



THREE PHASE STRING INVERTER 50-60KW

CSI-50K-T400 | CSI-60K-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 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 180-1000 V_{DC}, and 5 to 6 MPPTs for maximum energy harvest.



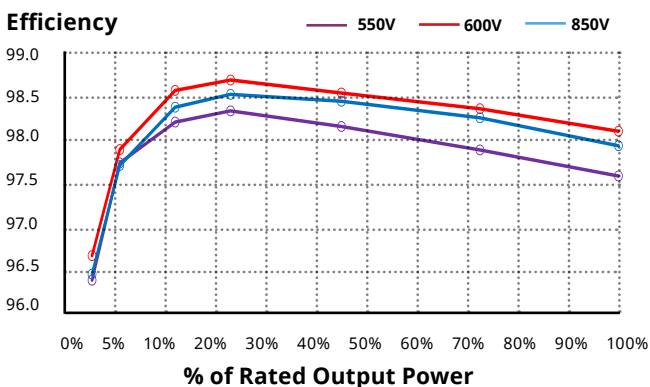
standard warranty, extension up to 15 years

KEY FEATURES

- Maximum efficiency of 98.8%, Maximum EU efficiency of 98.3%
- 5 to 6 MPPTs to achieve higher system efficiency
- 16A input for each PV string
- Integrated DC Switches
- Smart string monitoring and IV curve diagnosis

EFFICIENCY CURVE

CSI-60K-T400GL03-E



For detailed information, please refer to the Installation Manual.

HIGH RELIABILITY

- Intelligent redundant fan-cooling
- SPD Type II on both DC and AC sides
- Leakage current repression technology
- Fuse free design
- DC reverse polarity protection

BROAD ADAPTIBILITY

- IP66 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

CSI SOLAR CO., LTD. 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 55 GW deployed around the world since 2001.

CSI SOLAR CO., LTD.

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SYSTEM/TECHNICAL DATA

| MODEL NAME | CSI-50K-T400GL03-E | CSI-60K-T400GL03-E |
|----------------------------------|---|-----------------------|
| DC INPUT | | |
| Max. DC Input Voltage | 1100 V _{DC} | |
| Start-up DC Input Voltage/Power | 195 V _{DC} | |
| Number of MPP Trackers | 5 | 6 |
| MPPT Voltage Range | 180 - 1000 V _{DC} | |
| Max. Input Current (Imp) | 160 A (32 A per MPPT) | 192 A (32 A per MPPT) |
| Max. Short Circuit Current (Isc) | 250 A (50 A per MPPT) | 300 A (50 A per MPPT) |
| Number of DC Inputs | 10 (2 per MPPT) | 12 (2 per MPPT) |
| DC Switch | Integrated | |
| AC OUTPUT | | |
| Rated AC Output Power | 50 kW | 60 kW |
| Max. AC Output Power | 55 kW | 66 kW |
| Rated Output Voltage | 220 / 380 V _{AC} , 230 / 400 V _{AC} | |
| Grid Connection Type | 3W / N / PE | |
| Rated Grid Output Current | 76.0 A | 91.2 A |
| Max Output Current | 83.6 A | 100.3 A |
| Rated Output Frequency | 50 / 60 Hz | |
| Output Frequency Range* | 45 - 55 / 55 - 65 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 | IP66 | |
| Cooling | Intelligent Redundant 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 | < 55 dBA @ 1 m | |
| DISPLAY AND COMMUNICATION | | |
| Display | LCD, 2 × 20 Z | |
| Communication | RS485, Optional: Wi-Fi, PLC | |
| MECHANICAL DATA | | |
| Dimensions (W / H / D) | 750 × 600 × 350 mm | |
| Weight | 70 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 "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. CSI Solar Co., Ltd. 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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