

# THREE PHASE STRING INVERTER 12-20 KW

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

CSI 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 160-1000 V<sub>DC</sub>, and two MPPTs for maximum energy harvest.



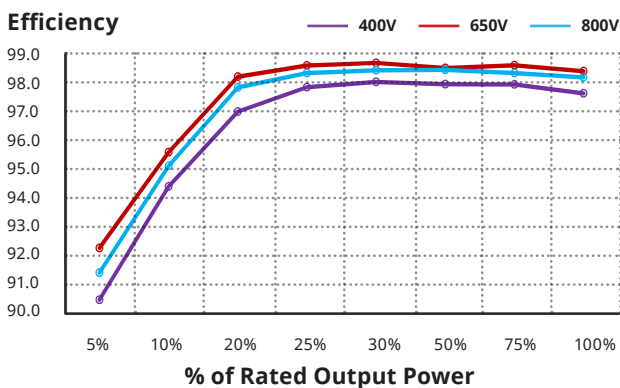
**Standard warranty, extension up to 20 years**

## 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 50% DC input oversize
- String current up to 16A

## EFFICIENCY CURVE

CSI-20K-T400GL03-E



## 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

- IP66 rated for outdoor application
- AFCI protection, proactively reduces fire risk
- 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

For detailed information, please refer to the Installation Manual.

**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 20 years, it has successfully delivered over 63 GW of premium-quality solar modules across the world.

**CSI SOLAR CO., LTD.**

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## SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-12K-T400GL03-E	CSI-15K-T400GL03-E	CSI-17K-T400GL03-E	CSI-20K-T400GL03-E
<b>DC INPUT</b>				
Max. DC Power	18kW	22.5kW	25.5kW	30kW
Max. DC Input Voltage	1100 V <sub>DC</sub>			
Start-up DC Input Voltage/Power	180 V <sub>DC</sub>			
Number of MPP Trackers	2			
MPPT Voltage Range	160 - 1000V <sub>DC</sub>			
Max. Input Current (Imp)	32A / 32A			
Max. Short Circuit Current (Isc)	50A / 50A			
Number of DC Inputs	2 / 4			
DC Disconnection Type	DC switch			
<b>AC OUTPUT</b>				
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 <sub>AC</sub> , 230/400 V <sub>AC</sub>			
Grid Connection Type	3 W / N / PE			
Rated Grid Output Current	18.2 A / 17.3 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A
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	< 2%			
<b>SYSTEM</b>				
Max. Efficiency	98.6%		98.7%	
EU Efficiency	98.0%		98.1%	
Night Consumption	< 1 W			
<b>ENVIRONMENT</b>				
Protection Degree	IP66			
Cooling	Intelligent redundant fan-cooling			
Operating Temperature Range	-25 ° C to +60 ° C			
Operating Humidity	0 - 100 % Condensing			
Operating Altitude	4000 m			
<b>DISPLAY AND COMMUNICATION</b>				
Display	LCD			
Communication	RS485, Optional: Wi-Fi, GPRS			
<b>MECHANICAL DATA</b>				
Dimensions (W / H / D)	310 x 563 x 219 mm			
Weight	17.8 kg	18.8 kg	20 kg	
Installation Angle	0~15 Degrees from Vertical			
DC Inputs	MC4			
<b>SAFETY</b>				
Safety and EMC Standard	IEC62109-1/-2, EN61000-6-2, EN61000-6-3			
Grid Standard	IEC61727			

\*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. 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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