



THREE PHASE STRING INVERTER 50-66 KW

CSI-50K-T480GL01-UB | CSI-60K-T480GL01-UB
CSI-66K-T480GL01-UB

Canadian Solar's grid-tied, transformer-less string inverters help 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 200-850 V_{DC}, and four MPPTs for maximum energy harvest.



Tigo Enhanced for rapid shutdown



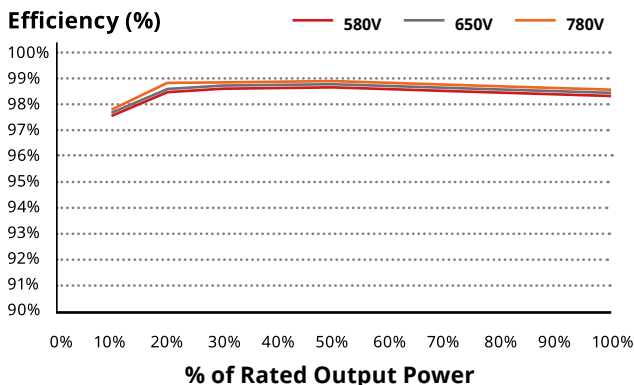
standard warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 98.8%, CEC efficiency of 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
- Compatible with SunSpec or Tigo Transmitter
- Rapid Shutdown: integrated Tigo RSS or SunSpec transmitter

EFFICIENCY CURVE

CSI-66KTL-GS@480 V



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

HIGH RELIABILITY

- Advanced thermal design with fan assisted cooling
- Ground-fault detection and interruption circuit
- AFCI Integrated (per UL1699B, factory enabled option)

BROAD ADAPTIBILITY

- NEMA 4X (IP65), outdoor application
- Utility interactive controls: active power derating, reactive power control and over frequency derating
- Separable wiring box design
- Integrated DC and AC load rated disconnects
- Wide MPPT range for flexible string sizing
- 0-90 degree installation angle
- AC terminals compatible with copper and aluminum conductors (Al with bimetallic terminal)
- Supports up to 16 DC string inputs (4 per MPPT)

CSI SOLAR (USA) CO., LTD. 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 63 GW deployed around the world since 2001, CSI Solar Co., Ltd. is one of the most bankable solar companies worldwide.

CSI SOLAR (USA) CO., LTD.

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94598, USA | www.csisolar.com/na | service.ca@csisolar.com

SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-50K-T480GL01-UB	CSI-60K-T480GL01-UB	CSI-66K-T480GL01-UB
DC INPUT			
Max. DC Input Voltage		1000 V _{DC}	
Operating DC Input Voltage Range		200-850 V _{DC}	
Start-up DC Input Voltage/Power		200 V	
Number of MPP Trackers		4	
MPPT Voltage Range	568-850 V _{DC}	526-850 V _{DC}	579-850 V _{DC}
Operating Current (Imp)		114 A (28.5 A per MPPT)	
Max. Input Current (Isc)		220 A (55 A per MPPT)	
Number of DC Inputs		16 (4 per MPPT)	
DC Disconnection Type		Load rated DC switch	
AC OUTPUT			
Rated AC Output Power	50 kW	60 kW	66 kW
Max. AC Output Power	50 kW	60 kW	66 kW
Rated Output Voltage		480 V _{AC}	
Output Voltage Range ¹		422.4 - 528 V _{AC}	
Grid Connection Type		3 Φ /PE	
Nominal AC Output Current @480 Vac	60.2 A	72.2 A	79.4 A
Rated Output Frequency		60 Hz	
Output Frequency Range ²		59.5 - 60.5 Hz	
Power Factor		1 default (\pm 0.8 adjustable)	
Current THD		< 3 %	
AC Disconnection Type		Load rated AC switch	
SYSTEM			
Topology		Transformerless	
Max. Efficiency	98.8 %	98.7 %	98.8 %
CEC Efficiency		98.4 %	
Night Consumption		< 1 W	
ENVIRONMENT			
Protection Degree		NEMA 4X	
Cooling		Intelligent Redundant Cooling	
Operating Temperature Range		-13 °F to +140 °F / -25 °C to +60 °C	
Storage Temperature Range		-40 °F to +158 °F / -40 °C to +70 °C	
Operating Humidity		0 - 100 %	
Operating Altitude		13,123.4 ft / 4000 m	
Audible Noise		<60 dBA @ 1 m	
DISPLAY AND COMMUNICATION			
Display		LCD + LED	
Communication		Standard: RS485 (Modbus)	
MECHANICAL DATA			
Dimensions (W / H / D)		24.8 x 47.5 x 14.7 in / 630 x 1206 x 374 mm	
Weight ³		172 lb / 78 kg	
Installation Angle		0-90 degrees from horizontal	
DC Inputs		20 A standard	
SAFETY			
Safety and EMC Standard	UL 1741:2010 IEEE 1547.1:2005 IEEE 1547A:2014 UL1699B, CSA C22.2#107.1:2016 Ed.4		
Grid Standard	IEEE 1547:2003		
Smart-Grid Features	Voltage-Ride Thru, Frequency-Ride Thru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt		

1. "Output Voltage Range" may differ according to specific grid standard.
2. "Output Frequency Range" may differ according to specific grid standard.
3. "Net Weight" tolerance \pm 1kg

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.