

# THREE PHASE STRING INVERTER 50-60KW

**CSI-50K-T400 | CSI-60K-T400**



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 central inverters, 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<sub>DC</sub>, and 5 to 6 MPPTs for maximum energy harvest.



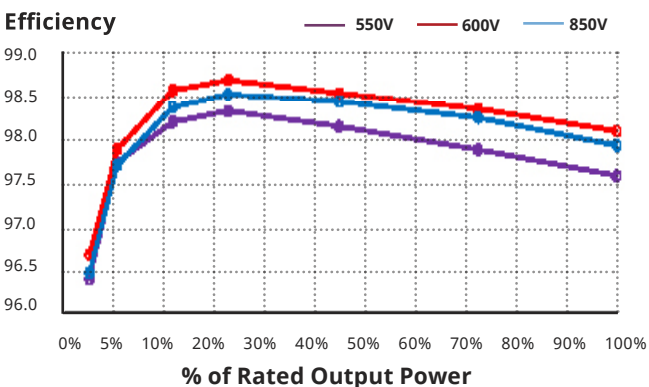
**standard warranty, extension up to 15 years**

## KEY FEATURES

- Maximum efficiency of 98.8%, Maximum EU efficiency of 98.3%
- 5 to 6 MPPTs to achieve higher system efficiency
- 16A input for each PV string
- Integrated DC Switches
- Smart string monitoring and IV curve diagnosis

## EFFICIENCY CURVE

CSI-60K-T400GL03-E



For detailed information, please refer to the Installation Manual.

## HIGH RELIABILITY

- Intelligent redundant fan-cooling
- SPD Type II on both DC and AC sides
- Leakage current repression technology
- Fuse free design
- DC reverse polarity protection

## BROAD ADAPTIBILITY

- IP66 rated for outdoor application
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- 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 55 GW deployed around the world since 2001.

**CSI SOLAR CO., LTD.**

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**SYSTEM/TECHNICAL DATA**

MODEL NAME	CSI-50K-T400GL03-E	CSI-60K-T400GL03-E
<b>DC INPUT</b>		
Max. DC Input Voltage		1100 V <sub>DC</sub>
Start-up DC Input Voltage/Power		195 V <sub>DC</sub>
Number of MPP Trackers	5	6
MPPT Voltage Range		180 - 1000 V <sub>DC</sub>
Max. Input Current (Imp)	160 A (32 A per MPPT)	192 A (32 A per MPPT)
Max. Short Circuit Current (Isc)	250 A (50 A per MPPT)	300 A (50 A per MPPT)
Number of DC Inputs	10 (2 per MPPT)	12 (2 per MPPT)
DC Switch	Integrated	
<b>AC OUTPUT</b>		
Rated AC Output Power	50 kW	60 kW
Max. AC Output Power	55 kW	66 kW
Rated Output Voltage	220 / 380 V <sub>AC</sub> , 230 / 400 V <sub>AC</sub>	
Grid Connection Type	3W / N / PE	
Rated Grid Output Current	76.0 A	91.2 A
Max Output Current	83.6 A	100.3 A
Rated Output Frequency	50 / 60 Hz	
Output Frequency Range*	45 - 55 / 55 - 65 Hz	
Power Factor	> 0.99 (0.8 leading ... 0.8 lagging)	
Current THD	< 3 %	
DC Injection Current	< 0.5 % of Rated Grid Output Current	
<b>SYSTEM</b>		
Max. Efficiency	98.8 %	
EU Efficiency	98.3 %	
Night Consumption	< 1 W	
Anti-PID Module	Optional	
Integrated AFCI (DC arc-fault circuit protection)	Yes	
<b>ENVIRONMENT</b>		
Protection Degree	IP66	
Cooling	Intelligent Redundant 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	< 55 dBA @ 1 m	
<b>DISPLAY AND COMMUNICATION</b>		
Display	LCD, 2 × 20 Z	
Communication	RS485, Optional: Wi-Fi, PLC	
<b>MECHANICAL DATA</b>		
Dimensions (W / H / D)	750 × 600 × 350 mm	
Weight	70 kg	
Installation Angle	0 ~ 15 Degrees from Vertical	
DC Inputs	MC4	
<b>SAFETY</b>		
Safety and EMC Standard	IEC 62109-1/2, IEC 61000-6-1/2/3/4	
Grid Standard	IEC 62116, IEC 61727	

\*The "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. 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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