

# All-black CS6P

## 230/235/240/245/250M

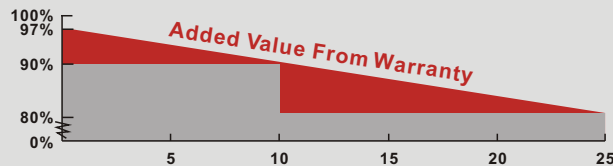


### All-purpose Module

All-black CS6P is a robust all purpose solar module with 60 solar cells. These modules can be used for on-grid and off-grid solar applications. The all-black modules use high efficiency mono-crystalline silicon cells, laminated with black back sheet and framed with black anodized aluminum. The all-black modules are the perfect choice of customers who not only are keen on using solar energy, but also look for aesthetic value.

### Key Features

- Industry first comprehensive warranty insurance by AM Best rated leading insurance companies in the world
- Industry leading plus only power tolerance: 0 ~ +5W
- Strong framed module, passing mechanical load test of 5400Pa to withstand heavier snow load
- The 1st manufacturer in the PV industry certified for ISO:TS16949 (The automotive quality management system) in module production since 2003
- ISO17025 qualified manufacturer owned testing lab, fully complying to IEC, TUV, UL testing standards
- **Backed By Our New 10/25 Linear Power Warranty Plus our added 25 year insurance coverage**



- 10 year product warranty on materials and workmanship
- 25 year linear power output warranty

### Applications

- On-grid and off-grid residential roof-tops
- On-grid and off-grid commercial/industrial roof-tops
- Rural area applications
- Solar power stations
- Other on-grid and off-grid applications

### Quality Certificates

- IEC 61215, IEC61730, UL 1703CE
- ISO9001:2008: Standards for quality management systems
- ISO/TS16949:2009: The automotive quality management system

### Environmental Certificates

- ISO14001:2004: Standards for Environmental management systems
- QC080000 HSPM: The Certification for Hazardous Substances Regulations
- Reach Compliance



# CS6P-230/235/240/245/250M

## All-black

### Electrical Data

STC	CS6P-230M	CS6P-235M	CS6P-240M	CS6P-245M	CS6P-250M
Nominal Maximum Power (Pmax)	230W	235W	240W	245W	250W
Optimum Operating Voltage (Vmp)	29.9V	30.1V	30.2V	30.3V	30.4V
Optimum Operating Current (Imp)	7.70A	7.82A	7.95A	8.09A	8.22A
Open Circuit Voltage (Voc)	37.1V	37.2V	37.3V	37.4V	37.5V
Short Circuit Current (Isc)	8.22A	8.34A	8.46A	8.61A	8.74A
Module Efficiency	14.30%	14.61%	14.92%	15.23%	15.54%
Operating Temperature	-40°C~+85°C				
Maximum System Voltage	1000V (IEC) /600V (UL)				
Maximum Series Fuse Rating	15A				
Application Classification	Class A				
Power Tolerance	0 ~ +5W				

Under Standard Test Conditions (STC) of irradiance of 1000W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C

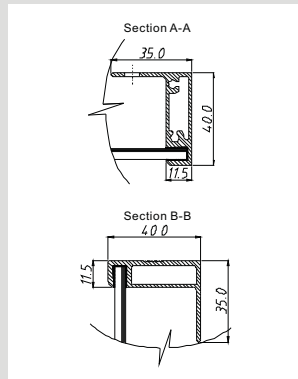
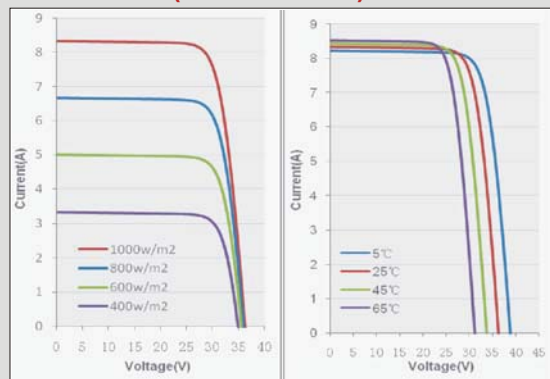
NOCT	CS6P-230M	CS6P-235M	CS6P-240M	CS6P-245M	CS6P-250M
Nominal Maximum Power (Pmax)	166W	170W	173W	177W	180W
Optimum Operating Voltage (Vmp)	27.3V	27.5V	27.5V	27.6V	27.7V
Optimum Operating Current (Imp)	6.09A	6.18A	6.29A	6.40A	6.51A
Open Circuit Voltage (Voc)	34.0V	34.1V	34.2V	34.3V	34.4V
Short Circuit Current (Isc)	6.65A	6.75A	6.85A	6.97A	7.08A

Under Normal Operating Cell Temperature, Irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s

### Mechanical Data

Cell Type	Mono-crystalline 156 x 156mm, 2 or 3 Busbars
Cell Arrangement	60 (6 x 10)
Dimensions	1638 x 982 x 40mm (64.5 x 38.7 x 1.57in)
Weight	20kg (44.1 lbs)
Front Cover	3.2mm Tempered glass
Frame Material	Anodized aluminium alloy
J-BOX	IP65, 3 diodes
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL), 1100mm
Connectors	MC4 or MC4 Comparable
Standard Packaging (Modules per Pallet)	24pcs
Module Pieces per container (40 ft. Container)	672pcs (40'HQ)

### I-V Curves (CS6P-250M)

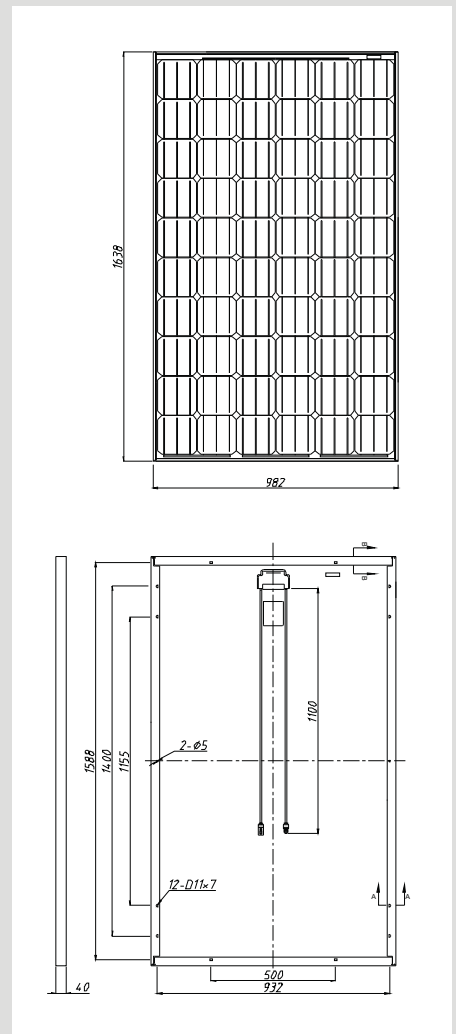


Temperature Coefficient	Pmax	-0.45%/°C
	Voc	-0.35%/°C
	Isc	0.060%/°C
Normal Operating Cell Temperature		45±2°C

### Performance at Low Irradiance

Industry leading performance at low irradiation environment, +95.5% module efficiency from an irradiance of 1000w/m<sup>2</sup> to 200w/m<sup>2</sup> (AM 1.5, 25°C)

### Engineering Drawings



\*Specifications included in this datasheet are subject to change without prior notice.

### About Canadian Solar

Canadian Solar Inc. is one of the world's largest solar companies. As a leading vertically-integrated manufacturer of ingots, wafers, cells, solar modules and solar systems. Canadian Solar delivers solar power products of uncompromising quality to worldwide customers. Canadian Solar's world class team of professionals works closely with our customers to provide them with solutions for all their solar needs.

Canadian Solar was founded in Canada in 2001 and was successfully listed on NASDAQ Exchange (symbol: CSIQ) in November 2006. Canadian Solar has already expanded its module manufacturing capacity to 2.05GW and cell manufacturing capacity to 1.3GW in 2011.

Headquarters | 650 Riverbend Drive, Suite B  
Kitchener, Ontario | Canada N2K 3S2

Tel: +1-519-954-2057

Fax: +1-519-578-2097

inquire.ca@canadiansolar.com

www.canadiansolar.com