# SOLECTRIA® XGI1500-250-DCG SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS WITH GROUNDED DC INPUT

#### **FEATURES**

- NEW!
  - XGI 1500-250/250-600-DCG
  - XGI 1500-225-600-DCG
  - XGI 1500-200/200-480-DCG
  - XGI 1500-175-480-DCG
- · Grounded DC Input!
  - Compatible with First Solar PV modules
  - Grounded DC input prevents potential-induced-degradation for any PV modules affected
- Industry-leading maximum DC/AC Ratio of 2.0
- Accepts two input PV Source Circuits, with no overcurrent protections
- Made in the USA with global components
- Buy American Act (BAA) compliant
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SB
- Robust, dependable and 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

#### **OPTIONS**

- PV Source Circuit Combiners
- · Web-based monitoring
- Extended warranty

Yaskawa Solectria Solar is pleased to introduce the new XGI 1500-DCG series inverters, featuring a grounded DC input, with two models at 600 Vac and two at 480 Vac



The XGI 1500-DCG Series inverters feature SiC technology, high power and high efficiency that places them at the top end of the utilityscale string inverters in the market.

Yaskawa Solectria Solar designs all XGI 1500 utility-scale string inverters for high reliability and builds them with the highest quality components -- selected, tested and proven to last beyond their warranty. The XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety.

The XGI 1500 inverters provide ideal solutions for ground-mounted utility-scale PV systems, with models available for service connections at 600 Vac and 480 Vac. Designed and engineered in Lawrence, MA, the SOLECTRIA XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. The XGI 1500 inverters are Made in the USA with global components, and are compliant with the Buy American Act.



## SOLECTRIA® XGI 1500-DCG SERIES TECHNICAL DATA

### **SPECIFICATIONS**

PRODUCT SPECIFICATION		XGI 1500 INVERTER MODEL			
		XGI 1500 250/250-600-DCG	XGI 1500 225-600-DCG	XGI 1500 200/200-480-DCG	XGI 1500 175-480-DCG
	Absolute Maximum Input Voltage	1500 VDC			
DC Inpu	Maximum Power Voltage Range (MPPT)	860-1250 VDC 750-1250 VDC			
	Operating Voltage Range (MPPT)	860-1450 VDC 750-1450 VDC			O VDC
	Number of MPP Trackers	1 MPPT			
	Maximum Operating Input Current	296.7 A	267 A	237.3 A	207.6 A
	Maximum Operating PV Power	255 kW	230 kW	204 kW	179 kW
	Maximum DC/AC Ratio   Max Rated PV Power	2.0   500 kW	2.22   500 kW	2.5   500 kW	2.86   500 kW
	Max Rated PV Short-Circuit Current (ΣIsc x 1.25)	800 A			
	Nominal Output Voltage	600 VAC, 3-Phase 480 VAC, 3-Phase			5-Phase
AC Output	AC Voltage Range	-12% to +10%			
	Continuous Real Output Power	250 kW	225 kW	200 kW	175 kW
	Continuous Apparent Output Power (kVA)	250	250 225	200	200 175
	Maximum Output Current (A <sub>RMS</sub> )	240.6	XGI 1500- 225/225: 216.5 225/250: 240.6	240.6	XGI 1500- 175/175: 210.5 175/200: 240.6
	Fault Current Contribution (1 cycle RMS)	390 A	390 A 351 A	312 A	312 A 273 A
	Conductor Compatibility	600 kcmil max, Cu or Alum, 1 or 2 conductors with lugs			
	Nominal Output Frequency	60 Hz			
	Power Factor (Unity default)	+/- 0.80 Adjustable			
	Total Harmonic Distortion (THD) @ Rated Load	< 5%			
	Grid Connection Type	3-Ph + N/GND			
Efficiency Temperature	Peak Efficiency	99.0%			
	CEC Average Efficiency	98.5%			
	Tare Loss	<1 W			
	Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)			
	De-Rating Temperature	113°F (45°C) 127°F (53°C) 113°F (45°C) 131°F (55°C)			
	Storage Temperature Range	-40°F to 167°F (-40°C to 75°C) 0 - 95%			
	Relative Humidity (non-condensing) Operating Altitude	9,840 ft (3 km)			
Communications	Advanced Graphical User Interface	9,840 ft (3 km) WiFi			
	Communication Interface	Ethernet			
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP			
	Web-Based Monitoring	Optional			
	Firmware Updates	Remote and Local			
	Safety Listings & Certifications	UL 1741, IEEE 1547, UL 1998			
Testing & Certifications	Advanced Grid Support Functionality	Rule 21, UL 1741SB			
	Testing Agency	ETL			
Managh.	FCC Compliance	FCC Part 15 (Subpart B, Class A)			
Warranty	Standard and Options Acoustic Noise Rating	5 Years Standard; Option for 10 Years 73 dBA @ 1 m ; 67dBA @ 3 m			
Enclosure	DC Disconnect	Integrated 2-Pole 400 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm)   Width: 44.3 in. (1125 mm)   Depth: 15.4 in. (390 mm)			
	Weight	290 lbs (131.5 kg)			
	Enclosure Rating and Finish	NEMA 4X, IEC IP66, Type 3R, Polyester Powder-Coated Aluminum			





