

# 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 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 99.0% conversion efficiency, a wide operating range of 600-1500 V  $_{\rm DC}$ , 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%
- · Fourteen MPPTs to achieve higher system efficiency
- PLC/RS-485 multiple communication modes, flexible monitoring

# **HIGH RELIABILITY**

- IP 66 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 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

CANADIAN SOLAR 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 40 GW deployed around the world since 2001.

For detailed information, please refer to the Installation Manual.

### CANADIAN SOLAR INC.

SYSTEM/TECHNICAL DATA	
MODEL NAME	CSI-255K-T800GL02-E
DC INPUT	
Max. PV Power	255 KW
Max. DC Input Voltage	1500 V <sub>DC</sub>
Start-up DC Input Voltage/Power	620 V <sub>DC</sub>
Number of MPP Trackers	14
MPPT Voltage Range	600 - 1500 V <sub>DC</sub>
Max. Input Current (Imp)	14*26A
Max. Short Circuit Current (Isc)	14*40A
Number of DC Inputs	14/28
DC Disconnection Type	Load rated DC switch
AC OUTPUT	
Rated AC Output Power	255 KW
Max. AC Output Power	255 KW
Rated Output Voltage*	800 V <sub>AC</sub>
Grid Connection Type	3W / N / PE
Max Output Current	184.0 A
Rated Output Frequency	50 / 60 Hz
Output Frequency Range*	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	99.0 %
CEC Efficiency	98.5 %
Night Consumption	< 2 W
Anti-PID Module	Optional
ENVIRONMENT	
Protection Degree	IP66
Cooling	Intelligent redundant Cooling
Operating Temperature Range	-25 ° C to +60 ° C
Storage Temperature Range	-40 ° C to +80 ° C
Operating Humidity	0 - 100 % condensing
Operating Altitude	4000 m
Audible Noise	<65 dBA @ 1 m
DISPLAY AND COMMUNICATION	
Display	LCD, 2×20 Z
Communication	RS485, Optional:PLC
MECHANICAL DATA	
Dimensions (W / H / D)	1170 x 770 x 384 mm
Weight	113 kg
Installation Angle	0~15 Degrees from Vertical
DC Inputs	MC4
SAFETY	
Safety and EMC Standard	IEC 62109-1/2, IEC 61000-6-1/2/3/4
Grid Standard	IEC 62116, IEC 61727

 $<sup>{\</sup>bf *The~"Rated~Output~Voltage~Range"~and~"Output~Frequency~Range"~may~differ~according~to~specific~grid~standard.}\\$ 

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.

### **CANADIAN SOLAR INC.**