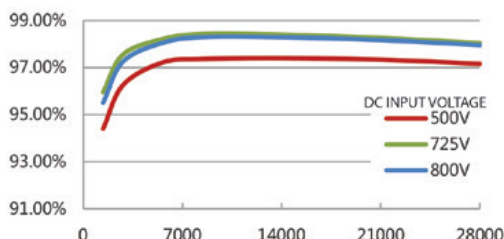


THREE-PHASE STRING INVERTER 23 - 28 kW

The three phase grid-tied transformerless string inverter offers dual MPPTs to accommodate two arrays mounted at different azimuth and/or tilt angles, different string length—even different size modules. With a 98% CEC conversion efficiency and a wide operating window of 300-900 VDC, it will provide maximum power generation. The use of 1000V DC will enable BoS cost saving.

Efficiency Curve

CSI KTL-0/US@240Vac



High Efficiency

- Max. Efficiency of 98.4%, CEC efficiency of 98%
- 3-level technology and enhanced control mechanism to achieve high efficiency over wide load range
- 2 MPPTs to achieve higher system efficiency
- Transformerless design

High Reliability

- "Electrolyte-free design" for improved long-term reliability
- Standard Warranty: 5 years, extension up to 20 years
- Advanced thermal design, with variable speed fans
- Ground-fault detection and interruption circuit
- ARC-fault detection function (factory enabled option)

Broad Adaptability

- NEMA 4 (IP65), outdoor application
- Active power derating, over frequency derating and reactive power adjustable
- Separate wiring box design
- Low voltage ride through
- Integrated DC, AC disconnects
- Wide MPPT range for flexible string sizing
- 1000V Max. DC input voltage for flexible configuration
- 15 - 90 degree installation orientation



Canadian Solar Inc.

Founded in 2001 in Ontario, Canada, Canadian Solar is one of the world's largest and foremost solar power companies. As a leading manufacturer of solar photovoltaic modules and provider of solar energy solutions, Canadian Solar has an industry leading and geographically diversified pipeline of utility-scale solar power projects as well as a track record of successful solar deployment boasting over 7GW of premium quality modules installed in over 70 countries during the past 13 years. Canadian Solar is committed to providing high-quality solar products and solar energy solutions to customers around the world. For more information about our company, products and projects please visit www.canadiansolar.com.

Model Name	CSI-23KTL-CT	CSI-28KTL-CT
DC Input		
Max. PV Power	31kW	38kW
Nominal DC Input Power	24kW	29kW
Max. DC Input Voltage		1000Vdc
Operating DC Input Voltage Range		300-900Vdc
Start-up DC Input Voltage/Power		330V/300W
Number of MPP Trackers		2
MPPT Voltage Range*	480-800Vdc	500-800Vdc
Max. Input Current (Imp)	54A (27A per MPPT)	64A (32A per MPPT)
Max. Short Circuit Current (Isc)	82A (41A per MPPT)	96A (48A per MPPT)
Number of DC Inputs		8 inputs, 4 per MPPT
DC Disconnection Type		Load rated DC switch
AC Output		
Rated AC Output Power	23kW	28kW
Max. AC Output Power	23kW	28kW
Rated Output Voltage		480Vac
Output Voltage Range		422-528Vac
Grid Connection Type		3φ/N/PE
Max. AC Output Current	32A	39A
Rated Output Frequency		60Hz
Output Frequency Range*		55-66Hz
Power Factor		>0.99 (±0.8 adjustable)
Current THD		<3%
AC Disconnection Type		Load rated AC switch
System		
Topology		Transformerless
Max efficiency		98.4%
CEC efficiency		98.0%
Stand-by/Night Consumption		<20W/<2W
Environment		
Protection Degree		NEMA 4
Cooling		Variable Speed Cooling Fans
Operating Temperature Range	-13°F to +140°F / -25°C to +60°C (derating from +113°F/+45°C)	
Operating Humidity	0-95%, non-condensing	
Operating Altitude	13123.4ft / 4000m (derating from 6561.7ft/2000m)	
Display and Communication		
Display		LCD+LED
Communication		Standard: RS485 (Modbus)
Mechanical Data		
Dimensions (WxHxD)	23.6x39.4x9.1in/600x1000x230mm	
Weight	122lbs/55kg	
Safety		
Safety and EMC Standard	UL1741:2010, CSA C22.2 No. 107.1-01, IEEE1547:FCC PART 15	
Grid Standard	IEEE1547: 2003, IEEE1547.1:2005	

*The "MPPT Voltage Range" is adjustable through LCD operations.

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

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