

SOLECTRIA® PVI-100TL-480

3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTERS

FEATURES

- Certified to IEEE 1547-2018 and UL 1741SB
- Dual rated listing allows selection of either 100 kVA (factory default) or 110 kVA (allowing full rated power down to ± 0.91 PF)
- Wirebox 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
- 6 MPPT's with 4 inputs each for PV array flexibility
- Industry-leading DC/AC ratio of 2.0
- Integrated AC and DC disconnects
- Remote firmware upgrades and diagnostics
- NEMA 4X outdoor rated enclosure
- Copper and Aluminum compatible AC connections
- Compatible with Bifacial PV Modules
- Isolated ground bars allow for mixing UL 3741 & MLRSD on one inverter

OPTIONS

- DC fuse bypass
- Web-based monitoring

Yaskawa Solectria Solar's PVI-100TL-480 is a transformerless 3-phase inverter, ideal for rooftops, carports and ground-mount PV systems.



The PVI-100TL-480 is the largest 1000V transformerless inverters from Yaskawa Solectria Solar that are IEEE 1547-2018 compliant. It comes standard with AC and DC disconnects, six MPPTs, and a wiring box with 24 fused positions.

Ideal for larger rooftop PV systems, its standard wirebox is Module-Level Rapid shutdown (MLRSD) ready to provide PV Rapid Shutdown System (PVRSS) compliance. It includes a built-in SunSpec compliant powerline communication transmitter from APsmart.

To set itself apart, the ground bars between MPPT zones are isolated from one another; allowing the mixing of MLRSD and UL 3741 methods to be used on one inverter.

Yaskawa Solectria Solar's PVI-100TL-480 inverters provides flexibility, size and convenience unmatched in the industry.



PVI-100TL-480 TECHNICAL DATA

SPECIFICATIONS

Inverter Model (Listing File Name)		PVI-100TL-480
DC Input	Maximum PV Power	200 kWdc
	Maximum Input Voltage	1000 Vdc
	DC Voltage Ranges: Operating/Max. Power (MPPT)	200-1000 Vdc / 340-850 Vdc
	Start-up DC Input Voltage/Power	250 V / 250 W
	Number of MPPT Trackers/Inputs	6 Trackers / 4 Fused-inputs each
	Maximum Available PV Current (Isc x 1.25)	750 A (120 A per MPPT)
AC Output	DC Surge Protections	Type II
	Rated AC Real Power/Apparent Power/Output Current	100 kW / 100 kVA / 120.4 A
	Overhead Mode: Real Power/Apparent Power/Output Current	100 kW / 110 kVA / 132.4 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)	TBD
	Total Harmonic Distortion (THD) @ Rated Load	< 3%
	Grid Connection Type	3-Ph/PE/N (neutral conductor optional)
	Maximum OCPD Device	200A
Efficiency	AC Surge Protection	Type II
	Peak Efficiency	98.80%
	CEC Efficiency	98.50%
	Tare Loss	< 20 W
Environment	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C)
	Storage Temperature Range	-40°F to +158°F (-40°C to +70°C)
	Relative Humidity (non-condensing)	0-100%
	Operating Altitude	13,123.4ft (4000m) Derating from 9842.5ft (3000m)
Communications	Modbus Protocol	Proprietary / SunSpec
	SolrenView Web-Based Monitoring Service	Optional
	Revenue Grade Metering	Optional, External
	Communication Interface	RS-485 Modbus RTU
	Remote Firmware Upgrades	Ethernet Network Card required
Safety	Remote Diagnostics	Ethernet Network Card required
	Certifications and Standards	UL1741-SA/SB Ed. 3, UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547-2018, FCC PART15
	Selectable Grid Standards	IEEE 1547-2014, IEEE 1547a-2018, CA Rule 21, ISO-NE, HECO
Warranty	Smart Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt, Watt-Var
	Standard Limited Warranty	10 years
Mechanical	Acoustic Noise Rating	<60dBA @ 1m and 25°C
	AC/DC Disconnect	Standard, fully-integrated, load break rated
	Mounting Angle	15° - 90° from horizontal
	Weight	Inverter: 160.9 lbs (73 kg) Wiring Box: 77.1 lbs (35 kg)
	Enclosure Rating and Finish	NEMA Type 4X; Polyester Powder Coated Aluminum
	Dimensions (H x W x D)	Overall: 49.5 in. x 29.5 in. x 13.8 in. (1259 mm x 750 mm x 350 mm)

Wirebox Specifications		
Wirebox	Fuse Configuration	24 Fused Positions (4 Positions per MPPT) 25 A Fuses Standard (30 A accepted)*
Wirebox Version	APsmart Transmitter Built-in	PVI-100TL-WB-AP25 (only positive polarity fused) MLRSD compatibility: APsmart RSD-S and RSD-D

* Yaskawa Solectria Solar does not supply optional fuses sizes

