

SGI 500XTM SGI 750XTM

FEATURES

- 98% CEC efficiency
- 1000 VDC
- 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



1000VDC UTILITY-SCALE INVERTERS

Solectria Renewables introduces the next generation of our SMARTGRID series inverters; optimized for high efficiency, reliability, and economy. Available in two power classes, 500 kW and 750 kW, these inverters are designed for direct connection to an external transformer for large commercial or utility-scale applications. They are robust, outdoor rated inverters that can be configured as 1 or 1.5 MW Solar Stations. Available utility-scale options include a Plant Master Controller and advanced grid management features such as fault ride through, real and reactive power control, and power factor control. Listed to 1000 VDC, with a CEC weighted efficiency of 98%, the SGI 500/750XTM inverters set a new standard for large scale power conversion.



SPECIFICATIONS	SGL 500XTM	SGL 750XTM
DC Input		
Absolute Maximum Input Voltage		1000 VDC
MPPT Input Voltage Range		545-820 VDC
Maximum Operating Input Current	965 A	1445 A
Strike Voltage		700 V
AC Output		
Native Output Voltage		380 VAC, 3-Ph
AC Voltage Range		-12/+10%
Continuous Output Power	500 kW	750 kW
Continuous Output Current	760 A	1140 A
Maximum Backfeed Current		0 A
Nominal Output Frequency		60 Hz
Maximum Output Frequency Range		57-60.5 Hz
Power Factor		Adjustable-0.8 to +0.8
Total Harmonic Distortion (THD)		< 3%
Efficiency		
Peak Efficiency		98.2%
CEC Efficiency		98.0%
Tare Loss	110 W	150 W
Subcombiner Options		
Fuses		Up to 16 positions, 100-400 A
Breakers		Up to 15 positions, 125-300 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	800 A	1600 A
Optional SolZone™ Sub-Array Monitoring (DC Current)		1 zone per protected input (up to 16 zones)
Optional Cellular Communication		SolrenView AIR
External Communication Interface		RS485 SunSpec Modbus RTU
Testing & Certifications		
Safety Listings & Certifications		UL 1741/IEEE 1547, IEEE 1547.1, 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		
dBA rating		60 dBA @ 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	3187 lbs (994 kg)	3600 lbs (1633 kg)
Enclosure Rating		Type 3R
Enclosure Finish		Polyester powder coated steel; Optional 316 stainless steel