

# SGI 500XT

**FEATURES**

- 98% CEC efficiency
- Built-in redundancy
- Subcombiner options
- Modbus communications
- User-interactive LCD

**OPTIONS**

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

**OPTIONS FOR UTILITIES**

- Real power curtailment
- Reactive power control
- Voltage ride through
- Frequency ride through
- DMS tie-in



## UTILITY-SCALE INVERTERS

Solectria Renewables' SMARTGRID 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. The robust design ensures 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 and reactive power control and fault ride-through. Solectria Renewables' inverters are backed by a world-class warranty and comprehensive service offerings that protect your investment throughout the lifetime of the product.



SPECIFICATIONS	SGI 500XT
<b>DC Input</b>	
Absolute Maximum Input Voltage	600 VDC
MPPT Input Voltage Range*	300-500 VDC
Maximum Operating Input Current	1750 A
Strike Voltage	390 V
<b>AC Output</b>	
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	Unity, >0.99
Total Harmonic Distortion (THD)	<3%
<b>Efficiency</b>	
Peak Efficiency	98.1%
CEC Efficiency	98.0%
Tare Loss	41 W
<b>Subcombiner Options</b>	
Fuses or breakers	8 positions, 225-400 A 16 positions, 110-200 A
Fuses only	32 positions, 70-100 A
<b>Temperature</b>	
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%
<b>Data Monitoring</b>	
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	RS485 SunSpec Modbus RTU
<b>Testing &amp; Certifications</b>	
Safety Listings & Certifications	UL 1741/IEEE 1547, IEEE 1547.1, CSA C22.2#107.1
Testing Agency	ETL
<b>Warranty</b>	
Standard	5 year
Optional	10, 15, 20 year; extended service agreement; uptime guarantee
<b>Dedicated External Transformer</b>	
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
<b>Enclosure</b>	
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. (2080 mm x 2769 mm x 1041 mm)
Shading Set Back	137" (3480 mm) at 30° solar elevation
Weight	3410 lbs (1550 kg)
Enclosure Rating	Type 3R
Enclosure Finish	Polyester powder coated steel; Optional 316 stainless steel

\*At nominal AC voltage