SOLECTRIA® PVI-25TL-480

3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTER

FEATURES

- Certified to IEEE 1547-2018 and UL 1741SB
- Wirebox models with built-in SunSpec compliant transmitters for Module-Level Rapid Shutdown for simple, safe NEC compliance
- UL Listed as a PV Rapid Shutdown System with APsmart
- Integrated UL-listed Arc-Fault protection
- 15-90° mounting angle allows low-profile rooftop installations
- 2 MPPT's with 3 inputs each for PV array flexibility
- Industry-leading DC/AC ratio of 1.5
- Integrated AC and DC disconnects
- Remote firmware upgrades and diagnostics
- NEMA 4X outdoor rated enclosure with proven performance
- Copper and Aluminum compatible AC connections
- 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, the wirebox provides RV Rapid Shutdown System (PVRSS) compliance with a built-in SunSpec compliant powerline communication transmitter, 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





SOLECTRIA® PVI-25TL-480 TECHNICAL DATA

SPECIFICATIONS

PVI-25TL-480 Commercial Transformerless String Inverter (Listing File Model: PVI25TL-480-R)				
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		
	Number of MPPT Trackers / Inputs	2 Trackers / 3 Fused-Inputs each		
	Maximum Available PV Current (Isc x 1.25)	90 A (45 A per MPPT)		
	DC Surge Protection	Type II MOV, 1240 $V_{_{\rm C}}$, 15 kA I $_{_{ m TM}}$ (8/20 μ s)		
AC Output	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)	31 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 μ s)		
Efficiency	Peak Efficiency	98.5%		
	CEC Efficiency	98.0%		
	Tare Loss	<1W		
	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C); Derating occurs over +113°F (+45°C)		
	Storage Temperature Range	-40°F to +158°F / -40°C to +70°C		
Environment	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		
	SolrenView Web-Based Monitoring Service	Optional		
	Revenue Grade Metering	Optional, External		
Communications	Communication Interface	LED Display, Yaskawa Connect Pro app (Bluetooth®)		
	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 1547a-2014, IEEE 1547-2018, CA Rule 21, ISO-NE, HECO		
	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	< 60 dBA		
	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), 25 A Fuse Included (15-30 A accepted) **		
Wirebox Versions	APsmart Transmitter Built-In	Inverter Model: PVI-25TL-480-APS25 (only positive polarity fused)	MLRSD Compatibility: APsmart RSD-S and RSD-D	

^{*} Please inquire at sales@solectria.com for more information

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^{**} Yaskawa Solectria Solar does not supply optional fuse sizes