# SOLECTRIA® XGI 1500-250 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

#### **FEATURES**

- NEW and MORE POWERFUL!
  - XGI 1500-250/250-600
  - XGI 1500-225-600 (Selectable: 225kW/225kVA or 225kW/250kVA)
  - XGI 1500-200/200-480
  - XGI 1500-175-480 (Selectable: 175kW/175kVA or 175kW/200kVA)
- Industry-leading maximum DC/AC Ratio of 2.0
- Accepts two input PV Output Circuits, with no overcurrent protection required
- 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

#### **OPTIONS**

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



Yaskawa Solectria Solar is pleased to introduce its most powerful XGI 1500 inverters, with the XGI 1500-250 models at 600 Vac, and the XGI 1500-200 models for 480 Vac service.



The XGI 1500-250 and XGI 1500-200 feature SiC technology, high power and high efficiency that places them at the top end of the utility-scale 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 1500-250 SERIES TECHNICAL DATA

### **SPECIFICATIONS**

| PRODUCT SPECIFICATION    |  | XGI 1500 INVERTER MODEL   |   |                         |   |
|--------------------------|--|---|---|-------------------------|---|
|                          |  | XGI 1500<br>250/250-600   | XGI 1500<br>225-600                           | XGI 1500<br>200/200-480 | XGI 1500<br>175-480                           |
|                          | Absolute Maximum Input Voltage                   | 1500 VDC  |   |                         |   |
| DC Input                 | Maximum Power Voltage Range (MPPT)               | 860-1250 VDC 750-1250 VDC   |   |                         |   |
|                          | Operating Voltage Range (MPPT)                   | 860-1450 VDC 750-1450 VDC   |   |                         | 50 VDC  |
|                          | Number of MPP Trackers                           | 1 MPPT  |   |                         |   |
|                          | Maximum Operating Input Current                  | 296.7 A   | 267 A   | 272.1 A                 | 238.1 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        |   |
| 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-<br>225/225: 216.5<br>225/250: 240.6 | 240.6                   | XGI 1500-<br>175/175: 210.5<br>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                        | < 3%  |   |                         |   |
|                          | (THD) @ Rated Load                               |   |   |                         |   |
|                          | Grid Connection Type                             | 3-Ph + N/GND  |   |                         |   |
| Efficiency               | Peak Efficiency                                  | 99.0%   |   |                         |   |
|                          | CEC Average Efficiency Tare Loss                 | 98.5%<br><1 W   |   |                         |   |
| Temperature              | 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)  |   |                         |   |
|                          | Relative Humidity (non-condensing)               | 0 - 95%   |   |                         |   |
|                          | Operating Altitude                               | 9,840 ft (3 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 1699b Photovoltaic Arc-Fault<br>Circuit Protection Certified |   |                         |   |
|                          | Advanced Grid Support Functionality              | Rule 21, UL 1741SB  |   |                         |   |
|                          | Testing Agency                                   | ETL   |   |                         |   |
|                          | FCC Compliance                                   | FCC Part 15 (Subpart B, Class A)  |   |                         |   |
| Warranty                 | 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 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 and IEC IP66,   |   |                         |   |
|                          |  |   | Polyester Powder-                             | Coatea Aluminum         |   |





