

THREE PHASE STRING INVERTER 12-20 KW

CSI-12K-T400 | CSI-15K-T400
CSI-17K-T400 | CSI-20K-T400

Canadian Solar's grid-tied, transformer-less string inverters help to accelerate the use of three-phase string architecture for residential and commercial rooftop applications. An NRTL approved, cost-effective alternative to MLPE, these inverters are modular design building blocks that provide high yield and enable significant BoS cost savings. They provide up to 98.7% conversion efficiency, a wide operating range of 160-850 V_{DC}, and two MPPTs for maximum energy harvest.



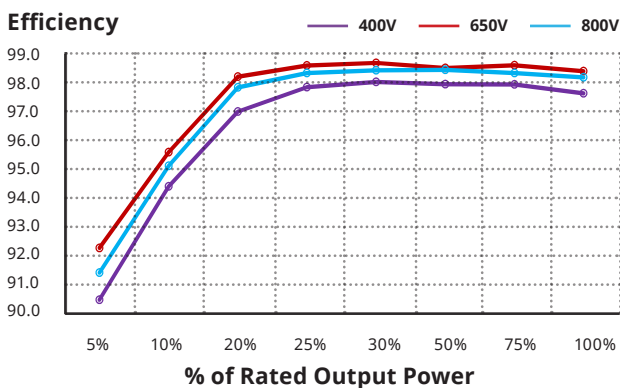
Standard warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 98.7%, Maximum EU efficiency of 98.1%
- Two MPPTs to achieve higher system efficiency
- Strings intelligent monitoring
- Up to 20% DC input oversize

EFFICIENCY CURVE

CSI-20K-T400GL01-E



For detailed information, please refer to the Installation Manual.

CANADIAN SOLAR INC.

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HIGH RELIABILITY

- Advanced thermal design and convection cooling
- Built in over-voltage and over-current protection
- DC reverse polarity and AC short circuit protection
- Fuse free design

BROAD ADAPTIBILITY

- IP65 rated for outdoor application
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Integrated DC load rated disconnects
- Wide MPPT range for flexible string sizing
- High switching frequency and ultra fast MPPT for maximum efficiency over a wide load range

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 40 GW deployed around the world since 2001.

SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-12K-T400GL01-E	CSI-15K-T400GL01-E	CSI-17K-T400GL01-E	CSI-20K-T400GL01-E
DC INPUT				
Max. DC Power	14.5kW	18kW	20.4kW	24kW
Max. DC Input Voltage	1000 V _{DC}			
Start-up DC Input Voltage/Power	180 V _{DC}			
Number of MPP Trackers	2			
MPPT Voltage Range	160 - 850V _{DC}			
Max. Input Current (Imp)	22A/22A			
Max. Short Circuit Current (Isc)	34.3A/34.3A			
Number of DC Inputs	2/4			
DC Disconnection Type	Load rated DC switch			
AC OUTPUT				
Rated AC Output Power	12 kW	15 kW	17 kW	20 kW
Max. AC Output Power	13.2 kW	16.5 kW	18.7 kW	22 kW
Rated Output Voltage*	220/380 V _{AC} , 230/400 V _{AC}			
Grid Connection Type	3 W / N / PE			
Rated Grid Output Current	18.2A / 17.3A	22.8A / 21.7A	25.8A / 24.6A	30.4A / 28.9A
Max Output Current	19.1 A	23.8 A	27 A	31.8 A
Rated Output Frequency	50/60 Hz			
Output Frequency Range*	45-55 Hz/55-65 Hz			
Power Factor	>0.99 (0.8 leading ... 0.8 lagging)			
Current THD	< 1.5%			
DC Injection Current	< 0.5 % of Rated Grid Output Current			
SYSTEM				
Max. Efficiency	98.7%			
EU Efficiency	98.1%			
Night Consumption	< 1 W			
ENVIRONMENT				
Protection Degree	IP65			
Cooling	Intelligent redundant fan-cooling			
Operating Temperature Range	-25 ° C to +60 ° C			
Storage Temperature Range	-40 ° C to +70 ° C			
Operating Humidity	0 - 100 % Condensing			
Operating Altitude	4000 m			
Audible Noise	<60 dBA @ 1 m			
DISPLAY AND COMMUNICATION				
Display	LCD, 2x20 Z			
Communication	WIFI/RS485 Optional			
MECHANICAL DATA				
Dimensions (W / H / D)	563 x 310 x 219 mm			
Weight	18.9 kg			19.8 kg
Installation Angle	0~15 Degrees from Vertical			
DC Inputs	MC4			
SAFETY				
Safety and EMC Standard	IEC62109-1/-2, EN61000-6-2, EN61000-6-3			
Grid Standard	IEC61727, AS777			

*The "Rated Output Voltage Range" and "Output Frequency Range" may differ according to specific grid standard.

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. Canadian Solar Inc. reserves the right to make necessary adjustment to the information described herein at any time without notice.

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.

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