

PVI 25TL

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
- Modbus communications
- 15 - 90° installation orientation
- Remote diagnostics
- Built-in SunSpec compliant transmitter for Module-Level Rapid Shutdown*
- LED indicator lights
- Yaskawa Connect app for system visibility

Options

- Web-based monitoring
- Shade cover
- 15° rooftop mounting rack

* Please inquire about compatible Module-Level Power Electronics (MLPE)

Yaskawa Solectria Solar's PVI 25TL is a compact grid-tied, transformerless three-phase string inverter ideal for rooftop, ground mount and carport PV arrays. The PVI 25TL inverter comes standard with AC and DC disconnects, two MPPTs, a six-position fused wiring box with fusing only for the positive conductors (NEC 2017), remote diagnostics, remote firmware upgrades and various protection features. Included is a SunSpec compliant powerline transmitter to allow customers to meet module-level rapid shutdown requirements easily.

Specifications

PVI 25TL Commercial Transformerless String Inverter		
DC Input	Absolute Maximum Input Voltage	1000 VDC
	Number of MPP Trackers	2
	Maximum Design DC-to-AC Ratio	1.5
	Maximum Power Voltage Range (MPPT)	560 - 850 VDC
	Operating Voltage Range (MPPT)	200 - 950 VDC
	Maximum Operating Input Current (DC clipping)	23.3 A per MPPT
	Maximum Operating PV Power (per MPPT)	13 kW
	Maximum Rated PV Input (per MPPT)	19.5 kW
	Maximum Rated PV Current, I _{sc} x 1.25 (per MPPT)	45 A per MPPT
AC Output	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)	TBD
	Total Harmonic Distortion (THD) @ Rated Load	< 3%
	Recommended AC Overcurrent Protection Device Rating	40 A (≤ AC Maximum Output Current x 1.25)
Efficiency	AC Surge Protection	Type III MOV, 1240Vc, 15kA I _{tm} (8/20μ)
	Peak Efficiency	98.5%
	CEC Efficiency	98.0%
Integrated String Combiner	Tare Loss	< 5 W
	Fused Inputs	6 Fused Positions (3 Positions per MPPT) 15 A Standard (20 A accepted) **
Temperature	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C); Derating occurs over +104°F (+40°C)
	Storage Temperature Range	-40°F (-40°C) +158°F (+70°C)
	Relative Humidity (non-condensing)	0-95%
	Operating Altitude	9,843 ft (3,000 m); Derating occurs from 8,202 ft (2,500 m)
Communications	Data Logger Hardware	Standard, Internal
	SolrenView Web-Based Monitoring Service	Optional
	Revenue Grade Metering	Optional, External
	Communication Interface	LED Display, Yaskawa Connect app (WiFi and Bluetooth®)
	Remote Firmware Upgrades	Standard
Features & Protections	Remote Diagnostics	Standard
	Arc-Fault	Standard
	Smart Grid Features	L/HVRT, L/HFRT, Volt-Var, Frequency-Watt and Volt-Watt, Soft-Start, Soft-Step
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	CSA
	FCC Compliance	FCC Part 15
Warranty	Standard Limited Warranty	10 Years
	Acoustic Noise Rating	< 68 dBA @ 1 m at room temperature
Enclosure	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)
	Weight	Wiring Box: 10.24 in. x 15.75 in. x 7.875 in (260 mm x 400 mm x 200 mm)
	Enclosure Rating and Finish	Power Head: 48.5 lbs (22 kg); Wiring Box: 13.2 lbs (6 kg) Type 4X; Polyester Powder Coated Aluminum

** Yaskawa Solectria Solar does not supply optional fuse sizes

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