

# TOPHiKu6

N-type TOPCon Technology

425 W ~ 450 W

CS6R-425 | 430 | 435 | 440 | 445 | 450T

## MORE POWER



Module power up to 450 W  
Module efficiency up to 23.0 %



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



Lower temperature coefficient (Pmax): -0.29%/°C,  
increases energy yield in hot climate



Lower LCOE & system cost

## MORE RELIABLE



Tested up to ice ball of 45 mm diameter  
according to IEC 61215 standard



Minimizes micro-crack impacts



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

\*Black frame product can be provided upon request.



**Enhanced Product Warranty on Materials and Workmanship\***



**Linear Power Performance Warranty\***

**1<sup>st</sup> year power degradation no more than 1%**  
**Subsequent annual power degradation no more than 0.4%**

\*According to the applicable Canadian Solar Limited Warranty Statement.

## 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  
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

## PRODUCT CERTIFICATES\*

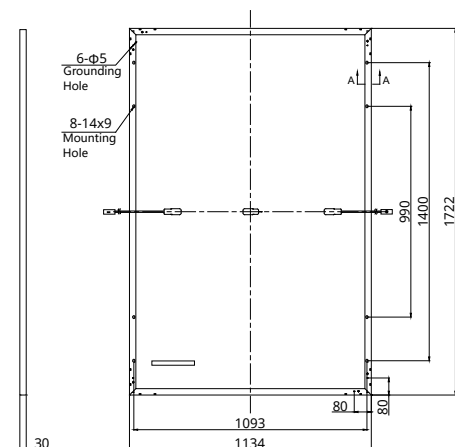
IEC 61215 / IEC 61730 / CE / INMETRO / MCS / UKCA / CGC  
UL 61730 / IEC 61701 / IEC 62716 / IEC 60068-2-68  
UNI 9177 Reaction to Fire: Class 1 / Take-e-way



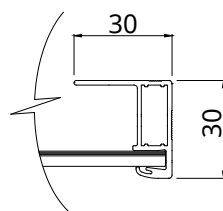
\* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates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

## ENGINEERING DRAWING (mm)

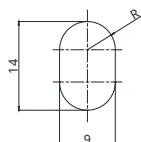
Rear View



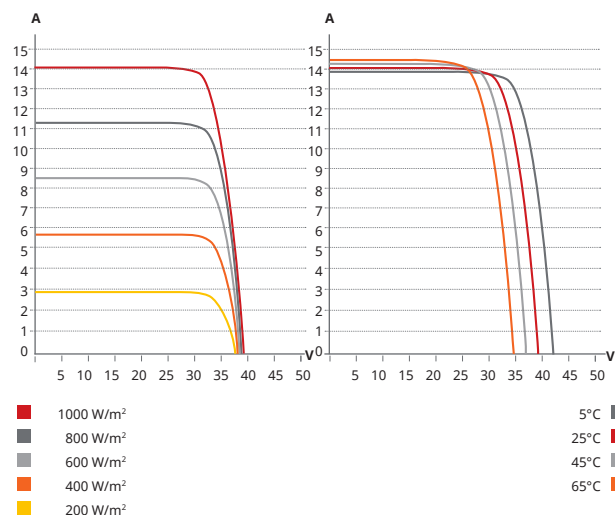
Frame Cross Section A-A



Mounting Hole



## CS6R-440T / I-V CURVES



## ELECTRICAL DATA | STC\*

CS6R	425T	430T	435T	440T	445T	450T
Nominal Max. Power (Pmax)	425 W	430 W	435 W	440 W	445 W	450 W
Opt. Operating Voltage (Vmp)	31.8 V	32.0 V	32.2 V	32.4 V	32.6 V	32.8 V
Opt. Operating Current (Imp)	13.37 A	13.44 A	13.51 A	13.59 A	13.66 A	13.72 A
Open Circuit Voltage (Voc)	38.8 V	39.0 V	39.2 V	39.4 V	39.6 V	39.8 V
Short Circuit Current (Isc)	13.78 A	13.86 A	13.94 A	14.01 A	14.09 A	14.16 A
Module Efficiency	21.8%	22.0%	22.3%	22.5%	22.8%	23.0%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)					
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	25 A					
Protection Class	Class II					
Power Tolerance	0 ~ + 10 W					

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

## MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	108 [2 X (9 X 6)]
Dimensions	1722 × 1134 × 30 mm (67.8 × 44.6 × 1.18 in)
Weight	21.3 kg (47.0 lbs)
Front Cover	3.2 mm tempered glass with anti-reflective coating
Frame	Anodized aluminium alloy,
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Connector	T6 or MC4 or MC4-EVO2 or MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300 mm (11.8 in) (+) / 200 mm (7.9 in) (-); landscape: 1100 mm (43.3 in)*
Per Pallet	35 pieces
Per Container (40' HQ)	910 pieces or 840 pieces (only for US & Canada)

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

## ELECTRICAL DATA | NMOT\*

CS6R	425T	430T	435T	440T	445T	450T
Nominal Max. Power (Pmax)	321 W	325 W	329 W	333 W	337 W	340 W
Opt. Operating Voltage (Vmp)	30.1 V	30.3 V	30.4 V	30.6 V	30.8 V	31.0 V
Opt. Operating Current (Imp)	10.69 A	10.75 A	10.81 A	10.87 A	10.92 A	10.98 A
Open Circuit Voltage (Voc)	36.7 V	36.9 V	37.1 V	37.3 V	37.5 V	37.7 V
Short Circuit Current (Isc)	11.11 A	11.18 A	11.24 A	11.30 A	11.36 A	11.42 A

\* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

## TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

## 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.