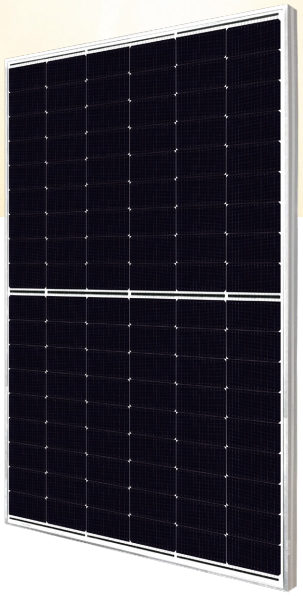
NEW

CanadianSolar



TOPHiKu6

N-type TOPCon Technology

400 W ~ 455 W

CS6R-400|405|410|415|420|425|430|435|440|445|450|455T (IEC1000 V)

CS6R-400|405|410|415|420|425|430|435|440|445|450|455T (IEC1500 V)

*Black frame product can be provided upon request.

MORE POWER

435 W — Module power up to 435 W
Module efficiency up to 22.3 %

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

Minimizes micro-crack impacts

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

12 Years — **Enhanced Product Warranty on Materials and Workmanship***

30 Years — **Linear Power Performance Warranty***

1st 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
IEC62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730
UL 61730 / IEC 61701 / IEC 62716 / IEC 60068-2-68
Take-e-way
Canadian Solar recycles panels at the end of life cycle

* 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.

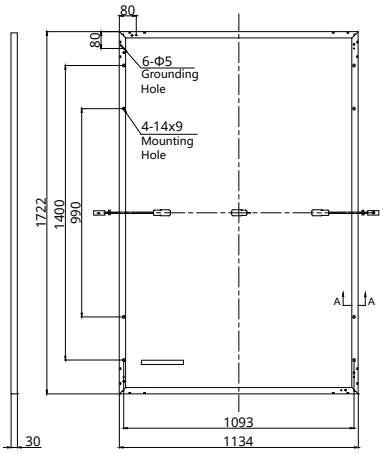
CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 22 years, it has successfully delivered over 88 GW of premium-quality solar modules across the world.

* For detailed information, please refer to the Installation Manual.

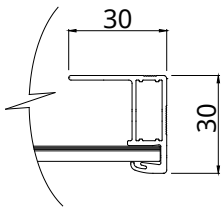
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ENGINEERING DRAWING (mm)

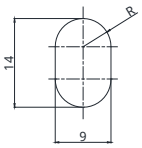
Rear View



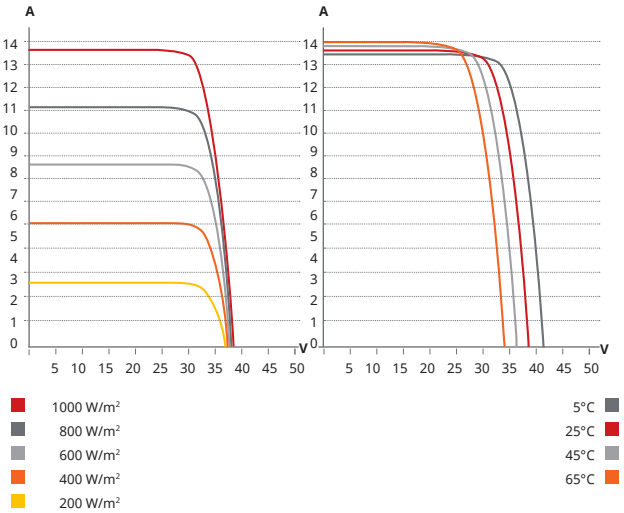
Frame Cross Section A-A



Mounting Hole



CS6R-420T / I-V CURVES



ELECTRICAL DATA | STC*

CS6R	400T	405T	410T	415T
Nominal Max. Power (Pmax)	400 W	405 W	410 W	415 W
Opt. Operating Voltage (Vmp)	30.8 V	31.0 V	31.2 V	31.4 V
Opt. Operating Current (Imp)	13.01 A	13.08 A	13.15 A	13.22 A
Open Circuit Voltage (Voc)	37.8 V	38.0 V	38.2 V	38.4 V
Short Circuit Current (Isc)	13.51 A	13.56 A	13.61 A	13.66 A
Module Efficiency	20.5%	20.7%	21.0%	21.3%
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			
Application Classification	Class A			
Power Tolerance	± 5 W			

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

ELECTRICAL DATA | NMOT*

CS6R	400T	405T	410T	415T
Nominal Max. Power (Pmax)	303 W	306 W	310 W	314 W
Opt. Operating Voltage (Vmp)	29.1 V	29.3 V	29.5 V	29.7 V
Opt. Operating Current (Imp)	10.39 A	10.45 A	10.51 A	10.58 A
Open Circuit Voltage (Voc)	35.8 V	36.0 V	36.2 V	36.4 V
Short Circuit Current (Isc)	10.89 A	10.93 A	10.97 A	11.01 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.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
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	Tlian: T6 Stäubli: PV-KST4/xy-UR, PV-KBT4/xy-UR or PV-KST4-EVO2/XY, PV-KBT4-EVO2/XY or PV-KST4-EVO2A/XY, PV-KBT4-EVO2A/XY
Cable Length (Including Connector)	Portrait: 350 mm (13.8 in) (+) / 250 mm (9.8 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

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

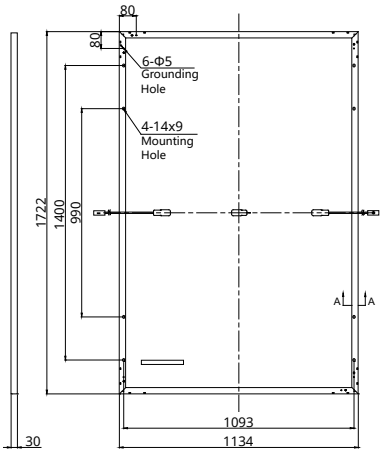
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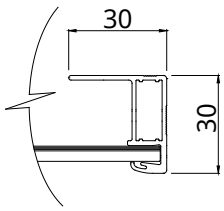
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* Manufactured and assembled in China, Thailand and Vietnam.

ENGINEERING DRAWING (mm)

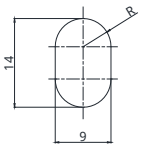
Rear View



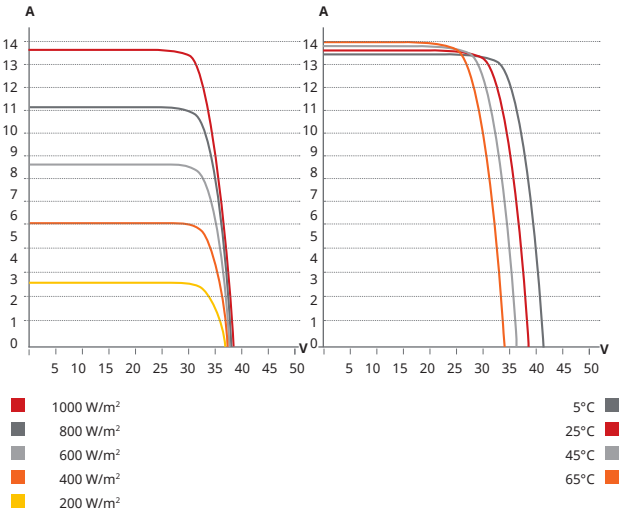
Frame Cross Section A-A



Mounting Hole



CS6R-420T / I-V CURVES



ELECTRICAL DATA | STC*

CS6R	420T	425T	430T	435T
Nominal Max. Power (Pmax)	420 W	425 W	430 W	435 W
Opt. Operating Voltage (Vmp)	31.6 V	31.8 V	32.0 V	32.2 V
Opt. Operating Current (Imp)	13.30 A	13.37 A	13.44 A	13.51 A
Open Circuit Voltage (Voc)	38.6 V	38.8 V	39.0 V	39.2 V
Short Circuit Current (Isc)	13.71 A	13.78 A	13.86 A	13.94 A
Module Efficiency	21.5%	21.8%	22.0%	22.3%
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			
Application Classification	Class A			
Power Tolerance	± 5 W			

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

ELECTRICAL DATA | NMOT*

CS6R	420T	425T	430T	435T
Nominal Max. Power (Pmax)	318 W	321 W	325 W	329 W
Opt. Operating Voltage (Vmp)	29.9 V	30.1 V	30.3 V	30.4 V
Opt. Operating Current (Imp)	10.63 A	10.69 A	10.75 A	10.81 A
Open Circuit Voltage (Voc)	36.5 V	36.7 V	36.9 V	37.1 V
Short Circuit Current (Isc)	11.05 A	11.11 A	11.18 A	11.24 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.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
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	Tlian: T6 Stäubli: PV-KST4/xy-UR, PV-KBT4/xy-UR or PV-KST4-EVO2/XY, PV-KBT4-EVO2/XY or PV-KST4-EVO2A/XY, PV-KBT4-EVO2A/XY
Cable Length (Including Connector)	Portrait: 350 mm (13.8 in) (+) / 250 mm (9.8 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

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

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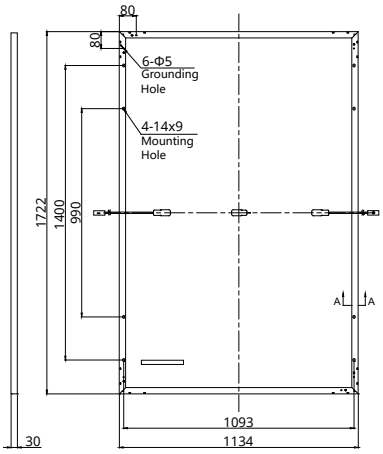
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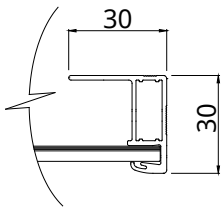
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ENGINEERING DRAWING (mm)

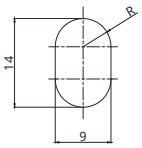
Rear View



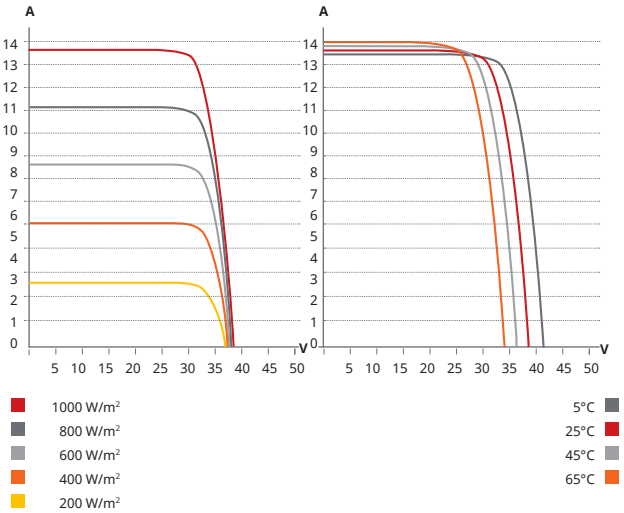
Frame Cross Section A-A



Mounting Hole



CS6R-420T / I-V CURVES



ELECTRICAL DATA | STC*

CS6R	440T	445T	450T	455T
Nominal Max. Power (Pmax)	440 W	445 W	450 W	455 W
Opt. Operating Voltage (Vmp)	32.4 V	32.6 V	32.8 V	33.0 V
Opt. Operating Current (Imp)	13.59 A	13.66 A	13.72 A	13.79 A
Open Circuit Voltage (Voc)	39.4 V	39.6 V	39.8 V	40.0 V
Short Circuit Current (Isc)	14.01 A	14.09 A	14.16 A	14.24 A
Module Efficiency	22.5%	22.8%	23.0%	23.3%
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			
Application Classification	Class A			
Power Tolerance	± 5 W			

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

ELECTRICAL DATA | NMOT*

CS6R	440T	445T	450T	455T
Nominal Max. Power (Pmax)	333 W	337 W	340 W	344 W
Opt. Operating Voltage (Vmp)	30.6 V	30.8 V	31.0 V	31.2 V
Opt. Operating Current (Imp)	10.87 A	10.92 A	10.98 A	11.03 A
Open Circuit Voltage (Voc)	37.3 V	37.5 V	37.7 V	37.9 V
Short Circuit Current (Isc)	11.30 A	11.36 A	11.42 A	11.48 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.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	108 [2 X (9 X 6)]
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Specification	Data
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Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION

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