



MaxPower CS6X

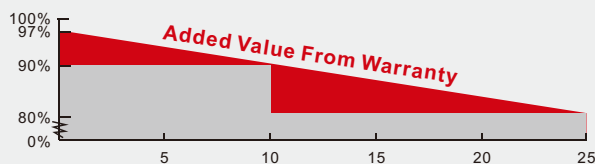
290/295/300/305/310M

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/m², spectrum AM 1.5 and cell temperature of 25°C

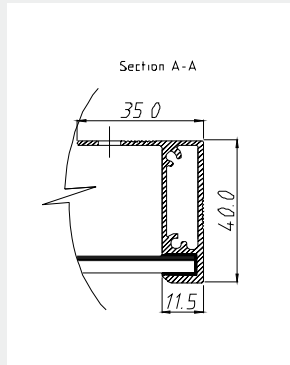
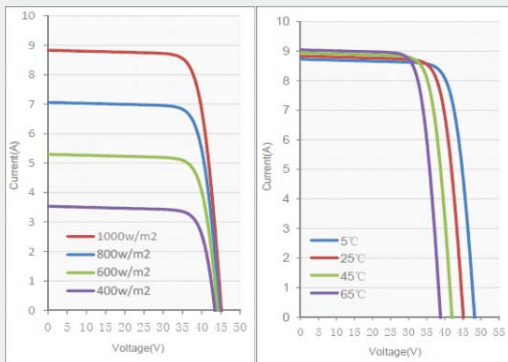
| NOCT | CS6X-290M | CS6X-295M | CS6X-300M | CS6X-305M | CS6X-310M |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|
| Nominal Maximum Power (Pmax) | 209W | 213W | 217W | 224W | 220W |
| Optimum Operating Voltage (Vmp) | 33.1V | 33.2V | 33.3V | 33.5V | 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/m², 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 ² (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)



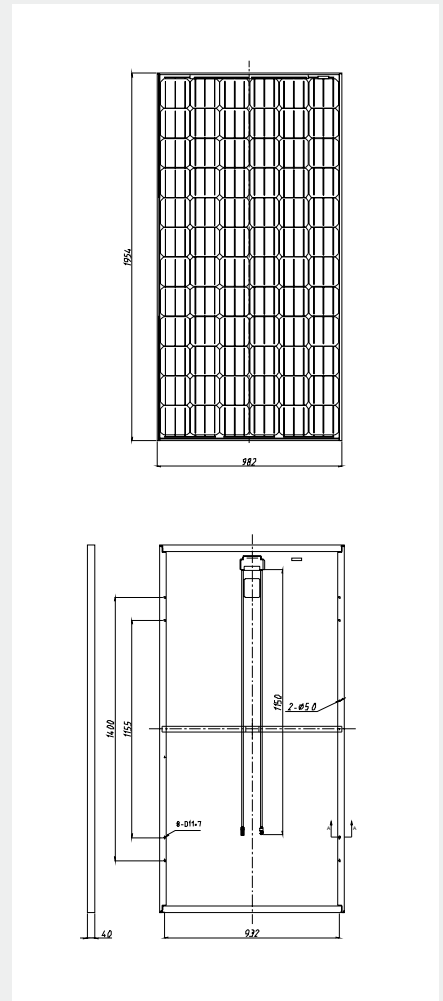
Temperature Characteristics

| | | |
|-----------------------------------|--------|------------|
| 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 irradiance environment, +95.5% module efficiency from an irradiance of 1000w/m² to 200w/m² (AM 1.5, 25 °C)

Engineering Drawings



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