## CanadianSolar

## TOPHiKu6

## N-type TOPCon Technology

420 W ~ 445 W
CS6R-420|425|430|435|440|445T(IEC1000 V)
CS6R-420|425|430|435|440|445T(IEC1500 V)


## MORE POWER



Module power up to 445 W
Module efficiency up to 22.8 \%

Excellent anti-LeTID \& anti-PID performance. Low power degradation, high energy yield


Lower temperature coefficient (Pmax): $-0.29 \% /{ }^{\circ} \mathrm{C}$, increases energy yield in hot climate

Lower LCOE \& system cost

## MORE RELIABLE



Minimizes micro-crack impacts


Heavy snow load up to 5400 Pa,
wind load up to 2400 Pa*

[^0]25 Industry Leading Product Warranty on Materials and Workmanship*

30 Linear Power Performance Warranty*
$1^{\text {st }}$ year power degradation no more than 1\% Subsequent annual power degradation no more than 0.4\%
*Subject to the terms and conditions contained in the applicable Canadian Solar Limited Warranty Statement. Also this 25 -year limited product warranty is available only for products installed and operating on rooftops in certain regions.

## MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health \& safety IEC62941: 2019 / Photovoltaic module manufacturing quality system

## PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730 / CE / INMETRO / MCS / UKCA / CGC UL 61730 / IEC 61701 / IEC 62716 / IEC 60068-2-68 Take-e-way


* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 22 years, it has successfully delivered over 100 GW of premium-quality solar modules across the world.

Rear View


## CS6R-440T / I-V CURVES



MECHANICAL DATA

| Specification | Data |
| :---: | :---: |
| Cell Type | Mono-crystalline |
| Cell Arrangement | 108 [2 X (9 X 6) ] |
| Dimensions | $\begin{aligned} & 1722 \times 1134 \times 30 \mathrm{~mm} \\ & (67.8 \times 44.6 \times 1.18 \mathrm{in}) \end{aligned}$ |
| Weight | 21.3 kg ( 47.0 lbs ) |
| Front Cover | 3.2 mm tempered glass with antireflective coating |
| Frame | Anodized aluminium alloy, |
| J-Box | IP68, 3 bypass diodes |
| Cable | $4 \mathrm{~mm}^{2}$ (IEC), 12 AWG (UL) |
| Connector | Tlian: T6 <br> Stäubli: PV-KST4/xy-UR, PV-KBT4/ <br> xy-UR or PV-KST4-EVO2/XY, PV <br> KBT4-EVO2/XY or PV-KST4-EVO2A/ <br> XY, PV-KBT4-EVO2A/XY |
| Cable Length (Including Connector) | Portrait: 350 mm (13.8 in) (+)/250 $\mathrm{mm}(9.8 \mathrm{in})(-)$; landscape: 1100 mm (43.3 in)* |
| Per Pallet | 35 pieces |

Per Container (40' HQ) 910 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.


## TEMPERATURE CHARACTERISTICS

A- | Specification | Data |
| :--- | :--- |
| Temperature Coefficient (Pmax) | $-0.29 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient (Voc) | $-0.25 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient (Isc) | $0.05 \% /{ }^{\circ} \mathrm{C}$ |

Nominal Module Operating Temperature $41 \pm 3^{\circ} \mathrm{C}$
Nominal Module

## PARTNER SECTION

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice.
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.

| CS6R | 420 T | 425 T | 4307 | 435T | 440 T | 445T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Max. Power (Pmax) | 420 W | 425 W | 430 W | 435 W | 440 W | 445 W |
| Opt. Operating Voltage (Vmp)31.6 V 31.8V 32.0 V 32.2V 32.4V 32.6 V |  |  |  |  |  |  |
| Opt. Operating Current (Imp) 13.30 A 13.37 A 13.44 A 13.51 A 13.59 A 13.66 A |  |  |  |  |  |  |
| Open Circuit Voltage (Voc) | 38.6 V 38.8 V 39.0 V 39.2 V 39.4 V 39.6 V |  |  |  |  |  |
| Short Circuit Current (Isc) | 13.71 A 13.78 A 13.86 A 13.94 A 14.01 A 14.09 A |  |  |  |  |  |
| Module Efficiency | 21.5\% | 21.8\% | 22.0\% | 22.3\% | 22.5\% | 22.8 |
| Operating Temperature | $-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$ |  |  |  |  |  |
| Max. System Voltage | 1500 V (IEC/UL) or 1000 V (IEC/UL) |  |  |  |  |  |
| Module Fire Performance | TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000 V ) or CLASS C (IEC 61730) |  |  |  |  |  |
| Max. Series Fuse Rating | 25 A |  |  |  |  |  |
| Application Classification | Class A |  |  |  |  |  |
| Power Tolerance | $\pm 5 \mathrm{~W}$ |  |  |  |  |  |

* Under Standard Test Conditions (STC) of irradiance of $1000 \mathrm{~W} / \mathrm{m}^{2}$, spectrum AM 1.5 and cell temperature of $25^{\circ} \mathrm{C}$. Measurement uncertainty: $\pm 3 \%$ (Pmax)


## ELECTRICAL DATA \| NMOT*

CS6R 420T 425T 430T 435T 440T 445T

Nominal Max. Power (Pmax) 318 W 321 W 325 W 329 W 333 W 337 W Opt. Operating Voltage (Vmp)29.9 V 30.1 V 30.3 V 30.4 V 30.6 V 30.8 V Opt. Operating Current (Imp) 10.63 A 10.69 A 10.75 A 10.81 A 10.87 A 10.92 A Open Circuit Voltage (Voc) 36.5 V 36.7 V 36.9 V 37.1 V 37.3 V 37.5 V Short Circuit Current (Isc) $\quad 11.05$ A 11.11 A 11.18 A 11.24 A 11.30 A 11.36 A

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


[^0]:    * For detailed information, please refer to the Installation Manual.

