



# THREE PHASE STRING INVERTER 125-255 KW

**CSI-125K-T600 | CSI-185K-T600 | CSI-255K-T800**

CSI Solar's grid-tied, transformer-less string inverters help to accelerate the use of three-phase string architecture for medium 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 99.0% conversion efficiency, a wide operating range of 480-1500 V DC, and 9-12 MPPTs for maximum energy harvest.



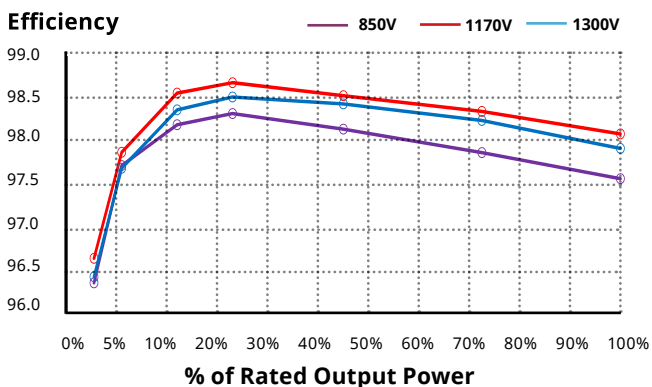
**standard warranty, extension up to 20 years**

## KEY FEATURES

- Maximum efficiency of 99.0%
- CEC efficiency of 98.3%
- 9-12 MPPTs to achieve higher system efficiency
- High current inputs to support high power and bifacial modules

## EFFICIENCY CURVE

CSI-255K-T800GL03-U



For detailed information, please refer to the Installation Manual.

## HIGH RELIABILITY

- NEMA X4 (IP66) and C5 protection level
- Intelligent redundant air cooling design
- Built in over-voltage and over-current protection
- DC reverse polarity and AC short circuit protection
- AFCI protection, proactively reduces fire risk

## BROAD ADAPTIBILITY

- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Integrated DC switches
- 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 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.

**Canadian Solar (USA), INC.**

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597, USA Website: [www.csisolar.com/na](http://www.csisolar.com/na)

**SYSTEM/TECHNICAL DATA**

MODEL NAME	CSI-125K-T600GL03-U	CSI-185K-T600GL03-U	CSI-255K-T800GL03-U
<b>DC INPUT</b>			
Max. DC Input Voltage		1500 V <sub>DC</sub>	
Rated DC Voltage	950 V <sub>DC</sub>	950 V <sub>DC</sub>	1080 V <sub>DC</sub>
Start-up DC Input Voltage		500 V <sub>DC</sub>	
Number of MPP Trackers	9		12
MPPT Voltage Range		480 - 1500 V <sub>DC</sub>	
Max. Input Current (Imp)		30 A per MPPT	
Max. Short Circuit Current (Isc)		50 A per MPPT	
Number of DC Input	18 (2 per MPPT)		24 (2 per MPPT)
DC Switch		Integrated	
<b>AC OUTPUT</b>			
Rated AC Output Power	125 kW	185 kW	255 kW
Max. AC Output Power	137.5kW	185 kW	255 kW
Rated Output Voltage	600 V <sub>AC</sub>	600 V <sub>AC</sub>	800 V <sub>AC</sub>
Grid Connection Type		3L / PE	
Rated Grid Output Current	132.3 A	178 A	184 A
Rated Output Frequency		60 Hz	
Power Factor		> 0.99 (0.8 leading ... 0.8 lagging)	
Current THD		< 3 %	
<b>SYSTEM</b>			
Max. Efficiency		99.0 %	
EU Efficiency		98.3 %	
Night Consumption		< 2 W	
<b>ENVIRONMENT</b>			
Cooling		Intelligent Redundant Cooling	
Protection Degree		Type 4X	
Operating Temperature Range		-13 °F to +140 °F / -25 °C to +60 °C	
Storage Environment		-40 °F to +176 °F / -40 °C to +80 °C	
Operating Humidity		0 - 100 %	
Noise Emission		≤ 65dB (A)	
Operating Altitude		13120 ft / 4000 m	
<b>DISPLAY AND COMMUNICATION</b>			
Display		LCD	
Communication		RS485	
<b>MECHANICAL DATA</b>			
Dimensions (W / H / D)		1170 x 770 x 384 mm / 46.1 x 30.3 x 15.1 inch	
Weight	109 kg / 240 lb		113 kg / 249 lb
DC Connection		MC4	
AC Connection		OT Terminal Connectors	
Topology		Transformerless	
<b>SAFETY</b>			
Compliance	UL 1741SB, UL 1741SA, UL 1998, UL1699B, IEEE 1547-2018, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, California Rule 21		

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.

**Canadian Solar (USA), INC.**

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597, USA Website: [www.csisolar.com/na](http://www.csisolar.com/na)

March 2022, All rights reserved. PV Inverter Product Datasheet V1.2\_EN