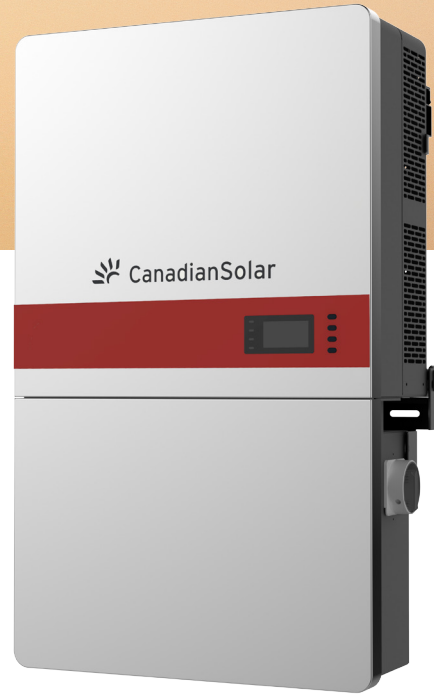




THREE-PHASE STRING INVERTER 50/60 KW

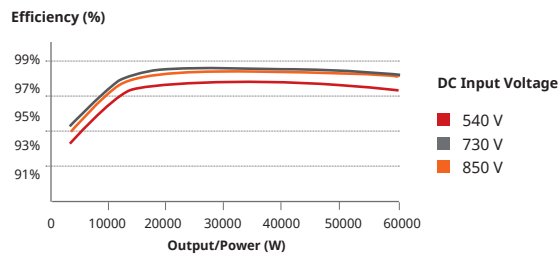
CSI-50KTL-CT & CSI-60KTL-CT

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 99% conversion efficiency, a wide operating range of 300-950 Vdc, and three MPPTs for maximum energy harvest.



EFFICIENCY CURVE

CSI-60KTL-CT@480 V



Max. efficiency of 98.8%, CEC efficiency of 98%

3 MPPTs to achieve higher system efficiency

Transformerless design

3-level technology and enhanced control mechanism to achieve high efficiency over wide load range

HIGH RELIABILITY

- Standard warranty: 10 years, extension up to 20 years
- Advanced thermal design with variable speed fans
- 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 overfrequency derating
- Separate wiring box design
- Integrated DC and AC load rated disconnects
- Wide MPPT range for flexible string sizing
- 0 – 90 degree installation angle
- AC terminals compatible with copper and aluminum conductors
- Supports up to 15 DC string inputs (5 per MPPT)

CANADIAN SOLAR 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 15 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-50KTL-CT	CSI-60KTL-CT
DC INPUT		
Max. PV-Power	75kW (25 kW/MPPT)	90kW (30 kW/MPPT)
Nominal DC Input Power	51 kW	61 kW
Max. DC Input Voltage	1000V _{DC}	
Operating DC Input Voltage Range	200-950V _{DC}	
Start-up DC Input Voltage/Power	330V / 300W	
Number of MPP Trackers	3	
MPPT Voltage Range	480-850V _{DC}	540-850V _{DC}
Operating Current (Imp)	108A (36A per MPPT)	114 A (38 A per MPPT)
Max. Input Current (Isc)	150 A (50 A per MPPT)	180 A (60 A per MPPT)
Number of DC Inputs	15 inputs, 5 per MPPT	
DC Disconnection Type	Load rated DC switch	
AC OUTPUT		
Rated AC Output Power	50 kW	60 kW
Max. AC Output Power	50 kVA	60 kVA
Rated Output Voltage	480 V _{AC}	
Output Voltage Range*	422 – 528 V _{AC}	
Grid Connection Type	3Φ/PE/N	
Nominal AC Output Current @480Vac	60 A	72 A
Rated Output Frequency	60 Hz	
Output Frequency Range*	57 – 63 Hz	
Power Factor	> 0.99 (±0.8 adjustable)	
Current THD	< 3%	
AC Disconnection Type	Load rated AC switch	
SYSTEM		
Topology	Transformerless	
Max efficiency	98.8%	
CEC efficiency	98.0%	
Stand-by/Night Consumption	< 30 W / < 2 W	
ENVIRONMENT		
Protection Degree	NEMA 4X	
Cooling	Variable Speed Cooling Fans	
Operating Temperature Range	-22°F to +140°F / -30°C to +60°C (derating from +113°F / +45°C)	
Storage Temperature Range	-40°F to +158°F / -40°C to +70°C	
Operating Humidity	0 – 95%, non-condensing	
Operating Altitude	13,123.4 ft / 4000 m (derating from 6,561.7 ft / 2000 m)	
Audible Noise	<50dBA @ 1m and 25°C	
DISPLAY AND COMMUNICATION		
Display	LCD+LED	
Communication	Standard: RS485 (Modbus), optional: TCP/IP Card	
MECHANICAL DATA		
Dimensions (WxHxD)	600×1000×260 mm (23.6 × 39.4 ×10.24 in)	
Weight	Inverter: 123.5 lbs / 59 kg; Wirebox: 33 lbs / 15 kg	
Installation Angle	0 – 90 degrees from horizontal	
Fused String Inputs(5 per MPPT)	15A standard (20, 25, 30A acceptable)	
SAFETY		
Safety and EMC Standard	UL1741:2010, UL1699B, CSA-C22.2 No. 107.1-01, IEEE1547;FCC PART 15	
Grid Standard	IEEE1547, Rule 21, HECO/Rule14	
Smart-Grid Features	Voltage-RideThru, Frequency-RideThru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt	

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