

THREE PHASE STRING INVERTER 255 KW

CSI-255K-T800



Canadian Solar's grid-tied, transformer-less string inverters help to accelerate the use of three-phase string architecture for 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 99.0% conversion efficiency, a wide operating range of 600-1500 V_{DC} and 14 MPPTs for maximum energy harvest.



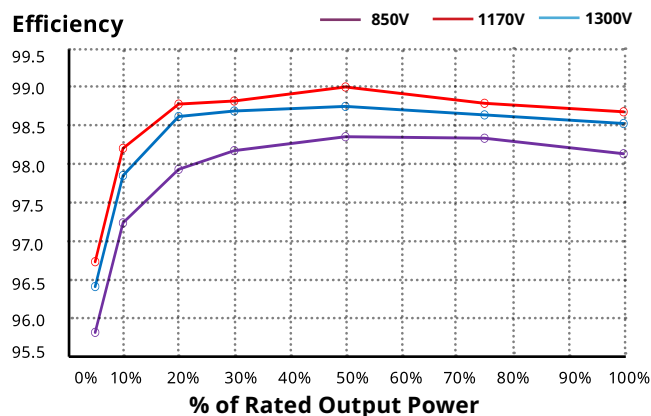
standard warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 99.0%, CEC efficiency of 98.5%
- 14 MPPTs to achieve higher system efficiency
- 13A input for each PV string
- Smart string monitoring and IV curve diagnosis
- PLC/RS-485 multiple communication modes, flexible monitoring

EFFICIENCY CURVE

CSI-255K-T800GL02-U



For detailed information, please refer to the Installation Manual.

HIGH RELIABILITY

- NEMA 4X protection level
- Intelligent redundant air cooling design
- Built in over-voltage and over-current protection
- DC reverse polarity and AC short circuit protection

BROAD ADAPTIBILITY

- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Integrated DC 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 (USA), 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 46 GW deployed around the world since 2001.

CANADIAN SOLAR (USA), INC.

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SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-255K-T800GL02-U
DC INPUT	
Max. PV Power	255 kW
Max. DC Input Voltage	1500 V _{DC}
Start-up DC Input Voltage/Power	620 V _{DC}
Number of MPP Trackers	14
MPPT Voltage Range	600 - 1500 V _{DC}
Max. Input Current (Imp)	14 x 26 A
Max. Short Circuit Current (Isc)	14 x 40 A
Number of DC Inputs	28
DC Switch	Integrated
AC OUTPUT	
Rated AC Output Power	255 kW
Max. AC Output Power	255 kW
Rated Output Voltage	800 V _{AC}
Rated Output Voltage Range*	640 - 920 V _{AC}
Grid Connection Type	3W / N / PE
Max Output Current	184.0 A
Rated Output Frequency	60 Hz
Output Frequency Range*	59.5 - 60.5 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	99.0 %
CEC Efficiency	98.5 %
Night Consumption	< 2 W
Anti-PID Module	Optional
ENVIRONMENT	
Protection Degree	NEMA 4X
Cooling	Intelligent redundant Cooling
Operating Temperature Range	-13 °F to +140 °F / -25° C to +60 °C
Storage Temperature Range	40 °F to +176 °F / -40 °C to +80 °C
Operating Humidity	0 - 100 % condensing
Operating Altitude	13,123.4 ft / 4000 m
Audible Noise	< 65 dBA @ 1 m
DISPLAY AND COMMUNICATION	
Display	LCD
Communication	RS485, Optional:PLC
MECHANICAL DATA	
Dimensions (W / H / D)	1170 x 770 x 384 mm / 46.1 x 30.3 x 15.1 inch
Weight	113 kg / 249.1 lbs
Installation Angle	0 ~ 15 Degrees from Vertical
DC Inputs	MC4
SAFETY	
Compliance	UL 1741, UL1741SA, Rule21, UL 1998, IEEE 1547, FCC Part 15 (Class A&B) CAN/CSA C22.2 107.1-1, Rule 21 phaes I& II & III

*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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