SOLECTRIA® PVI-25TL-208

25 KW, 208 VAC, 1000 VDC STRING INVERTERS

Features

- Certified to IEEE 1547-2018 and UL 1741SB
- Wirebox models with built-in SunSpec compliant transmitter 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
- 3 MPPT's with 2 inputs each for PV array flexibility
- Industry-leading DC/AC ratio of 1.8
- 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



Rapid Shutdown Ready Wirebox 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 products.

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





SOLECTRIA® PVI-25TL-208 TECHNICAL DATA

SPECIFICATIONS

PVI-25TL-208 Comr (Listing File Model: I	nercial Transformerless String Inverter PVI 25TL-208)		
	Maximum PV Power	45 kW (17 kW per MPPT)	
DC Input	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 kAI _{TM} (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	rmonic 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	97.0% / 96.5%	
	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	
	Storage Temperature Range	-40°F to +158°F / -40°C to +70°C	
	Operating Humidity	0 to 100%	
	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	
Display and	Revenue Grade Metering	Optional, external	
Communication	Communication Interface	RS-485	
	Remote Firmware Upgrades	Ethernet network card required	
	Remote Diagnostics	Ethernet network card required	
	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)	
Safety	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	
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	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 Fused Inputs		25 A Fuse Included (15 - 30 A accepted) ²		
Wirebox Versions	APsmart Transmitter Built-In	Inverter Model: PVI-25TL-208WB-APS (only positive polarity fused)	MLRSD Compatibility: APsmart RSD-S and RSD-D	

- 1) Active Power Derating begins at 45°C when PF=1 and Vmp \geq Vmin, and at 50°C when PF=1 and Vmp \geq 700 Vdc.
- Shade Cover accessory required for installation angles of 75 degrees or less from horizontal. Yaskawa Solectria Solar does not supply optional fuse sizes.





