# SOLECTRIA® XGI 1500-1MW MODULAR CENTRAL INVERTERS

MODELS AND SOLUTIONS FOR UTILITY-SCALE SYSTEMS DESIGNED & BUILT IN THE USA WITH PREMIUM YASKAWA QUALITY

# **FEATURES**

### **SOLECTRIA XGI 1500-1MW Series Inverter**

- Five Models: 1MW, 0.99MW, 0.85MW, 0.75MW and 0.50MW
- Unique and flexible utility-scale 1500Vdc, 3-phase 600Vac inverters
- Scalable for projects of any size
- Factory-integrated PowerSkid assemblies with 40 different power ratings from 2.25 MW to 5 MW
- Storage-ready for both DC-coupled and AC-coupled energy storage systems

#### **PV Input**

- Four PV source circuit terminals, each with 800 A fuse and 600 A disconnect switch
- Up to 8 PV Source Circuit inputs, 2 per fused terminal
- DC grounded, for PID mitigation for all PV modules

### **PowerSkid Assemblies**

Combine three, four, or five XGI 1500-1MW Series Inverters, pre-assembled to a supporting skid, prewired and tested, with AC Combiner and transformer (optional), and select from 24 different power ratings from 2.25MW to 4MW.

### **Storage Configurations**

- Designed for both DC-Coupled and AC-Coupled energy storage systems
- Equipped with input terminals and overcurrent protection for battery subsystem or DC/DC converter connections
- Provides bi-directional power flow to charge storage system from the grid

# Made in the USA

- Buy American Act (BAA) compliant
- World-class production facilities in Buffalo Grove, IL and Oak Creek, WI
- Schedule your factory visit by contacting sales@solectria.com

# **Advanced Grid Support Functionality**

- UL1741SB, CA Rule 21, ISO-NE
- SunSpec Modbus Certified

## **OPTIONS**

- PV Source Circuit Combiners
- Web-based monitoring



XGI 1500-1MW Series Inverters bring together the very best from Yaskawa Solectria Solar: proven technology with US-based design, engineering, and manufacturing.

With features for storage integration, and focus on utility-scale projects, XGI 1500-1MW Series Inverters are a breakthrough in flexibility and scalability, which lie at the heart of the Modular Central inverter concept.

XGI 1500-1MW Series Inverters build on the demonstrated success of the XGI 1500-166 series and XGI 1500-250 series utility-scale inverters, with advancements in key areas. Their negative-grounded DC input solve the PID issue for all PV modules.

Yaskawa Solectria Solar also offers the XGI 1500-1MW Series Inverters in factory-assembled multi-MW PowerSkids. By combining three, four, or five XGI 1500 Modular Central inverters, PowerSkids are uniquely available in 40 different power ratings between 2.25 MW and 5 MW, and offer the flexibility to use any number of the XGI 1500-1MW Series Inverters with storage, either DC-coupled or AC-coupled.



# SOLECTRIA® XGI 1500-1MW SERIES INVERTERS TECHNICAL DATA

# **SPECIFICATIONS**

Product Specifications		XGI 1500-1MW Series Inverter Model				
		XGI 1500- 1MW-600	XGI 1500- 0.99 MW-600	XGI 1500- 0.85 MW-600	XGI 1500- 0.75 MW-600	XGI 1500- 0.50 MW-600
DC Input	Absolute Maximum Input Voltage	1500 Vdc				
	Full Rated Power Voltage Range (MPPT)	860 to 1250 Vdc				
	Operating Voltage Range (MPPT)	860 to 1450 Vdc				
	Strike Voltage	920 Vdc				
	Number of MPP Trackers	1MPPT				
	Number of PV Input Source Circuits	Four input terminals with 800A fuse and 600A disconnect each. Up to two PV Source Circuits per input terminal.				
	Max. Operating PV Current	1,183 ADC	1,182 ADC	1,004 ADC	886 ADC	590 ADC
	Max. Operating PV Power	1,020 kWdc	1,019 kWdc	867 kWdc	765 kWdc	510 kWdc
	Max. DC/AC Ratio   Max. Rated DC Power	2.5   2.5 MW	2.5   2.5 MW	2.94   2.5 MW	3.33   2.5 MW	5.0   2.5 MW
	DC Configuration	DC NEG grounded				
AC Output	Nominal Output Voltage	600 VAC, 3-Phase				
	AC Voltage Range	-12% to +10%				
	Continuous Real Output Power	1 MW	999 kW	850 kW	750 kW	500 kW
	Continuous Apparent Output Power	1 MVA	999 kVA	User Selectable 850 kVA   1 MVA	User Selectable 750 kVA   1 MVA	User Selectable 500 kVA   1 MVA
	Maximum Output Current	960 A	960 A		750 kW / 750 kVA: 720 A 750 kW / 1MVA: 960 A	500 kW / 500 kVA: 480 A 500 kW / 1MVA: 960 A
	Nominal Output Frequency	60 Hz				
	Default Power Factor	1.0				
	Total Harmonic Distortions (THD)  @ Rated Load	< 5%				
	Grid Connection Type	3-Ph, Floating, No N/GND DELTA-DELTA or DELTA-WYE				
	Reactive Power	Q at Night (Optional)				
Efficiency	Peak Efficiency	99.0%				
	CEC Average Efficiency	98.5%				
	Tare Loss	<1W				
Environment	Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)				
	De-Rating Temperature	113°F (45°C)				
	Storage Temperature Range	-40°F to 167°F (-40°C to 75°C)				
	Relative Humidity (Non-Condensing)	O - 95%				
	Operating Altitude	9,840 ft (3 km)				
Communications	Advanced Graphical User Interface	WiFi				
	Communication Interface	RJ-45 Ethernet				
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP				
	Web-Based Monitoring	Optional				
	Firmware Updates	Remote and Local				
Testing and Certifications	Safety Listings & Certifications	UL 1741, IEEE 1547				
	Advanced Grid Support Functionality	Rule 21, UL 1741SB				
	Testing Agency	TÜV Rheinland®				
	FCC Compliance	FCC Part 15 (Subpart B, Class A)				
Warranty	Standard and Options	5 Years Standard; Option for 10 Years				
Enclosure	Acoustic Noise Rating	85 dBA @ 1 m; 75 dBA @ 3 m				
	DC Disconnect	Four Integrated, 2-pole disconnect, Both positive and negative poles switched				
	AC Disconnect	Integrated lockable, manually-operated, industrial control switch				
	Dimensions	Height: 79.8 in. (2026 mm) Width: 59.4 in. (1510 mm) Depth: 28.1 in. (714 mm)				
	Weight	1100 lbs (500 kg)				
	Enclosure Rating, Finish and Material	Type 3R, Polyester Powder-Coated Steel				





