THREE PHASE STRING INVERTER 60KW
CSI-60KTL-GI

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 98.8% conversion efficiency, a wide operating range of 200-1000 Voc, and four MPPTs for maximum energy harvest.

KEY FEATURES

- Maximum efficiency up to 98.8%, Maximum CEC efficiency up to 98.4%
- 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

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 ADAPTABILITY

- IP65 rated for outdoor application
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Integrated DC load rated disconnect
- Wide MPPT range for flexible string sizing
- 90 degree installation angle
- Supports up to 8 DC string inputs (2 per MPPT)

EFFICIENCY CURVE

CSI-60KTL-GI

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

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 33 GW deployed around the world since 2001, Canadian Solar Inc. is one of the most bankable solar companies worldwide.
**SYSTEM/TECHNICAL DATA**

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<th>MODEL NAME</th>
<th>CSI-60KTL-G1</th>
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### DC INPUT

- **Max. PV Power**: 72kW
- **Max. DC Input Voltage**: 1100 V
- **Operating DC Input Voltage Range**: 200-1000 V
- **Start-up DC Input Voltage**: 200 V
- **Number of MPP Trackers**: 4
- **MPPT Full Power Voltage Range**: 526-850 V
- **Operating Current (Imp)**: 114 A (28.5 A per MPPT)
- **Max. Input Current (Isc)**: 178 A (44.5 A per MPPT)
- **Number of DC Imputs**: 8 (2 per MPPT)
- **DC Disconnection Type**: Load rated DC switch

### AC OUTPUT

- **Rated AC Output Power**: 60 kW
- **Max. AC Output Power**: 66 kW
- **Rated Output Voltage**: 400 V
- **Output Voltage Range**: 304-460 V
- **Grid Connection Type**: 3/N/PE
- **Nominal AC Output Current**: 86.6 A
- **Rated Output Frequency**: 50/60 Hz
- **Output Frequency Range**: 47-52/57-62 Hz
- **Power Factor**: 1 default (±0.8 adjustable)
- **Current THD**: < 3 %

### SYSTEM

- **Topology**: Transformerless
- **Max. Efficiency**: 98.8 %
- **CEC Efficiency**: 98.4 %
- **Night Consumption**: < 1 W

### ENVIRONMENT

- **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 %
- **Operating Altitude**: 4000 m
- **Audible Noise**: <60 dBA @ 1 m

### DISPLAY AND COMMUNICATION

- **Display**: LCD, 2*20
- **Communication**: WiFi or GPRS

### MECHANICAL DATA

- **Dimensions (W / H / D)**: 630 x 700 x 357 mm
- **Weight**: 63 kg
- **Installation Angle**: 90 degrees from horizontal
- **DC Inputs**: MC4

### SAFETY

- **Safety and EMC Standard**: IEC62109-1/-2
- **Grid Standard**: AS4777.2:2015, VDE0126-1-1, IEC61727, VDE4105, EN50438,
- **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.*

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* 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 further 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.