

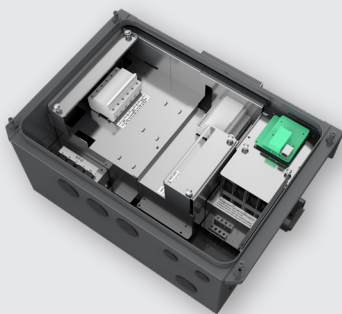
# PVI 25TL-208-R

25 kW, 208 VAC, 1000 VDC String Inverters



## Features

- NEC 2017 PVRSS Certified Rapid Shutdown
- 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
- UL1741 SA Certified to CA Rule 21, including SA14 FW and SA15 VW
- Separable wire-box design for fast service
- Standard 10 year warranty
- Generous 1.5 DC/AC Inverter Load Ratio



Rapid Shutdown Wire-box

Yaskawa Solectria Solar's PVI 25TL-208-R 25kW (25kVA) three phase string inverters are designed for rooftop and carport applications. 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 wirebox, fully integrated and separable with touch-safe fusing, monitoring, and AC and DC disconnect switches. The integrated PLC transmitter in the Rapid Shutdown wire-box enables PVRSS certified module-level rapid shutdown when used with the Tigo TS4-F/TS4-A-F products and APS RSD-S-PLC-A products. The Ethernet Network Card enables monitoring, controls and remote product upgrades.

## Specifications

PVI 25TL-208-R Commercial Transformerless String Inverter		
<b>DC Input</b>	Maximum PV Power	37.5 kW (14.5 kW per MPPT)
	Maximum DC Input Voltage	1000 VDC
	Operating DC Input Voltage Range / MPPT Voltage Range	200 - 950 VDC / 480 - 850 VDC
	Start-up DC Input Voltage / Power	330 V / 80 W
	Number of MPP Trackers / Inputs	3 MPPT / 6 Inputs (2 per MPPT)
	Maximum PV Short-Circuit Current (I <sub>sc</sub> x 1.25)	135 A (45 A per MPPT)
	DC Disconnection Type	Load-rated DC switch
	DC Surge Protection	Type II MOV, 2800 V <sub>C</sub> , 20 kA I <sub>TM</sub> (8/20 μS)
<b>AC Output</b>	Rated AC Output Power @ PF>0.99	25 kW
	Maximum AC Apparent Power (Selectable)	25 kVA
	Rated Output Voltage / Range <sup>1</sup>	208 VAC / 183 - 228 VAC
	Grid Connection Type	3-Phase / PE / N
	Maximum AC Output Current @480 VAC	69.5 A
	Rated Output Frequency / Range <sup>1</sup>	60 Hz / 57 - 63 Hz
	Power Factor	> 0.99 (±0.8 adjustable)
	Current THD at Rated Load	< 3%
	Maximum Fault Current Contribution (1 Cycle RMS)	64.1 A (0.92 PU)
	Maximum OCPD Rating	110 A
<b>System and Performance</b>	AC Disconnection Type	Load-break rated AC switch
	AC Surge Protection	Type II MOV, 1240 V <sub>C</sub> , 15 kA I <sub>TM</sub> (8/20 μS)
	Topology	Transformerless
<b>Environment</b>	Maximum Efficiency / CEC Efficiency	97.0% / 96.5%
	Stand-by / Night Consumption	< 1W
	Enclosure Protection Degree	NEMA Type 4X
	Cooling Method	Variable speed cooling fans
	Operating Temperature Range <sup>2</sup>	-22°F to +140°F / - 30°C to +60°C
	Non-Operating Temperature Range <sup>3</sup>	No low temp minimum to +158°F / +70°C maximum
	Operating Humidity	0 to 100%
<b>Display and Communication</b>	Operating Altitude	13,123.4 ft / 4000 m (derating from 9842.5 ft / 3000 m)
	Audible Noise	< 60 dBA @ 1 m and 25°C
	Modbus Protocol	Proprietary / SunSpec
	SolrenView Web-based Monitoring Service	Optional
	Revenue Grade Metering	Optional, External
	Communication Interface	RS-485
<b>Mechanical</b>	Remote Firmware Upgrades	Standard with the Ethernet card
	Remote Diagnostics	Standard with the Ethernet card
	Weight	Inverter: 123.5 lbs / 56 kg; Wire-box: 33lbs / 15kg
	Mounting / Installation Angle <sup>4</sup>	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)
<b>Safety</b>	DC Termination <sup>5</sup>	Screw Clamp, Neg. Busbar <sup>5</sup> Wire range: #14 - #6 AWG Cu
	Fused String Inputs (2 per MPPT) <sup>6</sup>	20A fuses provided (Fuse values up to 30A acceptable)
	Certifications and Standards	UL1741-SA, UL1699B, UL1998, CSA-C22.2 NO.107.1-01, IEEE1547, FCC PART15
	Selectable Grid Standard	IEEE 1547, CA Rule 21, ISO-NE, HECO
<b>Warranty</b>	Smart-Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt
	Standard Terms / Extended Terms	10 years / 15 and 20 years

1) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.  
 2) Active Power Derating begins; at 45°C when PF=1 and V<sub>mp</sub> ≥ V<sub>min</sub>, and at 50°C when PF=1 and V<sub>mp</sub> ≥ 700VDC.  
 3) See user manual for further requirements regarding non-operating conditions.  
 4) Shade Cover accessory required for installation angles of 75 degrees or less from horizontal.  
 5) RSD wire-box only includes fuses/fuseholders on the positive polarity, compliant with NEC 2017, 690.9 (C).  
 6) Fuse values above 20 A have additional spacing requirements. See user manual for details.



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