.

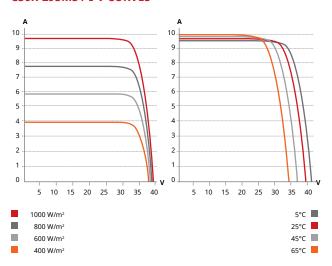
\*For detail information, please refer to Installation Manual.

#### **CANADIAN SOLAR INC.**

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

## **Rear View Frame Cross Section A-A** 066 **Mounting Hole** Α∐ 6-Φ5 992

### 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/UL)	or 1500 '	V (IEC/UL)
Module Fire Performance	TYPE 1	I (UL 170	)3) or	
	CLASS	C (IEC 6	51730)	
Max. Series Fuse Rating	15 A			
Application Classification	Class	Α		
Power Tolerance	0 ~ +	5 W		

**MECHANICAL DATA** 

Specification	Data
Cell Type	Mono-crystalline, 6 inch
Cell Arrangement	60 (6 × 10)
Dimensions	1650×992×35 mm (65.0×39.1×1.38 in)
Weight	18.2 kg (40.1 lbs)
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm <sup>2</sup> (IEC), 12 AWG (UL),
	1000 mm (39.4 in)
Connector	T4 series
Per Pallet	30 pieces
Per Container (40' HQ)	840 pieces

 $<sup>^{\</sup>star}\,$  Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

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

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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)	7.80 A	7.87 A	7.93 A	7.99 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)	-0.39 % / °C
Temperature Coefficient (Voc)	-0.29 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature (NMOT)	42 ± 3 °C

#### PERFORMANCE AT LOW IRRADIANCE

Excellent performance at low irradiance, with an average relative efficiency of 97.5 % for irradiances between 200 W/m<sup>2</sup> and 1000 W/m<sup>2</sup> (AM 1.5, 25°C).

#### **PARTNER SECTION**

#### \* 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.

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