

SOLECTRIA® XGI 1500-166 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

- ▶ Made in the USA with global components
- ▶ Buy American Act (BAA) compliant
- ▶ Models:
 - XGI 1500-166/166-600-UL
 - XGI 1500-150/166-600-UL
 - XGI 1500-125/150-600-UL
 - XGI 1500-125/125-600-UL
- ▶ Models with Arc-Fault Protection
 - XGI 1500-166/166-600-UL-A
 - XGI 1500-150/166-600-UL-A
 - XGI 1500-125/150-600-UL-A
 - XGI 1500-125/125-600-UL-A
- ▶ 99.0% peak efficiency
- ▶ Flexible solution for distributed and centralized system architecture
- ▶ Advanced grid-support functionality Rule 21/UL1741SB
- ▶ Robust, dependable, & 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

- ▶ String combiners for distributed and centralized systems
- ▶ Web-based monitoring
- ▶ Extended warranty



Yaskawa Solectria Solar's XGI 1500 utility-scale string inverters are designed for high reliability and built of the highest quality components that were selected, tested and proven to last beyond their warranty.

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. XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety.

XGI inverters provide ideal solutions for ground-mounted utility-scale PV systems. Designed and engineered in Lawrence, MA, Solectria XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL and Franklin, WI. XGI inverters are Made in the USA with global components, and are compliant with the Buy American Act.

SOLECTRIA® XGI 1500-166 SERIES TECHNICAL DATA

SPECIFICATIONS

| PRODUCT SPECIFICATION | | XGI 1500 INVERTER MODEL | | | |
|--------------------------|--|---|--|--|--|
| | | XGI 1500-125/125-UL XGI 1500-125/125-UL-A | XGI 1500-125/150-UL XGI 1500-125/150-UL-A | XGI 1500-150/166-UL XGI 1500-150/166-UL-A | XGI 1500-166/166-UL XGI 1500-166/166-UL-A |
| DC Input | Absolute Max Input Voltage | 1500 VDC | 1500 VDC | 1500 VDC | 1500 VDC |
| | Max Power Input Voltage Range (MPPT) | 860-1250 VDC | 860-1250 VDC | 860-1250 VDC | 860-1250 VDC |
| | Operating Voltage Range (MPPT) | 860-1450 VDC | 860-1450 VDC | 860-1450 VDC | 860-1450 VDC |
| | Number of MPP Trackers | 1 MPPT | 1 MPPT | 1 MPPT | 1 MPPT |
| | Max Operating Input Current | 148.3 A | 148.3 A | 178.0 A | 197.7 A |
| | Max Operating PV Power | 128 kW | 128 kW | 153 kW | 170 kW |
| | Max DC/AC Ratio Max Rated PV Power | 2.6 332 kW | 2.6 332 kW | 2.2 332 kW | 2.0 332 kW |
| | Max Rated PV Short-Circuit Current ($\Sigma I_{sc} \times 1.25$) | 500 A | 500 A | 500 A | 500 A |
| AC Output | Nominal Output Voltage | 600 VAC, 3-Ph | 600 VAC, 3-Ph | 600 VAC, 3-Ph | 600 VAC, 3-Ph |
| | AC Voltage Range | -12% to +10% | -12% to +10% | -12% to +10% | -12% to +10% |
| | Continuous Real Output Power | 125 kW | 125 kW | 150 kW | 166 kW |
| | Continuous Apparent Output Power | 125 kVA | 150 kVA | 166 kVA | 166 kVA |
| | Max Output Current | 120 A | 144 A | 160 A | 160 A |
| | Nominal Output Frequency | 60 Hz | 60 Hz | 60 Hz | 60 Hz |
| | Power Factor (Unity default) | +/- 0.80 Adjustable | +/- 0.80 Adjustable | +/- 0.80 Adjustable | +/- 0.80 Adjustable |
| | Total Harmonic Distortion (THD) @ Rated Load | <3% | <3% | <3% | <3% |
| | Grid Connection Type | 3-Ph + N/GND | 3-Ph + N/GND | 3-Ph + N/GND | 3-Ph + N/GND |
| | Fault Current Contribution (1 cycle RMS) | 144 A | 173 A | 192 A | 192 A |
| | Efficiency | Peak Efficiency | 98.9% | 98.9% | 99.0% |
| CEC Average Efficiency | | 98.5% | 98.5% | 98.5% | 98.5% |
| Tare Loss | | 2.75 W | 2.75 W | 2.75 W | 2.75 W |
| Temperature | Ambient Temp Range | -40°F to 140°F (-40C to 60C) | | -40°F to 140°F (-40C to 60C) | |
| | De-Rating Temperature | 122°F (50C) | | 113°F (45C) | |
| | Storage Temperature Range | -40°F to 167°F (-40C to 75C) | | -40°F to 167°F (-40C to 75C) | |
| | Relative Humidity (non-condensing) | 0 - 95% | | 0 - 95% | |
| | Operating Altitude | Full Power up to 9,840 ft (3.0 km); De-Rate to 70% of Full Power at 13,123 ft (4.0 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 | UL1741SB, IEEE 1547, UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified (-A models) | | | |
| | 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 250 A DC Disconnect | | | |
| | Mounting Angle | Vertical only | | | |
| | Dimensions | Height: 29.5 in. (750 mm) Width: 39.4 in. (1000 mm) Depth: 15.1 in. (380 mm) | | | |
| | Weight | 270 lbs (122 kg) | | | |
| | Enclosure Rating and Finish | Type 4X, Polyester Powder-Coated Aluminum | | | |

