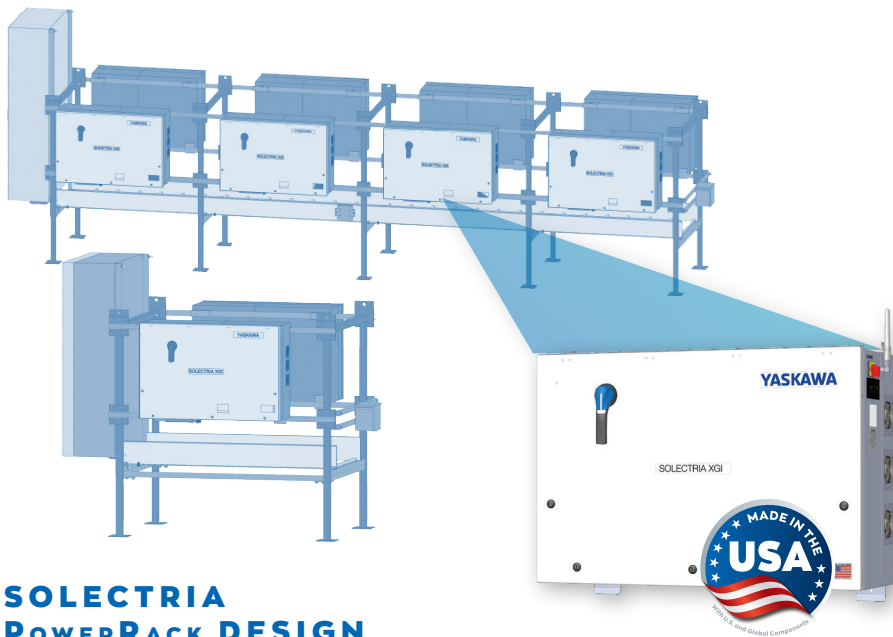


SOLECTRIA® XGI 1500 PowerRACKS

0.5 – 2.0 MWAC FACTORY INTEGRATED AND TESTED BUILDING BLOCKS FOR LARGE-SCALE PV PROJECTS

Solectria® XGI 1500 PowerRACKS comprise two to eight Solectria XGI 1500-250 series inverters and an AC Combiner.



SOLECTRIA PowerRack DESIGN

Built with two to eight Solectria XGI 1500-250 Series utility-scale inverters, Solectria PowerRacks deliver up to 2.0 MWac of scalable solar power. Engineered for high reliability and rapid deployment, PowerRacks are manufactured to Yaskawa's rigorous quality standards.

The modular architecture provides multiple independent MPPT zones per megawatt, maximizing energy harvest through enhanced array-level tracking while improving system availability. By incorporating multiple independent inverters, PowerRacks also simplify maintenance and minimize downtime, helping to reduce operational costs over the life of the system.

Featuring advanced grid-support capabilities and a true peak efficiency exceeding 99%, the Solectria XGI 1500-250 Series inverters are designed to meet the performance demands of today's utility-scale solar projects.

Designed and engineered in Massachusetts, Solectria PowerRacks incorporate American-made steel, conductors, AC combiners, and Solectria XGI 1500-250 Series inverters manufactured in Buffalo Grove, Illinois. The PowerRacks are fully BABAA compliant, supporting domestic content requirements for federally funded infrastructure projects.

FEATURES

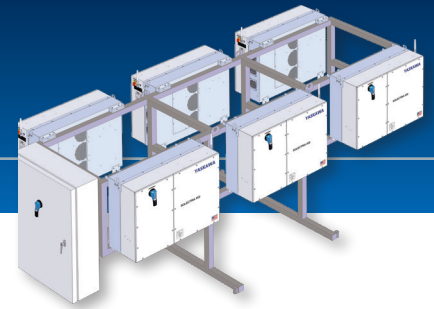
- PowerRacks available with two to eight Solectria XGI 1500-250 Series inverters, achieving up to 2.0MW in total. The inverters are pre-mounted, and pre-wired on a custom-fabricated, painted steel rack.
- Fused AC combiner for the output from the XGI 1500 inverters, with a load-break AC disconnect switch
- Pre-assembled and pre-wired AC and communications cabling
- Designed for rapid deployment
- Scalable alternative to central inverters with convenient access for maintenance and service
- True 99.0% peak efficiency
- Advanced grid-support functionality Rule21/UL1741SA
- PowerRacks are fully compliant with BABAA domestic content requirements
- Access all inverters on site via WiFi from one location
- Remote diagnostics and firmware upgrades
- XGI 1500 utility-scale string inverters are Made in the USA with global components and Buy American Act (BAA) compliant

OPTIONS

- PV Source Circuit Combiners: 16, 20, 24, 26, 28 position
- Configurations available using XGI 1500 models at 600 Vac (250 kW and 225 kW), and at 480 Vac (200 kW and 175 kW)
- Web-based monitoring
- Extended Warranty

SOLECTRIA® XGI 1500 PowerRACKS

TECHNICAL DATA



DESIGN DETAILS

SOLECTRIA POWER RACK	
Inverters	Flagship models are designed to accommodate two to eight Solectria XGI 1500-250 Series inverters, providing an overall power rating from 0.5MW to 2.0MW. Options are available to use any XGI 1500 inverter at 600Vac (250kW, 225kW, 150kW, and 125kW) or 480Vac (200kW and 175kW).
AC Combiner	Custom-fabricated rack built from rugged, welded US-made steel, finished with a durable, black powder-coat
Rack	Custom fabricated, rugged strut-based galvanized steel rack.
Factory Assembly, Test & Quality Control	A quality-controlled assembly and testing process, which includes rack assembly, mounting of the XGI 1500 inverters and AC Combiner, and routing and termination of the inverters' AC output to the AC Combiner. The process also includes routing and terminating communication wiring between inverters and the communications enclosure, concluding with final inspection and test.

SOLECTRIA PowerRack WEIGHT SPECIFICATIONS					
Model	Inverter Model	QTY	Dim H x W x D	Weight (lb)	
XGI-1500-250-PRU-2 or XGI-1500-250D-PR-2	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	2	7'-0" x 8'-1" x 7'-2"	1800	
XGI-1500-250-PRU-3 or XGI-1500-250D-PR-3	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	3	8'-0" x 12'-10" x 7'-2"	2000	
XGI-1500-250-PRU-4 or XGI-1500-250D-PR-4	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	4	8'-0" x 12'-10" x 7'-2"	2300	
XGI-1500-250-PRU-5 or XGI-1500-250D-PR-5	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	5	8'-0" x 18'-6" x 7'-2"	3000	
XGI-1500-250-PRU-6 or XGI-1500-250D-PR-6	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	6	8'-0" x 18'-6" x 7'-2"	3300	
XGI-1500-250-PRU-7 or XGI-1500-250D-PR-7	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	7	8'-0" x 24'-2" x 7'-2"	3700	
XGI-1500-250-PRU-8 or XGI-1500-250D-PR-8	XGI 1500-250/250-600 XGI 1500-250/250-600-DCG	8	8'-0" x 24'-2" x 7'-2"	4000	

SPECIFICATIONS

Specification Data		PowerRack MODELS							
PowerRack Models	PowerRack Model	XGI 1500-250-PRU-2	XGI 1500-250-PRU-3	XGI 1500-250-PRU-4	XGI 1500-250-PRU-5	XGI 1500-250-PRU-6	XGI 1500-250-PRU-7	XGI 1500-250-PRU-8	
	Number of Inverters & Inverter Model	(2) XGI 1500-250/250-600	(3) XGI 1500-250/250-600	(4) XGI 1500-250/250-600	(5) XGI 1500-250/250-600	(6) XGI 1500-250/250-600	(7) XGI 1500-250/250-600	(8) XGI 1500-250/250-600	
	PowerRack Model	XGI 1500-250D-PR-2	XGI 1500-250D-PR-3	XGI 1500-250D-PR-4	XGI 1500-250D-PR-5	XGI 1500-250D-PR-6	XGI 1500-250D-PR-7	XGI 1500-250D-PR-8	
	Number of Inverters & Inverter Model	(2) XGI 1500-250/250-600-DCG	(3) XGI 1500-250/250-600-DCG	(4) XGI 1500-250/250-600-DCG	(5) XGI 1500-250/250-600-DCG	(6) XGI 1500-250/250-600-DCG	(7) XGI 1500-250/250-600-DCG	(8) XGI 1500-250/250-600-DCG	
Configuration	DC Input to Inverters (field wired)	See SOLECTRIA® XGI 1500 PV COMBINERS datasheet for details on PV Combiner models							
	AC Connections	Inverter Output Circuits factory-wired to the AC Combiner; Combined AC output available for field wiring							
DC Input (All specifications are per inverter)	Absolute Max DC Input Voltage	1500 Vdc							
	Full Power Voltage Range (MPPT)	860 Vdc - 1250 Vdc							
	Operating Voltage Range (MPPT)	860 Vdc - 1450 Vdc							
	Number of MPP Trackers	Single MPPT Zone (per XGI 1500-250 Inverter)							
	Max Operating PV Current	296.7 Adc (per XGI 1500-250 Inverter)							
	Max Operating PV Power	255 kWdc (per XGI 1500-250 Inverter)							
	Max DC/AC Ratio Max Rated PV Power	2.0 500 kWdc (per XGI 1500-250 Inverter)							
AC Output (All specifications are for the combined AC Output)	Max Rated PV Short-Circuit Current (Σ Isc x 1.25)	800 Adc (per XGI 1500-250 Inverter)							
	Nominal AC Output Voltage (Range)	600 Vac, 3-Phase (-12% to +10%)							
	Continuous Real AC Output Power	0.5 MWac total	0.75 MWac total	1 MWac total	1.25 MWac total	1.5 MWac total	1.75 MWac total	2.0 MWac total	
	Continuous Apparent Output Power	0.5 MVA total	0.75 MVA total	1 MVA total	1.25 MVA total	1.5 MVA total	1.75 MVA total	2.0 MVA total	
	Maximum AC Output Current	481.2 A total	721.8 A total	962.4 A total	1203 A total	1444 A total	1684 A total	1925 A total	
	Nominal Operating AC Frequency	60 Hz							
	Power Factor Adjustable Range (Unity default)	+/- 0.80 Adjustable							
	Total Harmonic Distortion (THD) @ Rated Power	< 5%							
	Grid Connection Type	3-Ph + N/GND							
	Fault Current Contribution (1 cycle RMS)	144 A (per XGI 1500-250/250-600 Inverter)							

*All specifications in these columns are based on the XGI 1500-250/250-600. Consult SOLECTRIA for more information and specifications for the PowerRack™ using other XGI 1500-250 series inverter models (XGI 1500-225-600, XGI 1500-200/200-480, XGI 1500-175-480)

