



SGI 500XTM

SGI 750XTM

FEATURES

- Compliant with NEC 2014 690.11 & 690.12 arc-fault and rapid shutdown requirements when coupled with ARCCOM combiner
- 98% CEC efficiency
- 1000 VDC
- Parallel power stages
- Fuse and breaker subcombiner options
- Modbus communications
- User-interactive LCD

OPTIONS

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

OPTIONS FOR UTILITIES

- Real power curtailment
- Reactive power control
- Voltage ride through
- Frequency ride through
- Controlled ramp rates
- DMS tie-in
- Rule 21 compliant

1000VDC UTILITY-SCALE INVERTERS

The only 1000VDC inverter available that is compliant with NEC 2014 690.11 & 690.12 arc-fault and rapid shutdown requirements. Yaskawa - Solectria Solar's SMARTGRID series inverters are 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 advanced grid management features such as voltage and frequency ride through, reactive power control, real power curtailment and power factor control. Listed to 1000 VDC with 98% CEC weighted efficiency, the SGI 500/750XTM inverters set a new standard for large scale power conversion.



SPECIFICATIONS	SGI 500XTM	SGI 750XTM
DC Input		
Absolute Maximum Input Voltage	1000 VDC	
Max Power Input Voltage Range (MPPT)*	545-820 VDC	
Operating Voltage Range	545-1000 VDC	
Maximum Operating Input Current	965 A	1445 A
Maximum PV Power	700 kW	1050 kW
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	
Output Frequency Range	57-60.5 Hz	
Power Factor	Adjustable - 0.8 to +0.8, factory set at 1	
Fault Current Contribution (1 Cycle RMS)	912 A	1368 A
Total Harmonic Distortion (THD) @ Rated Load	< 3%	
Efficiency		
Peak Efficiency	98.3%	
CEC Efficiency	98.0%	
Tare Loss	89 W	123 W
Subcombiner Options		
Fuses	4 to 16 positions, 100-400 A	
Breakers	4 to 15 positions, 125-350 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	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		
dBA (Decibel) Rating	< 67 dBA @ 10 m	
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	
Shipping Weight	3080 lbs (1398 kg)	3570 lbs (1620 kg)
Enclosure Rating	Type 3R	
Enclosure Finish	Polyester powder coated steel; optional 316 stainless steel	

*At nominal AC voltage

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