

# MaxPower CS6X

290/295/300/305/310M

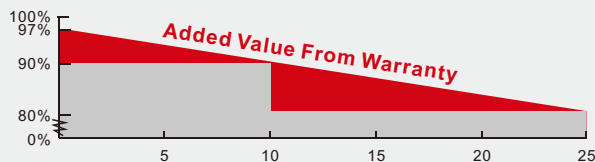


MaxPower CS6X is a robust solar module with 72 solar cells. These modules can be used for on-grid solar applications. Our meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities guarantee Canadian Solar's modules meet the highest quality standards possible.

## Key Features

- High module efficiency up to 16.16%
- Positive power tolerance: 0 ~ +5W
- Robust frame to up to 5400 Pa load
- Self-cleaning surface
- Outstanding performance at low irradiance
- High energy yield at Low NOCT

- **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

## Best Quality

- 235 quality control points in module production
- EL screening to eliminate product defects
- Current binning to improve system performance
- Accredited Salt mist/Ammonia resistance
- High PID Resistance

## Best Warranty Insurance

- 25 years worldwide coverage
- 100% warranty term coverage
- Providing third party bankruptcy rights
- Non-cancellable
- Immediate coverage
- Insured by 3 world top insurance companies

## Comprehensive Certificates

- IEC 61215, IEC 61730, UL 1703, IEC61701 ED2, IEC 62716, KEMCO, CEC Listed, CE, MCS
- ISO9001: 2008: Quality Management System
- ISO/TS16949:2009: The automotive quality management system
- ISO14001:2004: Standards for Environmental management system
- QC080000 HSPM: The Certification for Hazardous Substances Regulations
- OHSAS 18001:2007: International standards for occupational health and safety



# CS6X-290/295/300/305/310M MaxPower

## Electrical Data

STC	CS6X-290M	CS6X-295M	CS6X-300M	CS6X-305M	CS6X-310M
Nominal Maximum Power (Pmax)	290W	295W	300W	305W	310W
Optimum Operating Voltage (Vmp)	36.3V	36.4V	36.5V	36.6V	36.7V
Optimum Operating Current (Imp)	8.00A	8.11A	8.22A	8.33A	8.44A
Open Circuit Voltage (Voc)	44.7V	44.9V	45.0V	45.2V	45.3V
Short Circuit Current (Isc)	8.51A	8.63A	8.74A	8.84A	8.95A
Module Efficiency	15.11%	15.37%	15.63%	15.90%	16.16%
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

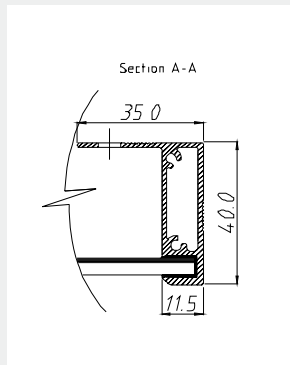
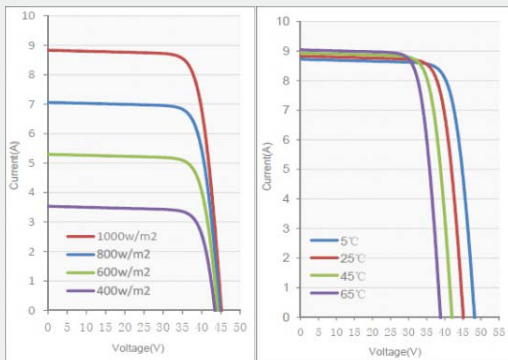
NOCT	CS6X-290M	CS6X-295M	CS6X-300M	CS6X-305M	CS6X-310M
Nominal Maximum Power (Pmax)	209W	213W	217W	224W	220W
Optimum Operating Voltage (Vmp)	33.1V	33.2V	33.3V	33.5V	33.4V
Optimum Operating Current (Imp)	6.32A	6.41A	6.51A	6.69A	6.60A
Open Circuit Voltage (Voc)	41.0V	41.2V	41.3V	41.5V	41.5V
Short Circuit Current (Isc)	6.89A	6.99A	7.08A	7.25A	7.16A

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	72 (6 x 12)
Dimensions	1954 x 982 x 40mm (76.93 x 38.7 x 1.57in)
Weight	23kg (50.7 lbs)
Front Cover	3.2mm Tempered glass
Frame Material	Anodized aluminium alloy
J-BOX	IP65 or IP67, 3 diodes
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL), 1150mm
Connectors	MC4 or MC4 Comparable
Standard Packaging (Modules per Pallet)	24pcs
Module Pieces per container (40 ft. Container)	528pcs (40'HQ)

## I-V Curves (CS6X-305M)



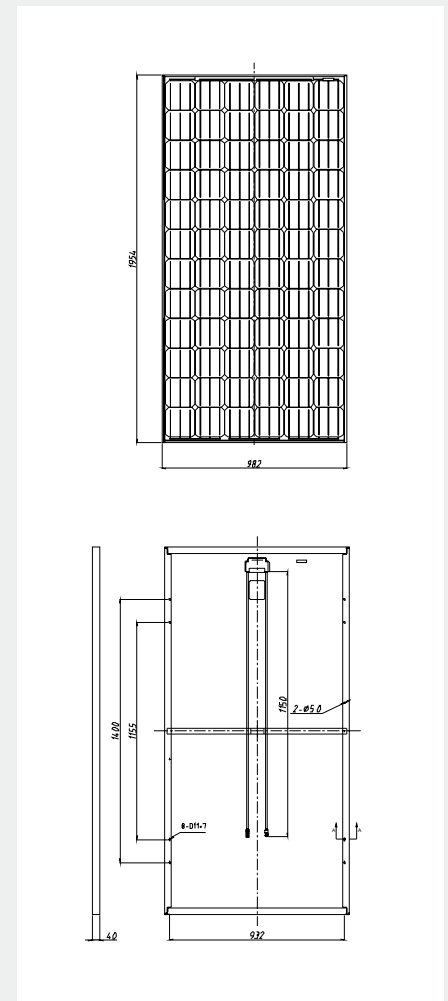
## Temperature Characteristics

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 cell manufacturing capacity of 1.5GW and module manufacturing capacity of 2.3GW.

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