

SGI 225
SGI 250
SGI 266
SGI 300
SGI 500
SGI 500PE

FEATURES

- 97.5% CEC efficiency
- Highest CEC efficiency in the industry
- Built-in redundancy
- Fully-integrated design
- Subcombiner options
- 480 VAC or 600 VAC
- Modbus communications
- User-interactive LCD

OPTIONS

- Uptime guarantee
- Stainless steel enclosure
- Web-based monitoring
- Built-in cellular connectivity

OPTIONS FOR UTILITIES

- Real power curtailment
- Reactive power control
- Voltage ride through
- Frequency ride through



COMMERCIAL INVERTERS

Solectria Renewables' SMARTGRID 225-500PE series of inverters boasts an industry leading 97.5% CEC weighted efficiency which translates into significantly greater energy production and cost savings over the lifetime of the system. The SGI line has been deployed in a large number of commercial and utility-scale PV systems across North America ranging from 200kW to multi-MW. Our customers find these inverters to be the most cost-effective, reliable and efficient in the market. The SGI product family offers options such as voltage and frequency ride through, controlled ramp rates and real power curtailment. 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 next generation large commercial and utility-scale systems.



SPECIFICATIONS	SGI 225	SGI 250	SGI 266	SGI 300	SGI 500	SGI 500PE
DC Input						
Absolute Maximum Input Voltage	600 VDC					
MPPT Input Voltage Range	300-500 VDC					
Maximum Operating Input Current	768 A	853 A	908 A	1026 A	1721 A	1712 A
Strike Voltage	390 V					
AC Output						
Nominal Output Voltage	480 or 600 VAC, 3-Ph (3-wire standard, 4-wire optional)					
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	57-63 Hz					
Power Factor	Unity, >0.99					
Total Harmonic Distortion (THD)	< 3%					
Efficiency						
Peak Efficiency	98.0%	98.0%	98.0%	97.9%	97.9%	98.3%
CEC Efficiency (480 VAC)	97.5%	97.5%	97.5%	97.5%	97.0%	97.5%
Tare Loss	28 W				32 W	
Subcombiner Options						
Fuses or breakers	6 positions, 225-400 A				8 positions, 225-400 A	
	12 positions, 110-200 A				16 positions, 110-200 A	
Fuses only	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%					
Data Monitoring						
Optional SolrenView Web-based Monitoring	Integrated					
Optional Revenue Grade Monitoring (Integrated)	400 A				800 A	
Optional SolZone™ Sub-Array Monitoring (DC Current)	6 zones				8 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, 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						
dBa rating	< 60 dBA @ 5m					
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)	7107 lbs (3230 kg)
Enclosure Rating	Type 3R					
Enclosure Finish	Polyester powder coated steel; Optional 316 stainless steel					
dBa rating	< 60 dBA @ 5m					