

ALL-BLACK CS6K-290 | 295 | 300 MS

Canadian Solar's All-Black CS6K-MS modules enhance the aesthetics of our 5 bus bar mono modules while providing a higher energy output. All-Black CS6K-MS modules are equipped with Mono-PERC cells, a dark colored backsheet and a black frame.



linear power output warranty



product warranty on materials and workmanship

KEY FEATURES



9 % more power than conventional modules



Excellent performance at low irradiance of up to: 97.5 %



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.

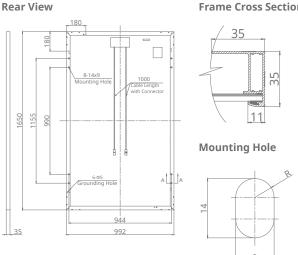
CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 25 GW deployed around the world since 2001, Canadian Solar Inc. is one of the most bankable solar companies worldwide.

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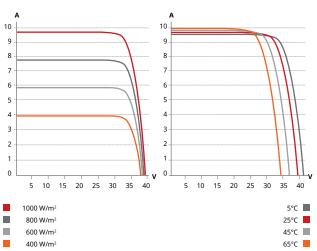
^{*}For detail information, please refer to Installation Manual.

ENGINEERING DRAWING (mm)

Frame Cross Section A-A



ALL-BLACK CS6K-295MS / I-V CURVES



ELECTRICAL DATA | STC*

| All-Black CS6K | 290MS | 295MS | 300MS |
|------------------------------|------------------------------------|-----------|---------|
| Nominal Max. Power (Pmax) | 290 W | 295 W | 300 W |
| Opt. Operating Voltage (Vmp) | 32.1 V | 32.3 V | 32.5 V |
| Opt. Operating Current (Imp) | 9.05 A | 9.14 A | 9.24 A |
| Open Circuit Voltage (Voc) | 39.3 V | 39.5 V | 39.7 V |
| Short Circuit Current (Isc) | 9.67 A | 9.75 A | 9.83 A |
| Module Efficiency | 17.72 % | 18.02 % | 18.33 % |
| Operating Temperature | -40°C ~ +85°C | | |
| Max. System Voltage | 1000 V (IEC/UL) or 1500 V (IEC/UL) | | |
| Module Fire Performance | TYPE 1 (UL 1703) or | | |
| | CLASS C | (IEC 6173 | 0) |
| Max. Series Fuse Rating | 15 A | | |
| Application Classification | Class A | | |
| Power Tolerance | 0 ~ + 5 W | 1 | |
| | | | |

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

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 ² (IEC), 12 AWG (UL), |
| | 1000 mm (39.4 in) |
| Connectors | T4 series |
| Per Pallet | 30 pieces |
| Per Container (40' HC |) 840 pieces |
| | |

ELECTRICAL DATA | NMOT*

| All-Black CS6K | 290MS | 295MS | 300MS |
|------------------------------|--------|--------|--------|
| Nominal Max. Power (Pmax) | 215 W | 218 W | 222 W |
| Opt. Operating Voltage (Vmp) | 29.7 V | 29.8 V | 30.0 V |
| Opt. Operating Current (Imp) | 7.24 A | 7.32 A | 7.40 A |
| Open Circuit Voltage (Voc) | 36.8 V | 37.0 V | 37.2 V |
| Short Circuit Current (Isc) | 7.80 A | 7.87 A | 7.93 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.

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) | 43±3 °C |

PERFORMANCE AT LOW IRRADIANCE

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

PARTNER SECTION

CANADIAN SOLAR INC.

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^{*} The specifications and key features contained in this datasheet may deviate shightly 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.