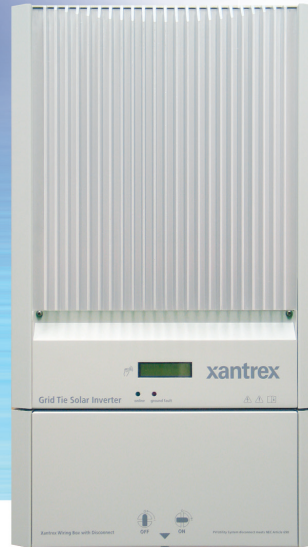


Xantrex™ GT Series Grid Tie Solar Inverters



The Xantrex™ Grid Tie Solar Inverter (GT Series) is designed to convert photovoltaic (PV) electricity produced by solar modules into utility-grade power that can be used by the home or sold to the local electrical utility. Offering high efficiency (up to 96.0 %), clean aesthetics, high reliability, and a low installed cost, through ease of installation and integrated features, the GT Series is a proven, high-frequency design in a compact enclosure.

The GT Series may be installed as a single inverter, for a single PV array, or in a multiple-inverter configuration for large PV systems.

Technology

- ▶ An NEC compliant, integrated DC/AC disconnect, standard in the GT Series, eliminates the need for external DC (PV) disconnects, and in some jurisdictions, AC disconnects
- ▶ Large heat-sink offers extraordinary heat dispersion without the need for a cooling fan
- ▶ Liquid crystal display (LCD) provides instantaneous information – power level, daily and lifetime energy production, PV array voltage and current, utility voltage and frequency, time online “selling”, fault messages, and installer-customized screens
- ▶ LCD vibration sensor allows the tap of a finger to turn backlight on and cycle through display screens

Installation

- ▶ Flexible module selection and sizing due to wide PV input MPPT tracking voltage range
- ▶ Lightweight and versatile mounting bracket
- ▶ Easy access DC (photovoltaic) and AC (utility) terminal block simplifies wiring
- ▶ Rugged NEMA 3R inverter enclosure allows reliable indoor and outdoor installations

Performance

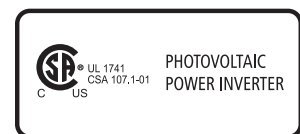
- ▶ Best-in-class efficiency to maximize solar system return on investment
- ▶ Accurate MPPT tracking ensures maximum energy harvest under any conditions
- ▶ FCC Part B compliance provides less external electronic interference

Serviceability

- ▶ 10-year standard warranty
- ▶ Sealed inverter enclosure can be quickly separated from the wiring box allowing DC/AC connections to remain intact in the unlikely event the inverter needs to be serviced



Standard
10-year
warranty



Xantrex Technology Inc.

Customer Service/Technical Support

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Xantrex™ GT Series Grid Tie Solar Inverters

Electrical Specifications - Output

| Models | GT5.0 | | GT4.0N | | GT3.8 | | GT3.3N | | GT2.8 | |
|--|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Maximum AC power output | 5000 W | 4500 W | 4000 W | 3800 W | 3800 W | 3500 W | 3300 W | 3100 W | 2800 W | 2700 W |
| AC output voltage (nominal) | 240 V | 208 V | 240 V | 208 V | 240 V | 208 V | 240 V | 208 V | 240 V | 208 V |
| AC output voltage range | 211-264 Vac 183-229 Vac | | | | | | | | | |
| AC frequency (nominal) | 60 Hz | | | | | | | | | |
| AC frequency range | 59.3 - 60.5 Hz | | | | | | | | | |
| Maximum continuous output current | 21 A | 22 A | 16.7 A | 18.3 A | 15.8 A | 16.8 A | 13.8 A | 14.9 A | 11.7 A | 13.0 A |
| Maximum output over-current protection | 30 A | | 25 A | | 20 A | 25 A | 20 A | | 15 A | |
| Maximum utility backfeed current | 0 A | | | | | | | | | |
| Total harmonic distortion (THD) | < 3 % | | | | | | | | | |
| Power factor | > 0.99 (at rated power), > 0.95 (full power range) | | | | | | | | | |
| Utility monitoring, islanding protection | UL1741-2005 / IEEE 1547 | | | | | | | | | |
| Output characteristics | Current source | | | | | | | | | |
| Output current waveform | True sine wave | | | | | | | | | |

Electrical Specifications - Input

| | | | | | | | | | | |
|-------------------------------------|--------------------------|----------|---------------|----------|---------------|----------|---------------|----------|---------------|----------|
| Maximum array open-circuit voltage | 600 Vdc | | | | | | | | | |
| MPPT voltage range (CEC & CSA) | 240 - 550 Vdc | | 240 - 480 Vdc | | 195 - 550 Vdc | | 200 - 400 Vdc | | 195 - 550 Vdc | |
| MPPT operating range | 235 - 550 Vdc | | 235 - 550 Vdc | | 195 - 550 Vdc | | 200 - 550 Vdc | | 193 - 550 Vdc | |
| Maximum input current | 22.0 Adc | 20.0 Adc | 18.0 Adc | 17.0 Adc | 20.8 Adc | 19.5 Adc | 17.5 Adc | 16.5 Adc | 15.4 Adc | 14.9 Adc |
| Maximum array short-circuit current | 24.0 Adc | | | | | | | | | |
| Reverse-polarity protection | Short-circuit diode | | | | | | | | | |
| Ground-fault protection | GF detection, IDIF > 1 A | | | | | | | | | |
| Maximum inverter efficiency | 95.9% | 95.5% | 96.0% | 95.7% | 95.9% | 95.6% | 95.9% | 95.6% | 95.0% | 94.6% |
| CEC efficiency | 95.5% | 95.0% | 95.5% | 95.0% | 95.0% | 95.0% | 95.5% | 95.0% | 94.0% | 93.5% |
| Night-time power consumption | 1 W | | | | | | | | | |

Environmental Specifications

| | | | | | | | | | | |
|---------------------------------|--|--|-------------------|--|-------------------|--|-------------------|--|-------------------|--|
| Operating temperature range | -13°F to 149°F (-25°C to 65°C) | | | | | | | | | |
| Enclosure type | NEMA 3R (outdoor rated) | | | | | | | | | |
| Inverter weight | 58.0 lb (25.8 kg) | | 58.0 lb (25.8 kg) | | 58.0 lb (25.8 kg) | | 49.0 lb (22.2 kg) | | 49.0 lb (22.2 kg) | |
| Shipping weight | 65.0 lb (27.2 kg) | | 65.0 lb (27.2 kg) | | 65.0 lb (27.2 kg) | | 57.0 lb (25.9 kg) | | 57.0 lb (25.9 kg) | |
| Inverter dimensions (H x W x D) | 28 1/2 x 16 x 5 3/4" (72.4 x 40.3 x 14.5 cm) | | | | | | | | | |
| Shipping dimensions (H x W x D) | 34 x 20 1/2 x 10 5/16" (86.6 x 51.8 x 26.2 cm) | | | | | | | | | |

Mechanical Specifications

| | | | | | | | | | | |
|--------------------------------|---|--|-------------------------|--|-------------------------|--|-------------------------|--|------------------------|--|
| Mounting | Wall mount (mounting bracket included) | | | | | | | | | |
| Input and output terminal | AC and DC terminals accept wires sizes of #14 to #6 AWG | | | | | | | | | |
| PV / Utility disconnect | Eliminates need for external PV (DC) disconnect. Complies with NEC requirements | | | | | | | | | |
| Cooling | Convection cooled, fan not required | | | | | | | | | |
| Display | Backlit, two-line, 16-character liquid crystal display provides instantaneous power, daily and lifetime energy production, PV array voltage and current, utility voltage and frequency, time online "selling", fault messages, and installer-customizable screens | | | | | | | | | |
| Communications | Integrated RS232 and Xanbus™ RJ45 communication ports | | | | | | | | | |
| Wiring box | PV, utility, ground, and communications connections. The inverter can be separated from the wiring box. | | | | | | | | | |
| Warranty | 10-year standard | | | | | | | | | |
| Model number (negative ground) | GT5.0-NA-240/208 UL-05 | | GT4.0N-NA-240/208 UL-05 | | GT3.8-NA-240-/208 UL-05 | | GT3.3N-NA-240/208 UL-05 | | GT2.8-NA-240/208 UL-05 | |
| Part number (negative ground) | 864-1009 | | 864-1008 | | 864-1032 | | 864-1006 | | 864-1001 | |
| | Positive ground inverters are also available | | | | | | | | | |

Regulatory Approvals

Certified to UL1741 1st Edition: 2005 version CSA 107.1-01 CSA 2 C22.2 No.107-1-01 general use power power supplies.