

THREE PHASE STRING INVERTER 25-40 KW

CSI-25K-T400 | CSI-30K-T400
CSI-33K-T400 | CSI-36K-T400 | CSI-40K-T400

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 MLPE, 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 180-1000 V_{DC}, and 4 MPPTs for maximum energy harvest.



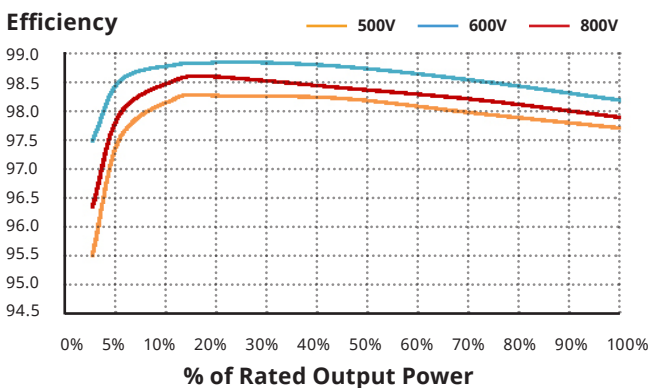
standard warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 98.8%, Maximum EU efficiency of 98.3%
- 4 MPPTs to achieve higher system efficiency
- Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- Up to 30% DC input oversize, 13A input for each PV string

EFFICIENCY CURVE

CSI-40K-T400GL02-E



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
- Fuse free design

BROAD ADAPTIBILITY

- IP65 rated for outdoor application
- Utility interactive controls: Active power derating, reactive power control and over frequency derating
- Wide MPPT range for flexible string sizing
- High switching frequency and ultra fast MPPT for maximum efficiency over a wide load range

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 40 GW deployed around the world since 2001.

CANADIAN SOLAR INC.

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SYSTEM/TECHNICAL DATA

| MODEL NAME | CSI-25K-T400GL02-E | CSI-30K-T400GL02-E | CSI-33K-T400GL02-E | CSI-36K-T400GL02-E | CSI-40K-T400GL02-E |
|----------------------------------|--------------------------------------|--------------------|--------------------|-----------------------|--------------------|
| DC INPUT | | | | | |
| Max. PV Power | 33 kW | 39 kW | 43 kW | 47 kW | 52 kW |
| Max. DC Input Voltage | 1100 V _{DC} | | | | |
| Start-up DC Input Voltage/Power | 180 V _{DC} | | | | |
| Number of MPP Trackers | 3 | | | 4 | |
| MPPT Voltage Range | 200 - 1000 V _{DC} | | | | |
| Max. Input Current (Imp) | 78 A (26 A per MPPT) | | | 104 A (26 A per MPPT) | |
| Max. Short Circuit Current (Isc) | 120 A (40 A per MPPT) | | | 160 A (40 A per MPPT) | |
| Number of DC Inputs | 6 (2 per MPPT) | | | 8 (2 per MPPT) | |
| DC Switch | Integrated | | | | |
| AC OUTPUT | | | | | |
| Rated AC Output Power | 25 kW | 30 kW | 33 kW | 36 kW | 40 kW |
| Max. AC Output Power | 27.5 kW | 33 kW | 36.3 kW | 39.6 kW | 44 kW |
| Rated Output Voltage* | 400 V _{AC} | | | | |
| Grid Connection Type | 3 W / N / PE | | | | |
| Rated Grid Output Current | 36 A | 43.3 A | 47.6 A | 51.9 A | 57.7 A |
| Max Output Current | 41.8 A | 50.2 A | 55.1 A | 60.2 A | 66.9 A |
| Rated Output Frequency | 50 / 60 Hz | | | | |
| Output Frequency Range* | 47 - 52 / 57 - 62 Hz | | | | |
| Power Factor | > 0.99 (0.8 leading ... 0.8 lagging) | | | | |
| Current THD | < 3% | | | | |
| DC Injection Current | < 0.5 % of Rated Grid Output Current | | | | |
| SYSTEM | | | | | |
| Max. Efficiency | 98.8 % | | | | |
| EU Efficiency | 98.3 % | | | | |
| Night Consumption | < 1 W | | | | |
| Anti-PID Module | Optional | | | | |
| ENVIRONMENT | | | | | |
| Protection Degree | IP65 | | | | |
| Cooling | Natural Convection 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 | | | | |
| Audible Noise | < 30 dBA @ 1 m | | | | |
| DISPLAY AND COMMUNICATION | | | | | |
| Display | LCD, 2 × 20 Z | | | | |
| Communication | WIFI / RS485 Optional | | | | |
| MECHANICAL DATA | | | | | |
| Dimensions (W / H / D) | 647 × 629 × 252 mm | | | | |
| Weight | 45 kg | | | | |
| Installation Angle | 0 – 15 Degrees from Vertical | | | | |
| DC Inputs | MC4 | | | | |
| SAFETY | | | | | |
| Safety and EMC Standard | IEC 62109-1/2, IEC 61000-6-1/2/3/4 | | | | |
| Grid Standard | IEC 62116, IEC 61727 | | | | |

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

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 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.

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