



SGI 500XT

FEATURES

- Compliant with NEC 2014 690.11 & 690.12 arc fault and rapid shutdown requirements when coupled with ARCCOM combiner
- 98% CEC efficiency
- Parallel power stages
- Fuse and breaker subcombiner options
- Modbus communications
- User-interactive LCD
- Real power curtailment

OPTIONS

- Uptime guarantee
- Stainless steel enclosure
- Web-based monitoring
- Built-in cellular connectivity
- AC breaker with shunt trip
- Revenue grade metering
- Air filters

UTILITY-SCALE INVERTERS

Yaskawa - Solectria Solar's SMARTGRID 500XT is compliant with NEC 2014 690.11 & 690.12 arc fault and rapid shutdown requirements. The SGI 500XT is the most reliable and efficient utility-scale inverter in its class. Optimized for direct coupling to an external transformer, the SGI 500XT is the best choice for large commercial and utility-scale applications that demand the highest performance and reliability. The SGI 500XT's unique inverter design contains all critical components in a compact and easy to install enclosure ensuring maximum uptime, energy production, and return on investment (ROI) for large PV systems. Standout features include a wide range of DC subcombiner (fuses or breakers), optional AC disconnect or AC breaker, and ample room inside the cabinet for easy wiring and service. The SGI 500XT supports advanced grid management for power plants, including real power curtailment, reactive power control, controlled ramp rates, and voltage and frequency ride through.



| SPECIFICATIONS | SGI 500XT |
|---|---|
| DC Input | |
| Absolute Maximum Input Voltage | 600 VDC |
| Max Power Input Voltage Range (MPPT)* | 300-500 VDC |
| Maximum Operating Input Current | 1750 A |
| Maximum PV Power (per MPPT) | 650 kW |
| Strike Voltage | 390 V |
| AC Output | |
| Native Output Voltage | 208 VAC, 3-Ph |
| AC Voltage Range | -12%/+10% |
| Continuous Output Power | 500 kW |
| Continuous Output Current | 1387 A |
| Maximum Backfeed Current | 0 A |
| Nominal Output Frequency | 60 Hz |
| Output Frequency Range | 57-60.5 Hz |
| Power Factor | Adjustable - 0.9 to +0.9, factory set at 1 |
| Fault Current Contribution (1 Cycle RMS) | 1665 A |
| Total Harmonic Distortion (THD) @ Rated Load | <3% |
| Efficiency | |
| Peak Efficiency | 98.1% |
| CEC Efficiency | 98.0% |
| Tare Loss | 41 W |
| Subcombiner Options | |
| Fuses or Breakers | 8 positions, 225-400 A |
| | 16 positions, 110-200 A |
| Fuses Only | 32 positions, 70-100 A |
| Temperature | |
| Ambient Temperature Range (full power) | -40°F to +122°F (-40°C to +50°C) |
| Storage Temperature Range | -40°F to +122°F (-40°C to +50°C) |
| Relative Humidity (non-condensing) | 5-95% |
| Data Monitoring | |
| Optional SolrenView Web-based Monitoring | Integrated |
| Optional Revenue Grade Monitoring (Integrated) | 1600 A |
| Optional SolZone™ Sub-Array Monitoring (DC Current) | 8 zones |
| Optional Cellular Communication | SolrenView AIR |
| External Communication Interface | RS-485 SunSpec Modbus RTU |
| Testing & Certifications | |
| Safety Listings & Certifications | UL 1741/IEEE 1547, CSA C22.2#107.1 |
| Testing Agency | ETL |
| Warranty | |
| Standard | 5 year |
| Optional | 10, 15, 20 year; extended service agreement; uptime guarantee |
| Dedicated External Transformer | |
| Dedicated External Transformer | Required, provided by customer to Solectria's specification |
| Transformer Type | Self cooled, step up, pad mount |
| Output Voltage | Typical: 2.4-36.0 kV, 3-Ph |
| Enclosure | |
| dB(A) (Decibel) Rating | 58 dB(A) @ 3m |
| DC Disconnect (integrated) | Standard |
| AC Disconnect/Breaker (integrated) | Optional disconnect, breaker or breaker with shunt trip |
| Dimensions (H x W x D) | 82 in. x 109 in. x 41 in. (2083 mm x 2769 mm x 1042 mm) |
| Shading Set Back | 137" (3480 mm) at 30° solar elevation |
| Weight | 3410 lbs (1547 kg) |
| Enclosure Rating | Type 3R |
| Enclosure Finish | Polyester powder coated steel; Optional 316 stainless steel |

*At nominal AC voltage

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