



THREE PHASE STRING INVERTER 25-40 KW

**CSI-25KTL-GS-FLB | CSI-30KTL-GS-FLB
CSI-36KTL-GS-FLB | CSI-40KTL-GS-FLB**

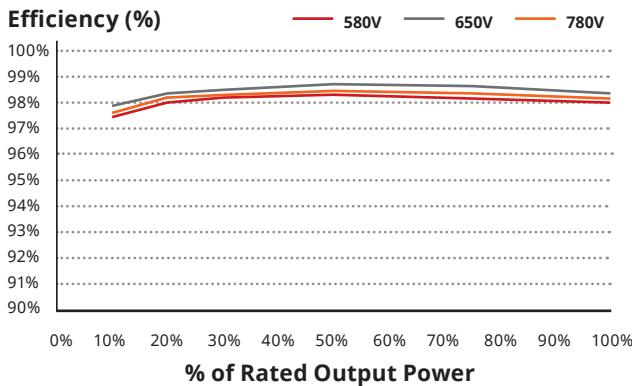
Canadian Solar's grid-tied, transformer-less string inverters help accelerate the use of three-phase string architecture for commercial rooftop and small ground-mount applications. An NRTL approved, cost-effective alternative to central inverters, these inverters are modular design building blocks that provide high yield and enable significant BoS cost savings. They provide up to 98.6% conversion efficiency, a wide operating range of 200-800 V_{DC}, and four MPPTs for maximum energy harvest.

KEY FEATURES

- Maximum efficiency of 98.6%, CEC efficiency of 98.3%
- 4 MPPTs to achieve higher system efficiency
- Transformerless design
- High switching frequency and ultra fast MPPT (<5 sec.) for maximum efficiency over a wide load range

EFFICIENCY CURVE

CSI-40KTL-GS-FL@480 V



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

CANADIAN SOLAR (USA), INC.

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Standard warranty, extension up to 20 years

HIGH RELIABILITY

- Advanced thermal design
- Ground-fault detection and interruption circuit
- AFCI Integrated (per UL1699B, factory enabled option)

BROAD ADAPTABILITY

- NEMA 4X (IP65), outdoor application
- Utility interactive controls: active power derating, reactive power control and over frequency derating
- Separable wiring box design
- Integrated DC and AC load rated disconnects
- Wide MPPT range for flexible string sizing
- 90 degree installation angle
- AC terminals compatible with copper and aluminum conductors (Al with bimetallic terminal)
- Supports up to 8 DC string inputs (2 per MPPT)

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 33 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-25KTL-GS-FLB	CSI-30KTL-GS-FLB	CSI-36KTL-GS-FLB	CSI-40KTL-GS-FLB
DC INPUT				
Max. PV Power	37.5 kW (13.5 kW/MPPT)	45 kW (13.5 kW/MPPT)	54 kW (13.5 kW/MPPT)	54 kW (13.5 kW/MPPT)
Max. DC Input Voltage		1000 V _{DC}		
Operating DC Input Voltage Range		200-800 V _{DC}		
Start-up DC Input Voltage/Power		350 V		
Number of MPP Trackers		4		
MPPT Voltage Range	347-800 V _{DC}	417-800 V _{DC}	500-800 V _{DC}	556-800 V _{DC}
Operating Current (Imp)		72 A (18 A per MPPT)		
Max. Input Current (Isc)		112.4 A (28.1 A per MPPT)		
Number of DC Imputs		8 (2 per MPPT)		
DC Disconnection Type		Load rated DC switch		
AC OUTPUT				
Rated AC Output Power	25 kW	30 kW	36 kW	40 kW
Max. AC Output Power	27.5 kW	33 kW	40 kW	44 kW
Rated Output Voltage		480 V _{AC}		
Output Voltage Range*		422.4 - 528 V _{AC}		
Grid Connection Type		3 Φ/PE		
Nominal AC Output Current @480 Vac	30.1 A	36.1 A	43.3 A	48.1 A
Rated Output Frequency		60 Hz		
Output Frequency Range*		59.5 - 60.5 Hz		
Power Factor		1 default (±0.8 adjustable)		
Current THD		< 3 %		
AC Disconnection Type		Load rated AC switch		
SYSTEM				
Topology		Transformerless		
Max. Efficiency		98.6 %		
CEC Efficiency		98.3 %		
Night Consumption		< 1 W		
ENVIRONMENT				
Protection Degree		NEMA 4X		
Cooling		Natural Convection Cooling		
Operating Temperature Range		-13 ° F to + 140 ° F / -25 ° C to +60 ° C		
Storage Temperature Range		-40 ° F to + 158 ° F / -40 ° C to +70 ° C		
Operating Humidity		0 - 100 % condensing		
Operating Altitude		13,123.4 ft / 4000 m		
Audible Noise		<30 dBA @ 1 m		
DISPLAY AND COMMUNICATION				
Display		LCD + LED		
Communication		Standard: RS485 (Modbus)		
MECHANICAL DATA				
Dimensions (W / H / D)		23.4 x 37.2 x 14.4 in / 595 x 945 x 356.5 mm		
Weight		147.7 lb / 67 kg		
Installation Angle		90 degrees from horizontal		
DC Inputs		15 A standard		
SAFETY				
Safety and EMC Standard		UL1741-SA, UL1699B, CSA-C22.2 No. 107.1-01, IEEE1547; FCC PART 15		
Grid Standard		IEEE1547, Rule 21		
Smart-Grid Features		Voltage-Ride Thru, Frequency-Ride Thru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt		

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.

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

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.