

# TOPHiKu6

N-type TOPCon Technology

**595 W ~ 620 W**

**CS6.1-72TD-595 | 600 | 605 | 610 | 615 | 620**

## MORE POWER



Module power up to 620 W  
Module efficiency up to 23.0 %



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



Lower temperature coefficient (Pmax):  $-0.29\%/^{\circ}\text{C}$ ,  
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\*



**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  
IEC62941: 2019 / Photovoltaic module manufacturing quality system

## PRODUCT CERTIFICATES\*

IEC 61215 / IEC 61730 / INMETRO  
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.

**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.

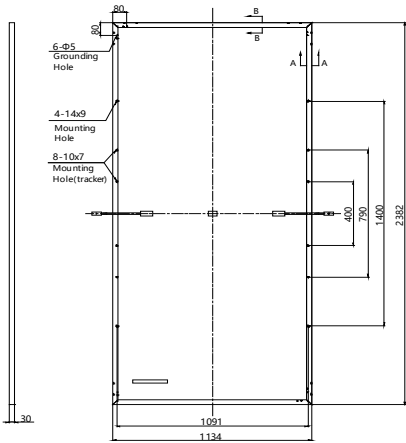
\* For detailed information, please refer to the Installation Manual.

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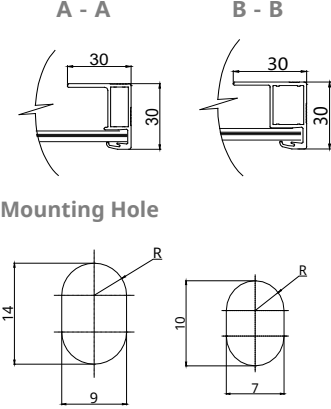
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ENGINEERING DRAWING (mm)

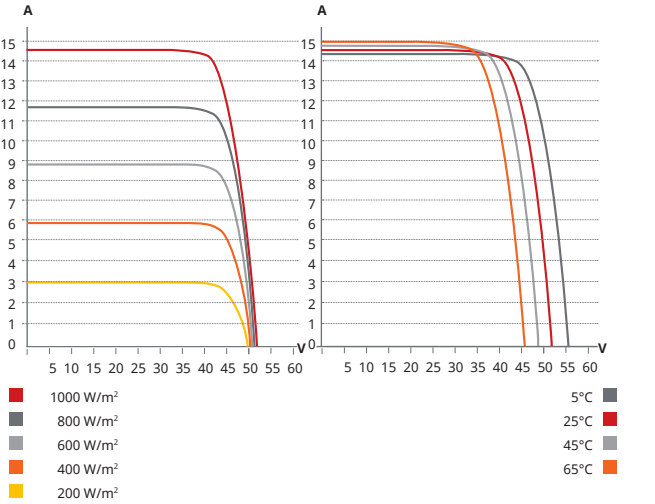
Rear View



Frame Cross Section



CS6.1-72TD-600 / I-V CURVES



ELECTRICAL DATA | STC\*

CS6.1-72TD	595	600	605	610	615	620
Nominal Max. Power (Pmax)	595 W	600 W	605 W	610 W	615 W	620 W
Opt. Operating Voltage (Vmp)	43.8 V	44.0 V	44.2 V	44.4 V	44.6 V	44.8 V
Opt. Operating Current (Imp)	13.59 A	13.64 A	13.69 A	13.74 A	13.79 A	13.84 A
Open Circuit Voltage (Voc)	51.6 V	51.8 V	52.0 V	52.2 V	52.4 V	52.6 V
Short Circuit Current (Isc)	14.48 A	14.54 A	14.60 A	14.66 A	14.72 A	14.78 A
Module Efficiency	22.0%	22.2%	22.4%	22.6%	22.8%	23.0%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)					
Module Fire Performance	TYPE 29 (UL 61730) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	25 A					
Application Classification	Class A					
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	144 [2 x (12 x 6)]
Dimensions	2382 × 1134 × 30 mm (93.8 × 44.6 × 1.18 in)
Weight	33.6 kg (74.1 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	350 mm (13.8 in) (+) / 250 mm (9.8 in) (-) or customized length*
Connector	T6 or MC4-EVO2 or MC4-EVO2A
Per Pallet	36 pieces
Per Container (40' HQ)	720 pieces

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

ELECTRICAL DATA | NMOT\*

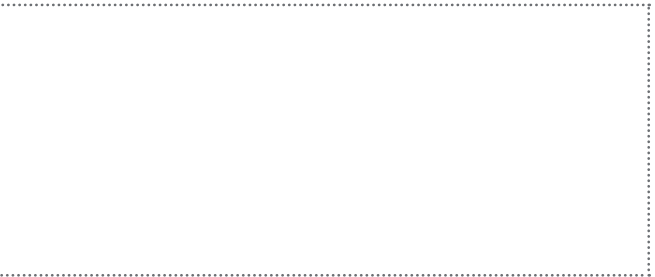
CS6.1-72TD	595	600	605	610	615	620
Nominal Max. Power (Pmax)	450 W	454 W	458 W	461 W	465 W	469 W
Opt. Operating Voltage (Vmp)	41.4 V	41.6 V	41.8 V	42.0 V	42.2 V	42.4 V
Opt. Operating Current (Imp)	10.87 A	10.91 A	10.95 A	10.99 A	11.03 A	11.07 A
Open Circuit Voltage (Voc)	48.9 V	49.0 V	49.2 V	49.4 V	49.6 V	49.8 V
Short Circuit Current (Isc)	11.68 A	11.73 A	11.77 A	11.82 A	11.87 A	11.92 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

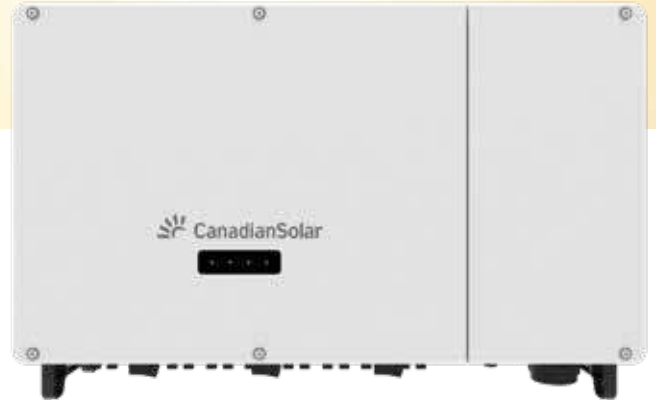


\* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further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



# THREE PHASE STRING INVERTER 100-120 KW

**CSI-100KW | CSI-110KW | CSI-120KW**



CSI Solar's grid-tied, transformer-less string inverters help to accelerate the use of three-phase string architecture for industrial and commercial rooftop applications.

These inverters are modular design building blocks that provide high yield and enable significant BoS cost savings. They provide up to 98.5% conversion efficiency, a wide operating range of 200-1000 V<sub>DC</sub>, and 6 or 9 MPPTs for maximum energy harvest.



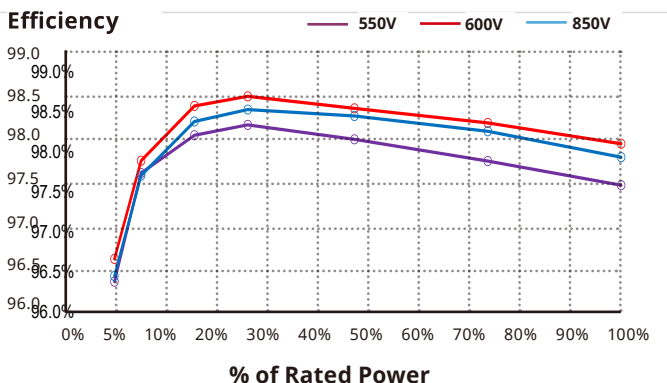
**Standard warranty, extension up to 20 years**

## KEY FEATURES

- Maximum efficiency of 98.5%, Maximum EU efficiency of 98.1%
- 6 or 9 MPPTs to achieve higher system efficiency
- 20A input for each string, perfectly match with Hiku7 series module\*
- Integrated DC Switches
- Smart string monitoring
- Integrated anti-PID function (Optional)
- Supports aluminum cable

## EFFICIENCY CURVE

CSI-120KW



\* For detail information, please refer to Installation Manual.

\* "20A input for each string, perfectly match with Hiku7 series module", this feature applies to the models of 6 MPPTs only.

## HIGH RELIABILITY

- Intelligent fan-cooling
- SPD Type II for DC and AC
- Leakage current suppression technology
- DC reverse polarity protection

## BROAD ADAPTIBILITY

- IP66 protection for harsh environment
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Wide MPPT range for flexible string sizing

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MODEL NAME	CSI-100K-T4001A-E	CSI-100K-T4001B-E	CSI-110K-T4001A-E	CSI-110K-T4001B-E	CSI-120K-T4001A-E	CSI-120K-T4001B-E
INPUT (DC)						
Max. Input Voltage	1100 V <sub>DC</sub>					
Start-up DC Input Voltage	195 V <sub>DC</sub>					
Rated Input Voltage	600 V <sub>DC</sub>					
MPPT Voltage Range	200 - 1000 V <sub>DC</sub>					
Max. String Input No.	12	18	12	18	12	18
MPPT No.	6	9	6	9	6	9
Max. Input Current	6 x 40 A	9 x 30 A	6 x 40 A	9 x 30 A	6 x 40 A	9 x 30 A
Max. DC short-circuit current	6 x 50 A	9 x 40 A	6 x 50 A	9 x 40 A	6 x 50 A	9 x 40 A
OUTPUT (AC)						
Rated AC Output Power	100 kW	100 kW	110 kW	110 kW	120 kW	120 kW
Max. AC Output Power (Apparent)	100 kVA	100 kVA	110 kVA	110 kVA	120 kVA	120 kVA
Rated Output Voltage	380 / 400 V <sub>AC</sub>					
Grid Connection Type	3 L / N / PE					
Max Output Current	152 A	152 A	167.1 A	167.1 A	182.3 A	182.3 A
Rated Output Frequency	50 / 60 Hz					
THDi	< 3 %					
Power Factor	0.8 leading ... 0.8 lagging					
Zero Export Solution	optional, Smart Meter or EPM-Box needed					
EFFICIENCY						
Max. Efficiency	98.5 %					
EU Efficiency	98.1 %					
ENVIRONMENT						
Protection Degree	IP66					
Cooling	Intelligent Fan Cooling					
Operating Temperature Range	-30 °C to +60 °C					
Operating Humidity	0 - 100 % Non-condensing					
Operating Altitude	4000 m (> 3000 m derating)					
PROTECTION						
DC Switch	Yes					
Anti-Islanding Protection	Yes					
DC Reverse-Polarity Protection	Yes					
DC Insulation Resistance Detection	Yes					
Residual Current Monitoring	Yes					
String Monitoring	Yes					
AC Output Over Current Protection	Yes					
AC Short Circuit Protection	Yes					
Grid Monitoring	Yes					
Anti-PID Module	Optional					
Overvoltage Class	II (DC), III (AC)					
DC / AC SPD	DC SPD Type II / AC SPD Type II (Type I Optional)					
DISPLAY AND COMMUNICATION						
Display	LED & APP (via Bluetooth)					
Communication	RS485 / WiFi					
MECHANICAL DATA						
Dimensions (W / H / D)	1050 x 687 x 355 mm					
Weight	90 kg	95 kg	90 kg	95 kg	90 kg	95 kg
DC Inputs Type	MC4					
AC Outputs Type	OT Terminals (Support the AC cables Max. 240mm²)					
CERTIFICATION						
Safety / EMC	IEC62109-1/2, IEC 61000-6-2/3					
Grid Code	IEC61727 & IEC62116, EN50549-1/2, CEI0-21/16, VDE4105, VDE4110, NRS097					

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Caution: For professional use only. The installation and handling of PV equipment requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the product.

**CSI Solar Co., Ltd.**

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