

PVI 25TL-480

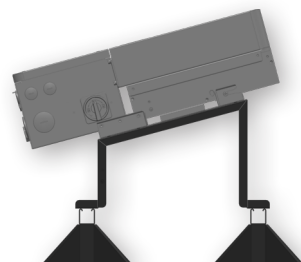
3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTER

FEATURES

- 1000 VDC
- UL 1741SA listed
- 2 MPPTs with 3 inputs each
- Integrated DC and AC disconnects
- AC terminals compatible with copper and aluminum conductors
- SunSpec Modbus compliant
- 15 - 90° installation orientation
- Remote diagnostics
- Built-in SunSpec compliant transmitter for Module-Level Rapid Shutdown
- Inverter models listed as PV Rapid Shutdown Systems with devices from Tigo Energy and APsmart
- LED indicator lights
- Yaskawa Connect Pro app for system visibility

OPTIONS

- Web-based monitoring
 - Shade cover
 - 15° rooftop mounting rack
- * Rooftop Mounting Kit includes support legs for a 15° tilt angle and shade cover (not depicted)



Yaskawa Solectria Solar's PVI 25TL-480 is a state-of-the-art compact 3-phase string inverter, ideal for rooftops, carports and ground-mount PV systems.



PVI 25TL-480 DESIGN

The PVI 25TL-480 comes standard with AC and DC disconnects, two MPPTs, and a wiring box with six fuse positions for the positive conductors (compliant with the 2017 and 2020 NEC).

For rooftop PV systems, both wirebox models provide PV Rapid Shutdown System (PVRSS) compliance and include a built-in SunSpec compliant powerline communication transmitter. One wirebox model is Tigo Enhanced for rapid shutdown and the other wirebox model is compatible with APsmart rapid shutdown devices.

Yaskawa Solectria Solar also offers its Roof-Mounting Kit, to simplify installation on rooftops. Yaskawa Solectria Solar's family of PVI 25TL-480 inverter models provides flexibility and convenience unmatched in the industry



PVI 25TL-480 TECHNICAL DATA

SPECIFICATIONS

| PVI 25TL-480 Commercial Transformerless String Inverter | | |
|---|---|---|
| DC Input | Maximum PV Power | 37.5 kW (22 kW per MPPT) |
| | Maximum Input Voltage | 1000 VDC |
| | DC Voltage Ranges: Operating / Maximum Power (MPPT) | 200 – 950 VDC / 560 – 850 VDC |
| | Start-up DC Input Voltage / Power | 330 V / 80 W |
| | Maximum Available PV Current (Isc x 1.25) | 90 A (45 A per MPPT) |
| AC Output | DC Surge Protection | Type II MOV, 1240 V _c , 15 kA I _{TM} (8/20 μs) |
| | Rated AC Real Power / Apparent Power / Output Current | 25 kW / 25 kVA / 30.5 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) | 28.2 A |
| | Total Harmonic Distortion (THD) @Rated Load | < 3% |
| | Grid Connection Type | 3-Ph/PE/N (neutral conductor optional) |
| | Maximum OCPD Device | 50 A |
| | AC Surge Protection | Type II MOV, 1025 V _c , 15 kA I _{TM} (8/20 μs) |
| Efficiency | Peak Efficiency | 98.5% |
| | CEC Efficiency | 98.0% |
| | Tare Loss | < 1 W |
| Environment | Ambient Temperature Range | -22°F to +140°F (-30°C to +60°C); Derating occurs over +113°F (+45°C) |
| | Storage Temperature Range | No low temp minimum; up to +158°F (+70°C) |
| | Relative Humidity (non-condensing) | 0-100% |
| | Operating Altitude | 13,123 ft (4,000 m); Derating occurs from 9,842.5 ft (3,000 m) |
| Communications | Modbus Protocol | Proprietary / SunSpec |
| | SolnView Web-Based Monitoring Service | Optional |
| | Revenue Grade Metering | Optional, External |
| | Communication Interface | LED Display, Yaskawa Connect Pro app (Wi-Fi) |
| | Remote Firmware Upgrades | Ethernet Network Card required |
| | Remote Diagnostics | Ethernet Network Card required |
| Safety | Certifications and Standards | UL1741-SA, UL1699B, UL1998, CSA-C22.2 NO.107.1-01, IEEE1547, FCC Part 15 (Subpart B, Class A) |
| | Selectable Grid Standards | IEEE 1547, CA Rule 21, ISO-NE |
| | Smart Grid Features | Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt |
| Warranty | Standard Limited Warranty | 10 Years |
| Mechanical | Acoustic Noise Rating | < 50 dBA @ 1 m at 25°C |
| | AC/DC Disconnect | Standard, fully-integrated |
| | Mounting Angle | 15-90° from horizontal (angled to vertical) |
| | Dimensions (H x W x D) | Power Head: 15.95 in. x 15.75 in. x 7.875 in (405 mm x 400 mm x 200 mm) Wirebox: 10.24 in. x 15.75 in. x 7.875 in (260 mm x 400 mm x 200 mm) |
| | Weight | Power Head: 48.5 lbs (22 kg); Wirebox: 13.2 lbs (6 kg) |
| | Enclosure Rating and Finish | NEMA Type 4X; Polyester Powder Coated Aluminum |

| Wirebox Specifications | | |
|----------------------------|------------------------------|--|
| Wirebox Fuse Configuration | | 6 Fused Positions (3 Positions per MPPT), 20A Fuses Standard (25, 30A accepted) ** |
| Wirebox Versions | APsmart Transmitter Built-In | Inverter Model: PVI-25TL-480-APS20 (only positive polarity fused) MLRSD Compatibility: APsmart RSD-S and RSD-D |
| | Tigo Transmitter Built-In | Inverter Model: VI-25TL-480-TGO20 (only positive polarity fused) MLRSD Compatibility: Tigo TS4-A-F (ver 6.7+) and TS4-A-2F |

* Please inquire at inverters@solectria.com for more information
 ** Yaskawa Solectria Solar does not supply optional fuse sizes

