

PVI 25TL-480

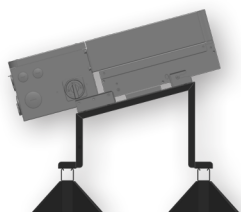
3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTER

FEATURES

- 1000 VDC
- Certified to IEEE 1547-2018 and UL 1741SB
- 2 MPPTs with 3 inputs each
- Integrated DC and AC disconnects
- AC terminals compatible with copper and aluminum conductors
- SunSpec Modbus compliant
- 15 - 90° installation orientation
- Remote diagnostics
- Built-in SunSpec compliant transmitter for Module-Level Rapid Shutdown
- UL Listed as PV Rapid Shutdown Systems with APsmart, Northern Electric Power (NEP), and Tigo Energy
- LED indicator light
- Yaskawa Connect Pro app for system visibility
- Compatible with Bifacial PV Modules

OPTIONS

- Web-based monitoring
- Shade cover
- 15° rooftop mounting rack
- * Rooftop Mounting Kit includes support legs for a 15° tilt angle and shade cover (not depicted)



Yaskawa Solectria Solar's PVI 25TL-480 is a state-of-the-art compact 3-phase string inverter, ideal for rooftops, carports and ground-mount PV systems.



PVI 25TL-480 DESIGN

The PVI 25TL-480 comes standard with AC and DC disconnects, two MPPTs, and a wiring box with six fuse positions for the positive conductors (compliant with the 2017 and 2020 NEC).

For rooftop PV systems, both wirebox models provide PV Rapid Shutdown System (PVRSS) compliance and include a built-in SunSpec compliant powerline communication transmitter. One wirebox model is Tigo Enhanced for rapid shutdown and the other wirebox model is compatible with APsmart rapid shutdown devices.

Yaskawa Solectria Solar also offers its Roof-Mounting Kit, to simplify installation on rooftops. Yaskawa Solectria Solar's family of PVI 25TL-480 inverter models provides flexibility and convenience unmatched in the industry



PVI 25TL-480 TECHNICAL DATA

SPECIFICATIONS

PVI 25TL-480 Commercial Transformerless String Inverter		
DC Input	Maximum PV Power	37.5 kW (22 kW per MPPT)
	Maximum Input Voltage	1000 VDC
	DC Voltage Ranges: Operating / Maximum Power (MPPT)	200 – 950 VDC / 560 – 850 VDC
	Start-up DC Input Voltage / Power	330 V / 80 W
	Maximum Available PV Current (Isc x 1.25)	90 A (45 A per MPPT)
AC Output	DC Surge Protection	Type II MOV, 1240 V _c , 15 kA I _{TM} (8/20 μs)
	Rated AC Real Power / Apparent Power / Output Current	25 kW / 25 kVA / 30.5 A
	Nominal Output Voltage / Range	480 VAC / -12% to +10%
	Nominal Output Frequency / Range	60 Hz / 57-63 Hz
	Power Factor	Unity, > 0.99 (Adjustable 0.8 leading to 0.8 lagging)
	Fault Current Contribution (1 Cycle RMS)	28.2 A
	Total Harmonic Distortion (THD) @Rated Load	< 3%
	Grid Connection Type	3-Ph/PE/N (neutral conductor optional)
	Maximum OCPD Device	50 A
	AC Surge Protection	Type II MOV, 1025 V _c , 15 kA I _{TM} (8/20 μs)
Efficiency	Peak Efficiency	98.5%
	CEC Efficiency	98.0%
	Tare Loss	< 1 W
Environment	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C); Derating occurs over +113°F (+45°C)
	Storage Temperature Range	No low temp minimum; up to +158°F (+70°C)
	Relative Humidity (non-condensing)	0-100%
	Operating Altitude	13,123 ft (4,000 m); Derating occurs from 9,842.5 ft (3,000 m)
Communications	Modbus Protocol	Proprietary / SunSpec
	SolnView Web-Based Monitoring Service	Optional
	Revenue Grade Metering	Optional, External
	Communication Interface	LED Display, Yaskawa Connect Pro app (Wi-Fi)
	Remote Firmware Upgrades	Ethernet Network Card required
	Remote Diagnostics	Ethernet Network Card required
Safety	Certifications and Standards	IEEE 1547-2018, UL 1741-SB, UL1741-SA, UL1699B, UL1998, CSA-C22.2 NO.107.1-01, FCC Part 15 (Subpart B, Class A)
	Selectable Grid Standards	IEEE 1547, CA Rule 21, ISO-NE
	Smart Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt, Watt-VAR
Warranty	Standard Limited Warranty	10 Years
Mechanical	Acoustic Noise Rating	< 50 dBA @ 1 m at 25°C
	AC/DC Disconnect	Standard, fully-integrated
	Mounting Angle	15-90° from horizontal (angled to vertical)
	Dimensions (H x W x D)	Power Head: 15.95 in. x 15.75 in. x 7.875 in (405 mm x 400 mm x 200 mm) Wirebox: 10.24 in. x 15.75 in. x 7.875 in (260 mm x 400 mm x 200 mm)
	Weight	Power Head: 48.5 lbs (22 kg); Wirebox: 13.2 lbs (6 kg)
	Enclosure Rating and Finish	NEMA Type 4X; Polyester Powder Coated Aluminum

Wirebox Specifications			
Wirebox Fuse Configuration		6 Fused Positions (3 Positions per MPPT), 20A Fuses Standard (25, 30A accepted) **	
Wirebox Versions	APsmart Transmitter Built-In	Inverter Model: PVI-25TL-480-APS20 (only positive polarity fused)	MLRSD Compatibility: APSmart RSD-S and RSD-D
	Tigo Transmitter Built-In	Inverter Model: VI-25TL-480-TGO20 (only positive polarity fused)	MLRSD Compatibility: Tigo TS4-A-F (ver 6.7+) and TS4-A-2F

* Please inquire at inverters@solectria.com for more information
 ** Yaskawa Solectria Solar does not supply optional fuse sizes

