## - I' CanadianSolar



DOUBLE-GLASS MODULE

## DYMOND <br> CS6X-315|320|325|330P-FG

Canadian Solar's Dymond CS6X-P-FG module is a 72 cell double-glass module with an extended power output warranty. By replacing the traditional polymer backsheet with heat-strengthened glass, the Dymond module has a lower annual power degradation than a traditional module and better protection against the elements, making it more reliable and durable during its lifetime.

## KEY FEATURES

Up to IEC1500 VDC system voltage, saving on BoS cost


Minimizes micro-cracks and prevents snail trails
21.5 \% more energy generation


Suitable for harsh environments, such as coasts, deserts and lakes


Fire Class A and Type 3 / Type 13 certified according to IEC 61730-2 / MST 23 and UL 1703


5400 Pa snow load, 2400 Pa wind load

## 30 <br> power output warranty

product warranty on materials and workmanship

## 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 / MCS / CEC AU / INMETRO
UL 1703 / IEC 61215 performance: CEC listed (US)
UL 1703: CSA / IEC 61701 ED2: VDE / IEC 60068-2-68: SGS
Take-e-way


* Please contact your local Canadian Solar sales representative for the specific product certificates applicable in your market.

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 20 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

## ENGINEERING DRAWING (mm)

Rear View Corner Protector Detail


| ELECTRICAL DATA \| STC* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CS6X | 315P-FG | 320P-FG | 325P-FG | 330P-FG |
| Nominal Max. Power (Pmax) | 315 W | 320 W | 325 W | 330 W |
| Opt. Operating Voltage (Vmp) | 36.6 V | 36.8 V | 37.0 V | 37.2 V |
| Opt. Operating Current (Imp) | 8.61 A | 8.69 A | 8.78 A | 8.88 A |
| Open Circuit Voltage (Voc) | 45.1 V | 45.3 V | 45.5 V | 45.6 V |
| Short Circuit Current (Isc) | 9.18 A | 9.26 A | 9.34 A | 9.45 A |
| Module Efficiency | 16.14\% | 16.39\% | 16.65\% | 16.90\% |
| Operating Temperature | $-40^{\circ} \mathrm{C} \sim$ | $+85^{\circ} \mathrm{C}$ |  |  |
| Max. System Voltage | 1500 (IEC) or 1000 V (UL) |  |  |  |
| Module Fire Performance | Type 3 / Type 13 (UL 1703) or CLASS A (IEC 61730) |  |  |  |
|  |  |  |  |  |


| Max. Series Fuse Rating 15 A |
| :--- |
| Application Classification Class A |

Power Tolerance $0 \sim+5 \mathrm{~W}$

* Under Standard Test Conditions (STC) of irradiance of $1000 \mathrm{~W} / \mathrm{m}^{2}$, spectrum AM 1.5 and cell temperature of $25^{\circ} \mathrm{C}$.

| ELECTRICAL DATA \| NMOT* |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CS6X | 315P-FG |  |  |  |
| 320P-FG | 325P-FG | $330 \mathrm{P}-\mathrm{FG}$ |  |  |
| Nominal Max. Power (Pmax) | 231 W | 235 W | 239 W | 242 W |
| Opt. Operating Voltage (Vmp) | 33.7 V | 33.9 V | 34.0 V | 34.2 V |
| Opt. Operating Current (Imp) | 6.87 A | 6.94 A | 7.01 A | 7.08 A |
| Open Circuit Voltage (Voc) | 42.0 V | 42.2 V | 42.4 V | 42.5 V |
| Short Circuit Current (Isc) | 7.41 A | 7.48 A | 7.54 A | 7.63 A |

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/ $m^{2}$, spectrum AM 1.5 , ambient temperature $20^{\circ} \mathrm{C}$, wind speed $1 \mathrm{~m} / \mathrm{s}$.


## PERFORMANCE AT LOW IRRADIANCE

Outstanding performance at low irradiance, with an average relative efficiency of $96.0 \%$ for irradiances between $200 \mathrm{~W} / \mathrm{m}^{2}$ and $1000 \mathrm{~W} / \mathrm{m}^{2}\left(\mathrm{AM} 1.5,25^{\circ} \mathrm{C}\right.$ ).

The aforesaid datasheet only provides the general information on Canadian Solar products and, due to the on-going innovation and improvement, please always contact your local Canadian Solar sales representative for the updated information on specifications, key features and certification requirements of Canadian Solar products in your region.

Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

## CS6X-320P-FG / I-V CURVES



## MECHANICAL DATA

| Specification | Data |
| :---: | :---: |
| Cell Type | Poly-crystalline, 6 inch |
| Cell Arrangement | 72 (6×12) |
| Dimensions | $1968 \times 992 \times 5.8 \mathrm{~mm}(77.5 \times 39.1 \times 0.23 \mathrm{in})$ without J-Box and corner protector |
| (Incl. corner protector) | $1972 \times 996 \times 8.5 \mathrm{~mm}(77.6 \times 39.2 \times 0.33 \mathrm{in})$ without J-Box |
| Weight | 27.5 kg ( 60.6 lbs ) |
| Front / Back Glass | 2.5 mm heat strengthened glass |
| Frame | Frameless |
| J-Box | Split J-Box, IP67, 3 diodes |
| Cable | $4 \mathrm{~mm}^{2}$ (IEC) or $4 \mathrm{~mm}^{2} \& 12$ AWG 1000 V (UL) |
| Cable Length | 1150 mm ( 45.3 in ), 500 mm ( 19.7 in ) <br> (+) and 350 mm ( 13.8 in ) (-) <br> is optional for portrait installation* |
| Connectors | T4 series or MC4 series or UTX (IEC1500V), T4 series or 05-6 (UL1000V) |
| Per Pallet | 30 pieces, 930 kg (2050.3 lbs) |
| Per Container ( $40^{\prime} \mathrm{HQ}$ ) | 660 pieces |

* The application of this short length cable can only be used in landscape installation (clamping mounting method) systems in which the distance between modules should be less than or equal to 50 mm . In the event the distance between the PV modules to be installed is more than 50 mm , please make sure to consult our technical team for evaluation and advice.

TEMPERATURE CHARACTERISTICS

| Specification | Data |
| :--- | :--- |
| Temperature Coefficient (Pmax) | $-0.41 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient (Voc) | $-0.31 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient (Isc) | $0.053 \% /{ }^{\circ} \mathrm{C}$ |
| Nominal Module Operating Temperature (NMOT) | $43 \pm 2{ }^{\circ} \mathrm{C}$ |

## PARTNER SECTION



