



# PVI 50TL PVI 60TL

## FEATURES

- NEC 2014 compliant (arc fault and rapid shutdown)
- 3 MPPTs with 5 inputs each
- Integrated DC and AC disconnects
- AC terminals compatible with copper and aluminum conductors
- Modbus communications
- Internal data logger
- 0 - 90° installation orientation
- Remote firmware upgrades
- Remote diagnostics

## OPTIONS

- H4 wiring box
- Shade cover
- DC combiners bypass
- Web-based monitoring

## 3-PH TRANSFORMERLESS STRING INVERTERS

Yaskawa - Solectria Solar's PVI 50TL and PVI 60TL are grid-tied, transformerless three-phase inverters designed for ground mount, rooftop and carport arrays and can be installed from 0 - 90 degrees. The PVI 50/60TL inverters are NEC 2014 compliant and are the most reliable, efficient and cost effective in their class. They come standard with AC and DC disconnects, three MPPTs, a 15-position string combiner, remote diagnostics, remote firmware upgrades and various protection features. Options include H4 wiring box, shade cover, DC combiner fuse bypass, and web-based monitoring.



SPECIFICATIONS	PVI 50TL	PVI 60TL
<b>DC Input</b>		
Absolute Maximum Open Circuit Voltage	1000 VDC	
Operating Voltage Range	200-950 VDC	
Max Power Input Voltage Range (MPPT)	480-850 VDC	540-850 VDC
MPP Trackers	3	
Maximum Operating Input Current	36 A per MPPT (108 A)	38 A per MPPT (114 A)
Maximum Available PV Current (Isc x 1.25)	60 A per MPPT (180 A)	
Maximum PV Power	75 kW (25 kW per MPPT)	90 kW (30 kW per MPPT)
Start Voltage	330 V	
<b>AC Output</b>		
Nominal Output Voltage	480 VAC, 3 $\phi$ +/PE/N	
AC Voltage Range (Standard)	-12%/+10%	
Continuous Output Power	50 kW	60 kW
Maximum Output Current	61 A	73 A
Maximum Backfeed Current	0 A	
Nominal Output Frequency	60 Hz	
Output Frequency Range	57-63 Hz	
Power Factor	Unity, >0.99 (adjustable 0.8 leading / 0.8 lagging)	
Fault Current Contribution (1 Cycle RMS)	55 A	
Total Harmonic Distortion (THD) @ Rated Load	< 3%	
<b>Performance</b>		
Peak Efficiency	99.0%	
CEC Efficiency	98.5%	
Tare Loss	< 2 W	
Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C) Derating occurs over +122°F (+50°C)	
Storage Temperature Range	-40°F to +158°F (-40°C to +70°C)	
Relative Humidity (non-condensing)	0-95%	
Audible Noise	< 55 dBA @ 1 m at room temperature	
Operating Altitude	13,123 ft (4,000 m) Derating from 9,842.5 ft (3,000 m)	
Safety Listings & Certifications	UL 1741:2010, UL 1699B, CSA-C22.2 #107.1-01, IEEE1547; FCC PART15	
Testing Agency	CSA	
<b>Mechanical</b>		
15 Fused Positions (5 positions per MPPT)	15 A standard (20, 25, 30 A accepted*)	
AC/DC Disconnect	Standard, fully-integrated	
Enclosure Rating	Type 4X	
Enclosure Finish	Polyester powder coated aluminum	
Mounting Method	0-90° from horizontal (vertical, angled, flat)	
Dimensions (H x W x D)	39.4 x 23.6 x 10.24 in. (1,000 x 600 x 260 mm)	
Weight	Inverter: 123.5 lbs (56 kg); Wiring Box: 33 lbs (15 kg)	
<b>Communications</b>		
Data Logger Hardware	Standard, Internal	
SolrenView Monitoring Service	Optional	
Revenue Grade Meter/Monitoring	Optional, External	
Communication Interface	RS-485 Modbus RTU	
Remote Firmware Upgrades	Standard	
Remote Diagnostics	Standard	
<b>Features &amp; Protections</b>		
Arc-Fault Detection	Standard	
Smart Grid Features	L/HVRT, L/HFRT, Soft Start, Volt-Var, Frequency-Watt and Volt-Watt	
<b>Warranty</b>		
Standard	10 year	
Optional	15, 20 year; extended service agreement	

\*Yaskawa - Solectria Solar does not supply the optional fuses