



THREE PHASE STRING INVERTER 15-20 KW

CSI-15K-T220 | CSI-20K-T220

Canadian Solar's grid-tied, transformer-less string inverters help to accelerate the use of three-phase string architecture for commercial rooftop and small ground-mount 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 98.8% conversion efficiency, a wide operating range of 180-1000 V_{DC}, and four MPPTs for maximum energy harvest.



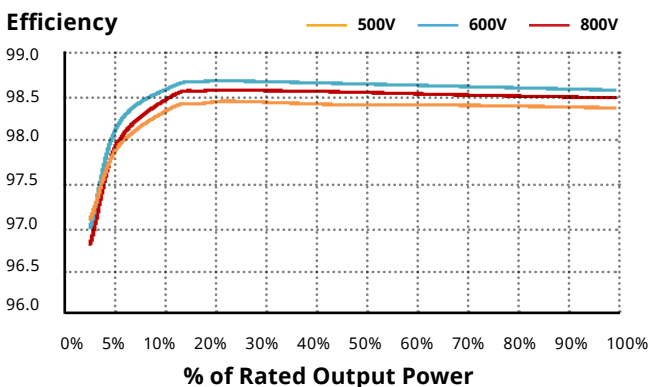
standard warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 98.8%, Maximum EU efficiency of 98.3%
- Four MPPTs to achieve higher system efficiency
- Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- Up to 30% DC input oversize, 13A input for each PV string

EFFICIENCY CURVE

CSI-20K-T220GL02-E



For detailed information, please refer to the Installation Manual.

CSI SOLAR CO., LTD.

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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

CSI SOLAR CO., LTD. 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 46 GW deployed around the world since 2001.

SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-15K-T220GL02-E	CSI-20K-T220GL02-E
DC INPUT		
Max. DC Input Voltage	1100 V _{DC}	
Start-up DC Input Voltage/Power	180 V _{DC}	
Number of MPP Trackers	3	
MPPT Voltage Range	200 - 1000 V _{DC}	
Max. Input Current (Imp)	78 A (26 A per MPPT)	
Max. Short Circuit Current (Isc)	120 A (40 A per MPPT)	
Number of DC Inputs	6 (2 per MPPT)	
DC Disconnection Type	Load rated DC switch	
AC OUTPUT		
Rated AC Output Power	15 kW	20 kW
Max. AC Output Power	15 kW	20 kW
Rated Output Voltage ¹	220 V _{AC}	
Grid Connection Type	3W / N / PE	
Rated Grid Output Current	39.4 A	52.5 A
Max Output Current	43.3 A	57.7 A
Rated Output Frequency	60 Hz	
Output Frequency Range ²	47 - 52 / 57 - 62 Hz	
Power Factor	> 0.99 (0.8 leading ... 0.8 lagging)	
Current THD	< 3%	
DC Injection Current	< 0.5 % of Rated Grid Output Current	
SYSTEM		
Max. Efficiency	98.8 %	
EU Efficiency	98.3 %	
Night Consumption	< 1 W	
Anti-PID Module	Optional	
ENVIRONMENT		
DC / AC SPD	DC SPD Type II / AC SPD Type II (Type I Optional)	
Protection Degree	TYPE 4X	
Cooling	Natural Convection 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	< 30 dBA @ 1 m	
DISPLAY AND COMMUNICATION		
Display	LCD, 2 × 20 Z	
Communication	WIFI / RS485 Optional	
MECHANICAL DATA		
Dimensions (W / H / D)	647 x 629 x 252 mm	
Weight ³	45 kg	
Installation Angle	0 – 15 Degrees from Vertical	
DC Inputs	MC4	
SAFETY		
Compliance	UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA	

1. "Output Voltage Range" may differ according to specific grid standard.

2. "Output Frequency Range" may differ according to specific grid standard.

3. "Net Weight" tolerance ± 1kg

4. Any system which DC/AC ratio is less than 1.5 is within product limited warranty, otherwise, please contact CSI local technical team for further confirmation.

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 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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