



# THREE PHASE STRING INVERTER 25-40 KW

# CSI-25K-T480GL01-UB | CSI-30K-T480GL01-UB CSI-36K-T480GL01-UB | CSI-40K-T480GL01-UB

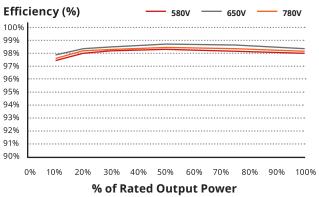
Canadian Solar's grid-tied, transformer-less string inverters help accelerate the use of three-phase string architecture for commercial rooftop and small ground-mount applications. An NRTL approved, cost-effective alternative to central inverters, these inverters are modular design building blocks that provide high yield and enable significant BoS cost savings. They provide up to 98.6% conversion efficiency, a wide operating range of 200-800 V<sub>pc</sub>, and four MPPTs for maximum energy harvest.

## **KEY FEATURES**

- Maximum efficiency of 98.6%, CEC efficiency of 98.3%
- 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
- Rapid Shutdown: integrated Tigo RSS or SunSpec transmitter

# **EFFICIENCY CURVE**

#### CSI-40KTL-GS-FL@480 V



For detailed information, please refer to the Installation Manual.

CSI SOLAR (USA) CO., LTD.



# Tigo Enhanced for rapid shutdown

W CanadianSola

10 years

standard warranty, extension up to 20 years

#### HIGH RELIABILITY

- Advanced thermal design
- 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
- 90 degree installation angle
- AC terminals compatible with copper and aluminum conductors (Al with bimetallic terminal)
- Supports up to 8 DC string inputs (2 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.

MODEL NAME	CSI-25K-T480GL01-UB	CSI-30K-T480GL01-UB	CSI-36K-T480GL01-UB	CSI-40K-T480GL01-UE
DC INPUT	L			
Max. PV Power	37.5 kW (13.5 kW / MPPT)	45 kW (13.5 kW / MPPT)	54 kW (13.5 kW / MPPT)	54 kW (13.5 kW / MPPT)
Max. DC Input Voltage	$1000 V_{pc}$			
Operating DC Input Voltage Range	200-800 V <sub>pc</sub>			
Start-up DC Input Voltage/Power	350 V			
Number of MPP Trackers	4			
MPPT Voltage Range	347-800 V <sub>DC</sub>	417-800 V <sub>DC</sub>	500-800 V <sub>pc</sub>	556-800 V <sub>DC</sub>
Operating Current (Imp)		•	per MPPT)	
Max. Input Current (Isc)	112.4 A (28.1 A per MPPT)			
Number of DC Imputs	8 (2 per MPPT)			
DC Disconnection Type	Load rated DC switch			
ACOUTPUT				
Rated AC Output Power	25 kW	30 kW	36 kW	40 kW
Max. AC Output Power	27.5 kW	33 kW	40 kW	44 kW
Rated Output Voltage		<u>L</u>	) V <sub>AC</sub>	
Output Voltage Range*	422.4 - 528 V <sub>AC</sub>			
Grid Connection Type	3 Φ/ΡΕ			
Nominal AC Output Current @480 Vac	30.1 A	36.1 A	43.3 A	48.1 A
Rated Output Frequency			Hz	
Output Frequency Range*	59.5 - 60.5 Hz			
Power Factor	1 default (±0.8 adjustable)			
Current THD	<3%			
AC Disconnection Type	Load rated AC switch			
SYSTEM				
Topology		Transfo	rmerless	
Max. Efficiency	98.6 %			
CEC Efficiency	98.3 %			
Night Consumption	98.3 m <1 W			
ENVIRONMENT				
Protection Degree Cooling	NEMA 4X Natural Convection Cooling			
Operating Temperature Range	-13 °F to +140 °F / -25 °C to +60 °C			
	-13 °F to +140 °F / -25 °C to +60 °C -40 °F to +158 °F / -40 °C to +70 °C			
Storage Temperature Range				
Operating Humidity	0 - 100 % condensing 13,123.4 ft / 4000 m			
Operating Altitude	13,123.4 TT / 4000 m <30 dBA @ 1 m			
		~30 dB.		
			+ I ED	
Display	LCD + LED Standard: RS485 (Modbus)			
MECHANICAL DATA		Stanuard, KS		
Dimensions (W / H / D)		20 9 x 45 9 x 14 1 in /	530 x 1167 x 358 mm	
Weight	20.9 x 45.9 x 14.1 in / 530 x 1167 x 358 mm 147.7 lb / 67 kg			
Installation Angle	90 degrees from horizontal			
DC Inputs	20 A standard			
SAFETY		20 A St	unuuru	
	1744		·2011/11116000 CCA C22 2#1074.2	016 Ed <i>1</i>
Safety and EMC Standard Grid Standard	UL 1741:2010 IEEE 1547.1:2005 IEEE 1547A:2014 UL1699B, CSA C22.2#107.1:2016 Ed.4 IEEE1547:2003			
Smart-Grid Features	Voltage-Ride Thru, Frequency-Ride Thru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt			

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein. \*The "Output Voltage Range" and "Output Frequency Range" may differ according to specific grid standard.

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.