# **PVI 25TL-480**

## 3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTER

### FEATURES

- 1000 VDC
- UL 1741SA listed
- 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
- Inverter models listed as PV Rapid Shutdown Systems with devices from Tigo Energy, APsmart and Northern Electric Power (NEP)
- LED indicator lights
- Yaskawa Connect app for system visibility

#### 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

Tigo Enhanced

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, all three models provide PV Rapid Shutdown System (PVRSS) certification and include built-in SunSpec compliant powerline transmitters. One model is Tigo Enhanced for rapid shutdown; other models are compatible with the APsmart and Northern Electric Power (NEP) 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





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#### SPECIFICATIONS

PVI 25TL Commercial Transformerless String Inverter		
	Maximum PV Power	37.5 kW total, 22 kW per MPPT
DC Input	Maximum DC Input Voltage	1000 VDC
	Operating DC Input Voltage Range / MPPT Voltage Range	200 - 950 VDC / 560 - 850 VDC
	Start-up DC Input Voltage / Power	900 V / 250 W
	Number of MPP Trackers / Inputs	2 MPPT / 3 Inputs each
	Maximum PV Short-Circuit Current (Isc x 1.25)	90 A total, 45A per MPPT
	DC Disconnection Type	Load-rated DC switch
	DC Surge Protection	Type II MOV, 1240VC, 15kA ITM (8/20s)
AC Output Efficiency	Nominal Output Voltage	480 VAC, 3-Ph/PE/N
	Maximum Output Current	30.5 A
	AC Voltage Range (Standard)	-12% to +10%
	Continuous Output Power, Real/Apparent	25 kW / 25 kVA
	Nominal Output Frequency (Range)	60 Hz (57 Hz - 63 Hz)
	Power Factor	Unity (>0.99 default), Adjustable 0.8 leading to 0.8 lagging
	Fault Current Contribution (1 Cycle RMS)	22 A
	Total Harmonic Distortion (THD) @ Rated Load	< 3%
	Recommended AC Overcurrent Protection Device Rating	40 A ( <= AC Maximum Output Current x 1.25)
	AC Surge Protection	Type III MOV, 1240Vc, 15kA ltm (8/20µ)
	Peak Efficiency	98.5%
	CEC Efficiency	98.0%
	Tare Loss	1 W
Integrated String Combiner	Fused Inputs	6 Fused Positions (3 positions per MPPT) 20 A Standard
Temperature	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C); Derating occurs over +104°F (+40°C)
	Storage Temperature Range	Up to +158°F (+70°C)
	Relative Humidity (non-condensing)	0-95%
	Operating Altitude	13,123 ft (4,000 m); Derating occurs from 8,202 ft (2,500 m)
Communications	Modbus Protocol	Proprietary / SunSpec
	Data Logger Hardware	Standard, Internal
	SolrenView 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
Features & Protections	Arc-Fault	Standard
	Smart Grid Features	L/HVRT, L/HFRT, Volt-VAR, Freq-Watt, Volt-Watt, Soft-Start, Soft-Step,
		Specified-PF
Testing & Certifications	Safety Listings & Certifications	UL 1741SA-2018, UL1699B, CSA-C22.2 #107.1, IEEE1547a-2014
	Advanced Grid Support Functionality	Rule 21, UL 1741SA, ISO-NE
	Testing Agency	Intertek
14/h	FCC Compliance	FCC Part 15 (Subpart B, Class A)
Warranty	Standard Limited Warranty	10 Years
Enclosure	Acoustic Noise Rating	< 50 dBA @ 1 m at room temperature
	AC/DC Disconnect	Standard, fully-integrated
	Mounting Angle	15-90° from horizontal (angled to vertical) Power Head: 15.95 in. x 15.75 in. x 7.875 in (405 mm x 400 mm x 200 mm)
	Dimensions (H x W x D) Weight	Wiring Box: 10.24 in, x 15.75 in, x 7.875 in (260 mm x 400 mm x 200 mm) Power Head: 48.5 lbs (22 kg); Wiring Box: 13.2 lbs (6 kg)
	Enclosure Rating and Finish	Type 4X; Polyester Powder Coated Aluminum
PV Rapid Shutdown System Certifications	PVI-25TL-480-APS20 (APS transmitter built-in)	PVRSS Compatibility: APsmart: RSD-S-PLC-A
	PVI-25TL-480-NEP20 (NEP transmitter built-in, Available Q4 2021)	PVRSS Compatibility: Northern Electric Power: PVG-1/2/3/4
	PVI-25TL-480-TGO20 (Tigo RSS transmitter built-in)	PVRSS Compatibility: Tigo Energy: TS4-A-F (ver 6.7+), TS4-A-2F

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







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