

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

- Six Models: 1 MW, 0.99 MW, 0.85 MW, 0.75 MW, 0.5 MW, 0.498 MW
- Unique and flexible utility-scale 1500 VDC, 3-phase 600 VAC inverters
- Scalable for projects of any size
- Factory-integrated MegaSkid™ 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

MegaSkid™ Assemblies

Combine three, four, or five XGI 1500-1MW Series Inverters, pre-assembled to a supporting skid, pre-wired and tested, with AC Combiner and transformer (optional), and select from 40 different power ratings from 2.25 MW to 5 MW.

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 Franklin, WI
- Schedule your factory visit by contacting sales@solectria.com

Advanced Grid Support Functionality

- UL1741SB, CA Rule 21, HECO SRD V2.0, ISO-NE
- SunSpec Modbus Certified

OPTIONS

- PV Source Circuit Combiners
- Web-based monitoring

Yaskawa Solectria Solar is pleased to introduce our new, powerful, scalable XGI 1500 Modular Central inverters for utility-scale projects of any size.



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 MegaSkids. By combining three, four, or five XGI 1500 Modular Central inverters, MegaSkids 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 1500-0.99MW-600	XGI 1500-0.85MW-600	XGI 1500-0.75MW-600	XGI 1500-0.50MW-600	XGI 1500-0.498MW-600	
DC Input	Absolute Maximum Input Voltage	1500 VDC						
	Full Rated Pwr Voltage Range (MPPT)	860 to 1250 VDC						
	Operating Voltage Range (MPPT)	860 to 1450 VDC						
	Strike Voltage	920 VDC						
	Number of MPP Trackers	1 MPPT						
	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	588 ADC	
	Max. Operating PV Power	1,020 kWDC	1,010 kWDC	867 kWDC	765 kWDC	510 kWdc	508 kWDC	
	Max. DC/AC Ratio Max. Rated DC Power	2.5 2.5 MW	2.53 2.5 MW	2.94 2.5 MW	3.33 2.5 MW	5.0 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	0.99 MW	0.85 MW	0.75 MW	0.50 MW	0.498 MW	
	Continuous Apparent Output Power	1 MVA	0.99 MVA	User Selectable 0.85 MVA 1 MVA	User Selectable 0.75 MVA 1 MVA	User Selectable 0.50 MVA 1 MVA	User Selectable 0.498 MVA 1 MVA	
	Continuous Reactive Output Power	0.6 MVar	0.594 MVar	User Selectable 0.51 MVar 0.6 MVar	User Selectable 0.45 MVar 0.7 MVar	User Selectable 0.3 MVar 0.866 MVar	User Selectable 0.299 MVar 0.867 MVar	
	Maximum Output Current	960 A	953 A	0.85 MW/0.85 MVA 818 A 0.85 MW/1 MVA 960 A	0.75 MW/0.75 MVA 722 A 0.75 MW/1 MVA 960 A	0.50 MW/0.50 MVA 481 A 0.50 MW/1 MVA 960 A	0.498 MW/0.498 MVA 479 A 0.498 MW/1 MVA 960 A	
	Nominal Output Frequency	60 Hz						
	Power Factor (Unity Default)	+/- 0.80 Adjustable						
	Total Rated Current Distortion @ Rated Load	< 5%						
	Grid Connection Type	3-Ph, Floating, No N/GND DELTA-DELTA or DELTA-WYE						
	Reactive Power	Q at Night						
	Efficiency	Peak Efficiency	99.0%					
		CEC Average Efficiency	98.5%					
Environment	Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)						
	De-Rating Temperature	113°F (45°C)		122°F (50°C)		140°F (60°C)		
	Storage Temperature Range	-40°F to 140°F (-40°C to 60°C)						
	Relative Humidity (Non-Condensing)	0 - 95%						
Communications	Operating Altitude	9,840 ft (3 km)						
	Advanced Graphical User Interface	WiFi						
	Communication Interface	RJ-45 Ethernet						
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP						
	Web-Based Monitoring	Optional						
Testing and Certifications	Firmware Updates	Remote and Local						
	Safety Listings & Certifications	UL 1741:2021, IEEE 1547, UL 1998, CSA C22.2 No. 1071-16						
	Advanced Grid Support Functionality	CA Rule 21, HECO SRD V2.0, UL 1741SB						
	Testing Agency	TÜV Rheinland®						
Warranty	FCC Compliance	FCC Part 15 (Subpart B, Class A)						
	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: 83.2 in. (2114 mm)		Width: 59.7 in. (1516 mm)		Depth: 42.8 in. (1056 mm)		
	Weight	1955 lbs (887 kg)						
	Enclosure Rating, Finish and Material	Type 3R, Polyester Powder-Coated Steel						

