

# THREE PHASE STRING INVERTER 80 KW

## CSI-80K-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 98.7% conversion efficiency, a wide operating range of 180-1000 V<sub>DC</sub>, and ten MPPTs for maximum energy harvest.



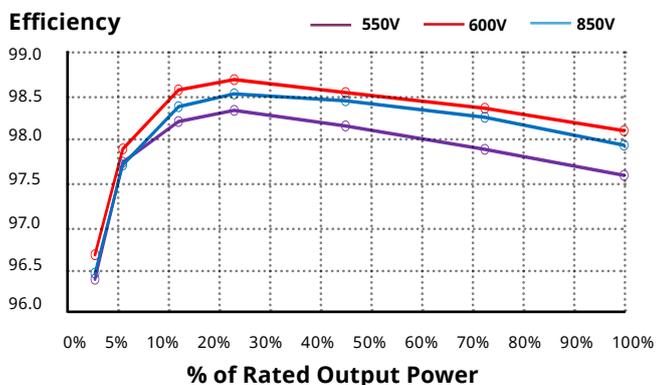
**standard warranty, extension up to 20 years**

### KEY FEATURES

- Maximum efficiency of 98.7%, Maximum EU efficiency of 98.3%
- Nine MPPTs to achieve higher system efficiency
- 13A input for each PV string
- Integrated DC Switches, AC switch optional
- Smart string intelligent monitoring and IV curve diagnosis

### EFFICIENCY CURVE

CSI-80K-T400GL02-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
- 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.

### CANADIAN SOLAR INC.

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**SYSTEM/TECHNICAL DATA**

MODEL NAME	CSI-80K-T400GL02-E
<b>DC INPUT</b>	
Max. PV Power	126 KW
Max. DC Input Voltage	1100 V <sub>DC</sub>
Start-up DC Input Voltage/Power	195 V <sub>DC</sub>
Number of MPP Trackers	9
MPPT Voltage Range	180 - 1000 V <sub>DC</sub>
Max. Input Current (Imp)	234 A (26 A per MPPT)
Max. Short Circuit Current (Isc)	360 A (40 A per MPPT)
Number of DC Inputs	18 (2 per MPPT)
DC Disconnection Type	Load rated DC switch
<b>AC OUTPUT</b>	
Rated AC Output Power	80 KW
Max. AC Output Power	88 KW
Rated Output Voltage*	220/380 V <sub>AC</sub>
Grid Connection Type	3W / N / PE
Rated Grid Output Current	121.6 A
Max Output Current	133.7 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
<b>SYSTEM</b>	
Max. Efficiency	98.7 %
EU Efficiency	98.3 %
Night Consumption	< 2 W
Anti-PID Module	Optional
<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	< 65 dBA @ 1 m
<b>DISPLAY AND COMMUNICATION</b>	
Display	LCD, 2 × 20 Z
Communication	RS485 / WiFi Optional
<b>MECHANICAL DATA</b>	
Dimensions (W / H / D)	1050 x 567 x 314.5 mm
Weight	82 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 "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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