

SOLECTRIA® PVI 25TL-208

25 KW, 208 VAC, 1000 VDC STRING INVERTERS

Features

- UL Listed as PV Rapid Shutdown Systems with APsmart, NEP and Tigo Energy
- NEC 2017 compliant & UL listed Arc-Fault circuit protection
- 15-90° Mounting orientation for low profile roof installs
- Optional Ethernet Network Card enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 3 MPPT's with 2 inputs each for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated enclosure
- Certified to IEEE 1547-2018 and UL 1741SB
- Separable wirebox design for fast service
- Standard 10 year warranty
- Generous 1.8 DC/AC Inverter Load Ratio
- Compatible with Bifacial PV Modules



Rapid Shutdown Ready Wirebox

New



Yaskawa Solectria Solar's PVI 25TL-208 25kW (25kVA) three phase string inverters are designed for rooftop and carport applications

PVI 25TL-208 DESIGN

These high performance, advanced and reliable inverters are designed specifically for the North American environment and grid.

High efficiency at 97.0% peak and 96.5% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications.

The product ships with the Rapid Shutdown Ready wirebox, fully integrated and separable with touch-safe fusing, monitoring, and AC and DC disconnect switches.

The integrated Sunspec compliant PLC transmitter in the wirebox enables PVRSS certified module-level rapid shutdown when used with APsmart, NEP, and Tigo products.

The Ethernet Network Card enables monitoring, controls and remote product upgrades.



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SOLECTRIA® PVI 25TL-208 TECHNICAL DATA

SPECIFICATIONS

PVI 25TL-208 Commercial Transformerless String Inverter		
DC Input	Maximum PV Power	45 kW (17 kW per MPPT)
	Maximum Input Voltage	1000 VDC
	DC Voltage Ranges: Operating / Maximum Power (MPPT)	200 - 950 VDC / 480 - 850 VDC
	Start-up DC Input Voltage / Power	330 V / 80 W
	Number of MPPT Trackers/Inputs	3 Trackers / 2 Fused-Inputs each
	Maximum Available PV Current (Isc x 1.25)	135 A (45 A per MPPT)
	DC Surge Protection	Type II MOV, 2800 V _c , 20 kA _{ITM} (8/20 μs)
AC Output	Rated AC Real Power / Apparent Power / Output Current	25 kW / 25 kVA / 69.5 A
	Nominal Output Voltage / Range	208 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)	64.1 A
	Total Harmonic Distortion (THD) @Rated Load	< 3%
	Grid Connection Type	3-Ph/PE/N (neutral conductor optional)
	Maximum OCPD Device	125 A
	AC Surge Protection	Type II MOV, 1240 VC, 15 kA ITM (8/20 μs)
	Efficiency	Maximum Efficiency / CEC Efficiency
Stand-by / Night Consumption		< 3 W
Environment	Enclosure Protection Degree	NEMA Type 4X
	Cooling Method	Variable speed cooling fans
	Operating Temperature Range ¹	-22°F to +140°F / - 30°C to +60°C
	Non-Operating Temperature Range	No low temp minimum to +158°F / +70°C maximum
	Operating Humidity	0 to 100%
Display and Communication	Operating Altitude	13,123.4 ft / 4000 m (derating from 9842.5 ft / 3000 m)
	Modbus Protocol	Proprietary / SunSpec
	SolrenView Web-based Monitoring Service	Optional
	Revenue Grade Metering	Optional, external
	Communication Interface	RS-485
	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 Standard	IEEE 1547, 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 Terms	10 years
Mechanical	Acoustic Noise Rating	< 60 dBA @ 1m and 25°C
	Dimensions (H x W x D)	39.4 x 23.6 x 10.24 in. (1000 x 600 x 260 mm)
	Weight	Inverter: 123.5 lbs / 56 kg; Wire-box: 33lbs / 15kg
	Mounting / Installation Angle ²	15 to 90 degrees from horizontal (vertical or angled)
	AC Termination	M8 Stud Type Terminal Block (Wire range: #6 - 3/0 AWG Cu / Al, Lugs not supplied)
	DC Termination	Screw Clamp, Neg. Busbar Wire range: #14 - #6 AWG Cu

Wirebox Specifications		
Wirebox Fuse Configuration	6 Fused Positions (2 Positions per MPPT), 20A Fuses Standard (25, 30A accepted) ³	
Wirebox Versions	APsmart Transmitter Built-In	Inverter Model: PVI-25TL-208WB-APS (only positive polarity fused) MLRSD Compatibility: APsmart RSD-S and RSD-D
	NEP Transmitter Built-In	Inverter Model: PVI 25TL-208WB-NEP (only positive polarity fused) MLRSD Compatibility: NEP PVG-2
	Tigo Transmitter Built-In	Inverter Model: PVI-25TL-208WB-TGO (only positive polarity fused) MLRSD Compatibility: Tigo TS4-A-F (ver 6.7+) and TS4-A-2F

1) Active Power Derating begins at 45°C when PF=1 and V_{mp} ≥ V_{min}, and at 50°C when PF=1 and V_{mp} ≥ 700 Vdc.

2) Shade Cover accessory required for installation angles of 75 degrees or less from horizontal.

3) Fuse values above 20A have additional spacing requirements; see the user's manual for details.

Yaskawa Solectria Solar does not supply optional fuse sizes.

