

SOLECTRIA® XGI 1500-166 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

- Made in the USA with global components
- Buy American Act (BAA) compliant
- Four models:
 - 125kW/125kVA,
 - 125kW/150kVA,
 - 150kW/166kVA,
 - 166kW/166kVA
- Additional models available certified to UL1699b, Photovoltaic DC Arc-Fault Circuit Protection
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SA
- Robust, dependable, & built to last
- Lowest O&M and installation costs
- Access all inverters on site via WiFi from one location
- Remote diagnostics and firmware upgrades
- SunSpec Modbus Certified
- Tested compatible with the TESLA PowerPack Microgrid System app for system visibility

OPTIONS

- String combiners for distributed and centralized systems
- Web-based monitoring
- Extended warranty



Yaskawa Solectria Solar's XGI 1500 utility-scale string inverters are designed for high reliability and built of the highest quality components that were selected, tested and proven to last beyond their warranty.

XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety. They are the most powerful 1500 VDC string inverters in the PV market and have been engineered for both distributed and centralized system architecture.

Designed and engineered in Lawrence, MA, XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. They are Made in the USA with global components and are compliant with the Buy American Act.

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Yaskawa Solectria Solar | 1-978-683-9700 | Email: sales@solectria.com | solectria.com
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SOLECTRIA® XGI 1500-166 SERIES TECHNICAL DATA

SPECIFICATIONS

SOLECTRIA XGI 1500 Model		XGI 1500-125/125-UL XGI 1500-125/125-UL-A	XGI 1500-125/150-UL XGI 1500-125/150-UL-A	XGI 1500-150/166-UL XGI 1500-150/166-UL-A	XGI 1500-166/166-UL XGI 1500-166/166-UL-A	
DC Input	Absolute Max Input Voltage	1500 VDC	1500 VDC	1500 VDC	1500 VDC	
	Max Power Input Voltage Range (MPPT)	860-1250 VDC	860-1250 VDC	860-1250 VDC	860-1250 VDC	
	Operating Voltage Range (MPPT)	860-1450 VDC	860-1450 VDC	860-1450 VDC	860-1450 VDC	
	Number of MPP Trackers	1 MPPT	1 MPPT	1 MPPT	1 MPPT	
	Max Operating Input Current	148.3 A	148.3 A	178.0 A	197.7 A	
	Max Operating PV Power	128 kW	128 kW	153 kW	170 kW	
	Max DC/AC Ratio Max Rated PV Power	2.6 332 kW	2.6 332 kW	2.2 332 kW	2.0 332 kW	
	Max Rated PV Short-Circuit Current ($\Sigma I_{sc} \times 1.25$)	500 A	500 A	500 A	500 A	
AC Output	Nominal Output Voltage	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph	
	AC Voltage Range	-12% to +10%	-12% to +10%	-12% to +10%	-12% to +10%	
	Continuous Real Output Power	125 kW	125 kW	150 kW	166 kW	
	Continuous Apparent Output Power	125 kVA	150 kVA	166 kVA	166 kVA	
	Max Output Current	120 A	144 A	160 A	160 A	
	Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz	
	Power Factor (Unity default)	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable	
	Total Harmonic Distortion (THD) @ Rated Load	<3%	<3%	<3%	<3%	
	Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	
	Fault Current Contribution (1 cycle RMS)	144 A	173 A	192 A	192 A	
	Efficiency	Peak Efficiency	98.9%	98.9%	99.0%	99.0%
		CEC Average Efficiency	98.5%	98.5%	98.5%	98.5%
Tare Loss		<1 W	<1 W	<1 W	<1 W	
Temperature	Ambient Temp Range	-40°F to 140°F (-40C to 60C)		-40°F to 140°F (-40C to 60C)		
	De-Rating Temperature	122°F (50C)		113°F (45C)		
	Storage Temperature Range	-40°F to 167°F (-40C to 75C)		-40°F to 167°F (-40C to 75C)		
	Relative Humidity (non-condensing)	0 - 95%		0 - 95%		
	Operating Altitude	Full Power up to 9,840 ft (3.0 km); De-Rate to 70% of Full Power at 13,123 ft (4.0 km)				
Communications	Advanced Graphical User Interface	WiFi				
	Communication Interface	Ethernet				
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP				
	Web-Based Monitoring	Optional				
	Firmware Updates	Remote and Local				
Testing & Certifications	Safety Listings & Certifications	UL 1741, IEEE 1547, UL 1998 (All models) UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified (-A models)				
	Advanced Grid Support Functionality	Rule 21, UL 1741SA				
	Testing Agency	ETL				
Warranty	FCC Compliance	FCC Part 15 (Subpart B, Class A)				
	Standard and Options	5 Years Standard; Option for 10 Years				
Enclosure	Acoustic Noise Rating	73 dBA @ 1 m ; 67dBA @ 3 m				
	DC Disconnect	Integrated 2-Pole 250 A DC Disconnect				
	Mounting Angle	Vertical only				
	Dimensions	Height: 29.5 in. (750 mm) Width: 39.4 in. (1000 mm) Depth: 15.1 in. (380 mm)				
	Weight	270 lbs (122 kg)				
	Enclosure Rating and Finish	Type 4X, Polyester Powder-Coated Aluminum				

