

SGI 225
SGI 250
SGI 266
SGI 300
SGI 500

FEATURES

- 97.5% CEC efficiency
- Highest CEC efficiency in the industry
- Built-in redundancy
- Fully-integrated design
- Customizable subcombiners
- 480 VAC or 600 VAC
- MODBUS communications
- User-interactive LCD display

OPTIONS

- Uptime guarantee
- Stainless steel enclosure
- Web-based monitoring

OPTIONS FOR UTILITIES

- Low voltage ride through
- VAR support
- Controlled ramp rate
- Remote power control



UTILITY-SCALE INVERTERS

Solectria Renewables' SMARTGRID 225-500 kW series of inverters boasts an industry leading 97.5% CEC weighted efficiency which translates into significantly greater energy generation per year for utility-scale PV systems. The SGI series of transformer based inverters are rugged and durable with the transformer providing galvanic isolation between the PV array and the grid. The SMARTGRID series features five power classes, 225 kW, 250 kW, 266 kW, 300 kW and 500 kW, and offers utility options such as VAR support, low voltage ride through, controlled ramp rate and remote power control. Such critical utility options, combined with unsurpassed efficiencies and the lowest nighttime tare loss in the industry, earmark the SGI Series as the premier inverter for the next generation of large commercial and utility-scale systems.



Built for the real world

SPECIFICATIONS	SGL 225	SGL 250	SGL 266	SGL 300	SGL 500	
DC Input						
Absolute Maximum Input Voltage	625 VDC					
MPPT Input Voltage Range	300-500 VDC					
MPPT Input Voltage Range - Low Voltage Option	285-500 VDC					
Maximum Operating Input Current	768 A	853 A	908 A	1026 A	1721 A	
Maximum Input Current - Low Voltage Option	808 A	898 A	956 A	1080 A	1812 A	
AC Output						
Nominal Output Voltage	480 or 600 VAC, 3-Ph					
AC Voltage Range	-12%/+10%					
Continuous Output Power	225 kW	250 kW	266 kW	300 kW	500 kW	
Continuous Output Current	480 VAC	271 A	301 A	320 A	360 A	602 A
	600 VAC	217 A	240 A	256 A	289 A	480 A
Maximum Backfeed Current	0 A					
Nominal Output Frequency	60 Hz					
Output Frequency Range	59.3-60.5 Hz					
Power Factor	Unity, >0.99					
Total Harmonic Distortion (THD)	<3%					
Efficiency						
Peak Efficiency	98.0%	98.0%	98.0%	97.9%	97.9%	
CEC Efficiency	97.5%	97.5%	97.5%	97.5%	97.0%	
Tare Loss	28 W	28 W	28 W	28 W	32 W	
Subcombiner Options						
	6 positions, 225-400 A				8 positions, 225-400 A	
	12 positions, 110-200 A				16 positions, 110-200 A	
	24 positions, 70-100 A				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 +158°F (-40°C to +70°C)					
Relative Humidity (non-condensing)	5-95%					
Monitoring Options						
Web-based Monitoring (Inverter Direct)	SolrenView					
Revenue Grade Monitoring (Integrated)	400 A	400 A	400 A	400 A	800 A	
Sub-Array Monitoring (SolZone)	6 zones	6 zones	6 zones	6 zones	8 zones	
Cellular Communication	SolrenView AIR					
Third Party Compatibility	Standard via MODBUS					
Testing & Certifications						
Safety Listings & Certifications	UL 1741/IEEE 1547, IEEE 1547.1, IEEE 62.41.2, IEEE 62.45, IEEE C37.90.2, CSA C22.2#107.1, FCC part 15 B					
Maintenance outage power factor per IEEE 762-2006	0.1					
Testing Agency	ETL					
Warranty						
Standard	5 year					
Optional	10, 15, 20 year; extended service agreement; uptime guarantee					
Enclosure						
Transformer	Standard, fully-integrated (internal); External optional					
AC Breaker/DC Disconnect	Fully-integrated (internal)					
Dimensions (H x W x D)	79 in. x 109 in. x 41 in. (2007 mm x 2769 mm x 1041 mm)					
Shading Set Back	137" (3480 mm) at 30° solar elevation					
Weight	5170 lbs (2350 kg)	5650 lbs (2568 kg)	5650 lbs (2568 kg)	5650 lbs (2568 kg)	6980 lbs (3173 kg)	
Enclosure Rating	NEMA 3R					
Enclosure Finish	Polyester powder coated steel; Optional stainless steel					