

# THREE PHASE STRING INVERTER 15-30 KW

**CSI-15K-T220 | CSI-20K-T220**  
**CSI-25K-T220 | CSI-30K-T220**

CSI 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 98.4% conversion efficiency, a wide operating range of 180-1000 V<sub>DC</sub>, and 3/4 MPPTs for maximum energy harvest.



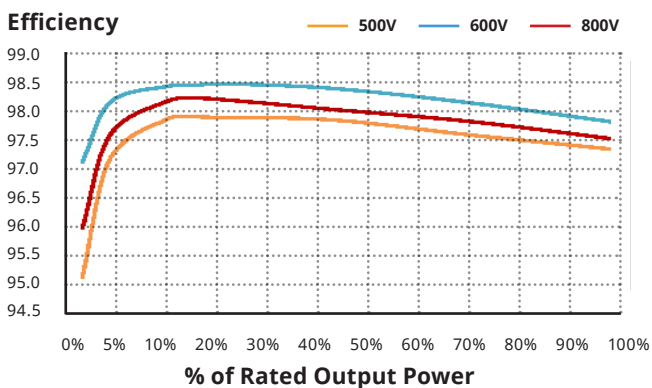
**standard warranty, extension up to 15 years**

## KEY FEATURES

- Maximum efficiency of 98.4%, Maximum EU efficiency of 98.0%
- 3/4 MPPTs to achieve higher system efficiency
- Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- 16A input for each PV string

## EFFICIENCY CURVE

CSI-30K-T220GL03-E



For detailed information, please refer to the Installation Manual.

## CSI SOLAR CO., LTD.

199 Lushan Road, SND, Suzhou, Jiangsu, China, 215129 [www.csisolar.com](http://www.csisolar.com)

## HIGH RELIABILITY

- Advanced thermal design and Intelligent Redundant Fan cooling
- Built-in over-voltage and over-current protection
- DC reverse polarity and AC short circuit protection
- Fuse free design

## BROAD ADAPTIBILITY

- TYPE 4X rated for outdoor application
- AFCI protection, proactively reduces fire risk
- Night time PID recovery function, increases overall system yield (optional)
- 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 photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 20 years, it has successfully delivered over 63 GW of premium-quality solar modules across the world.

## SYSTEM/TECHNICAL DATA

| MODEL NAME                       | CSI-15K-T220GL03-E                                    | CSI-20K-T220GL03-E | CSI-25K-T220GL03-E         | CSI-30K-T220GL03-E  |
|----------------------------------|---|--------------------|----------------------------|---------------------|
| <b>DC INPUT</b>                  |   |                    |                            |                     |
| Max. DC Input Voltage            | 1100 V <sub>DC</sub>                                  |                    |                            |                     |
| Start-up DC Input Voltage/Power  | 180 V <sub>DC</sub>                                   |                    |                            | 195 V <sub>DC</sub> |
| Number of MPP Trackers           | 3   |                    |                            | 4                   |
| MPPT Voltage Range               | 200 - 1000 V <sub>DC</sub>                            |                    | 180 - 1000 V <sub>DC</sub> |                     |
| Max. Input Current (Imp)         | 96 A (32 A per MPPT)                                  |                    | 128 A (32 A per MPPT)      |                     |
| Max. Short Circuit Current (Isc) | 150 A (50 A per MPPT)                                 |                    | 200 A (50 A per MPPT)      |                     |
| Number of DC Inputs              | 6 (2 per MPPT)  |                    | 8 (2 per MPPT)             |                     |
| DC Switch                        | Integrated  |                    |                            |                     |
| <b>AC OUTPUT</b>                 |   |                    |                            |                     |
| Rated AC Output Power            | 15 kW   | 20 kW              | 25 kW                      | 30 kW               |
| Max. AC Output Power             | 15 kW   | 20 kW              | 25 kW                      | 30 kW               |
| Rated Output Voltage             | 220 V <sub>AC</sub>                                   |                    |                            |                     |
| Grid Connection Type             | 3 W / N / PE  |                    |                            |                     |
| Rated Grid Output Current        | 39.4 A  | 52.5 A             | 65.6 A                     | 78.7 A              |
| Max Output Current               | 43.3 A  | 57.7 A             | 72.2 A                     | 86.6 A              |
| Rated Output Frequency           | 60 Hz   |                    |                            |                     |
| Power Factor                     | > 0.99 (0.8 leading ... 0.8 lagging)                  |                    |                            |                     |
| Current THD                      | < 3%  |                    |                            |                     |
| <b>SYSTEM</b>                    |   |                    |                            |                     |
| Max. Efficiency                  | 97.8 %  |                    | 98.4 %                     |                     |
| EU Efficiency                    | 97.3 %  |                    | 98.0 %                     |                     |
| Night Consumption                | < 1 W   |                    |                            |                     |
| Anti-PID Module                  | Optional  |                    |                            |                     |
| <b>ENVIRONMENT</b>               |   |                    |                            |                     |
| DC / AC SPD                      | DC SPD Type II / AC SPD Type II                       |                    |                            |                     |
| Protection Degree                | TYPE 4X   |                    |                            |                     |
| Cooling                          | Intelligent Redundant Fan Cooling                     |                    |                            |                     |
| Operating Temperature Range      | - 25 °C to + 60 °C                                    |                    |                            |                     |
| Operating Humidity               | 0 - 100 % Condensing                                  |                    |                            |                     |
| Operating Altitude               | 4000 m  |                    |                            |                     |
| <b>DISPLAY AND COMMUNICATION</b> |   |                    |                            |                     |
| Display                          | LCD   |                    |                            |                     |
| Communication                    | RS485, Optional: Wi-Fi                                |                    |                            |                     |
| <b>MECHANICAL DATA</b>           |   |                    |                            |                     |
| Dimensions (W / H / D)           | 647 x 629 x 252 mm                                    |                    | 691 x 578 x 338 mm         |                     |
| Weight                           | 37 kg   |                    | 54.5 kg                    |                     |
| DC Connector                     | MC4   |                    |                            |                     |
| Compliance                       | UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA |                    |                            |                     |

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.

**CSI SOLAR CO., LTD.**

199 Lushan Road, SND, Suzhou, Jiangsu, China, 215129 [www.csisolar.com](http://www.csisolar.com)

December 2021, All rights reserved. PV Inverter Product Datasheet V1.0\_EN