



# THREE PHASE STRING INVERTER 25-30 KW

## CSI-25KTL-GI-L | CSI-30KTL-GI-L

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 97.5% conversion efficiency, a wide operating range of 200-850 V<sub>DC</sub> and two MPPTs for maximum energy harvest.



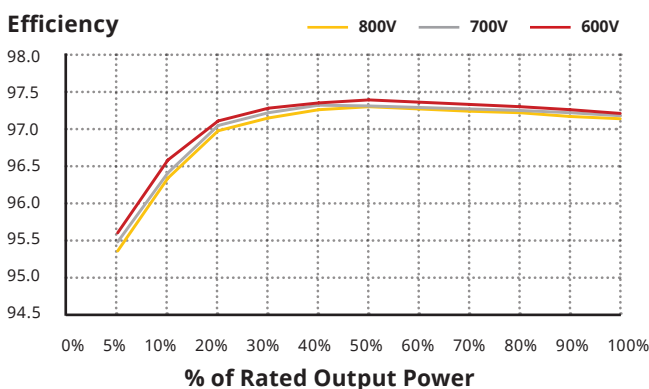
**Standard warranty, extension up to 20 years**

### KEY FEATURES

- Maximum efficiency of 97%, Maximum EU efficiency of 96.5%
- 2 MPPTs to achieve higher system efficiency
- Transformerless design
- High switching frequency and ultra fast MPPT for maximum efficiency over a wide load range

### EFFICIENCY CURVE

CSI-30KTL-GI-LFL@220 V<sub>AC</sub>



\*For detailed information, please refer to the Installation Manual.

### HIGH RELIABILITY

- Advanced thermal design and convection cooling
- Built in over-voltage and over-current protection
- DC reverse polarity and AC short circuit protection

### BROAD ADAPTIBILITY

- IP65 rated for outdoor application
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Integrated DC and AC load rated disconnects
- Supports up to 6 DC string inputs (3 per MPPT)
- Wide MPPT range for flexible string sizing

**CANADIAN SOLAR (USA), INC.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 26 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

### CANADIAN SOLAR (USA), INC.

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**SYSTEM/TECHNICAL DATA**

MODEL NAME	CSI-25KTL-GI-L	CSI-30KTL-GI-L
<b>DC INPUT</b>		
Max. PV Power	30 kW	36 kW
Max. DC Input Voltage	1100 V <sub>DC</sub>	
Start-up DC Input Voltage/Power	200 V <sub>DC</sub>	
Number of MPP Trackers	2	
MPPT Voltage Range	200-850 V <sub>DC</sub>	
Max. Input Current (Imp)	57 A (28.5 A per MPPT)	
Max. Short Circuit Current (Isc)	89 A (44.5 A per MPPT)	
Number of DC Inputs	6 (3 per MPPT)	
DC Disconnection Type	Load rated DC switch	
<b>AC OUTPUT</b>		
Rated AC Output Power	25 kW	30 kW
Max. AC Output Power	27.5 kW	30 kW
Rated Output Voltage	220 V <sub>AC</sub>	
Output Voltage Range*	180 - 270 V <sub>AC</sub>	
Grid Connection Type	3 $\Phi$ / PE	
Rated Grid Output Current	65.6 A	78.8 A
Max Output Current	72.2 A	78.8 A
Rated Output Frequency	50 / 60 Hz	
Output Frequency Range*	47 - 52 / 57 - 62 Hz	
Power Factor	1 default ( $\pm 0.8$ adjustable)	
Current THD	< 3 %	
DC Injection Current	< 50 mA	
AC Disconnect Type	Load rated AC switch	
<b>SYSTEM</b>		
Topology	Transformerless	
Max. Efficiency	97.0 %	
EU Efficiency	96.5%	
Night Consumption	< 1 W	
<b>ENVIRONMENT</b>		
Protection Degree	IP65	
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	
Noise Emission (typical)	<30 dBA @ 1 m	
<b>DISPLAY AND COMMUNICATION</b>		
Display	LCD + LED	
Communication	Standard: RS485 (Modbus)	
<b>MECHANICAL DATA</b>		
Dimensions (W / H / D)	630 x 700 x 357 mm	
Weight	63 kg	
Installation Angle	90 degrees from horizontal	
DC Inputs	MC4 compatible	
<b>SAFETY</b>		
Safety and EMC Standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3	
Grid Standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727	
Smart-Grid Features	Voltage-Ride Thru, Frequency-Ride Thru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt	

\*The "Output Voltage Range" and "Output Frequency Range" may differ according to specific grid standard.

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

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.