

Xantrex[™] GT100 & GT250 Grid Tie Solar Inverters



XantrexTM GT Series Grid Tie Solar Inverters are based on a reliable platform that is used in grid-connected photovoltaic (PV) and wind turbine applications throughout North America and Europe.

The Xantrex GT100 and GT250 incorporate an advanced Maximum Power Point Tracking (MPPT) algorithm to maximize the energy harvested from a PV array. To reduce power losses during the conversion process, the inverter uses the latest switching devices and a high-efficiency transformer to achieve a weighted CEC efficiency of 96%.

To ensure reliability, the Xantrex GT100 and GT250 and their sub-components are tested using Highly Accelerated Life Testing (HALT). HALT combines thermal and vibration technologies to stress a product beyond its specifications. This enables Xantrex to develop products and test them to a much higher standard than other inverter manufacturers. High reliability of the Xantrex GT100 and GT250 reduces system downtime and results in higher energy production.

Product Features

- ▶ Ultra-efficient design with industry-leading CEC efficiency of 96%, including isolation transformer
- Integrated design with transformer and AC/DC disconnects in one unit
- ▶ Night-time disconnect to reduce tare loss
- Integrated ground-fault detection and interruption
- ▶ Soft-start circuit to reduce nuisance trips
- ▶ Sealed design does not require filters or external air to cool sensitive components
- ▶ Back and sides of unit designed for zero clearance installations to minimize inverter space requirements
- Wiring access points on bottom, sides, and back of inverter
- Removable air outlet allows inverter to be mated with venting ductwork
- Designed for forklift or sling transportation
- > Zinc coated and powder coated steel enclosure for maximum corrosion resistance
- Designed for maximum reliability with film-type capacitors, bus bars in the power path, and uses compression lugs and disc springs to maintain torque
- ▶ Bright fluorescent green vacuum display with UV cover for ease of reading in sunlight
- Standard five year warranty with optional extensions to 10 years and 15 years (100 A, 150 A or 200 A fuses)

Product Options

- ▶ Fused sub-array combiner integrated in the inverter enclosure
- ▶ Positive-ground configuration
- ▶ RS485/Modbus or RS232 remote communication interface
- ▶ Preventative maintenance programs
- Service contracts that include an uptime guarantee



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| | GT100-208 | GT100-480 | GT250-48 | 0 |
|--|---|--|-------------|--|
| Maximum continuous output power | 100 kW | 100 kW | 250 kW | |
| Nominal output voltage | 208 Vac | 480 Vac | 480 Vac | (line to line, +10%-12%) |
| Nominal output frequency | 60 Hz | 60 Hz | 60 Hz | (+0.5 Hz / -3.0 Hz) |
| Nominal output current | 278 A rms | 121 A rms | 301 A rms | |
| Maximum output fault current | 1100 A peak | 1100 A peak | 1400 A peak | (duration of 0.008 sec) |
| Power factor | > 0.99 | > 0.99 | > 0.99 | |
| DC input voltage range | 300-600 Vdc | 300-600 Vdc | 300-600 Vdc | |
| Peak power tracking voltage range | 300-480 Vdc | 300-480 Vdc | 300-480 Vdc | |
| Maximum input current | 347 Adc | 347 Adc | 867 Adc | |
| Maximum input short-circuit current | 460 Adc | 460 Adc | 1214 Adc | |
| Maximum backfeed current | 0 Adc | 0 Adc | 0 Adc | |
| Peak inverter efficiency | 96.2% | 96.7% | 96.8% | |
| CEC efficiency | 95.0% | 96.0% | 96.0% | |
| Night-time power consumption | < 100 W | < 100 W | < 100 W | |
| Maximum output over-current protection | 400 A | 200 A | 400 A | |
| Operating temperature range Enclosure rating | -5°F to 122°F (-15°C to 50°C) NEMA 3R (outdoor rating) | | | |
| Operating temperature range | -5°F to 122°F (-15°C to 50°C) | | | |
| | NEMA 3R (outdoor rating) | | | |
| Enclosure | Zinc coated and powder co | | | |
| Unit weight | 3000 lb (1361 kg) | 3000 lb (1361 kg) | 4450 lb (20 | |
| Inverter dimensions (H x W x D) | 73.3 x 67.0 x 46.1" 1862 x 1702 x 1171 mm | 73.3 x 67.0 x 46.1" 1862 x 1702 x 1171 mm | | 0 x 46.1" (Removable air intake reduces depth by 12" for fitting through doc 36 x 1171 mm |
| Noise | < 70 dBA | | | |
| Altitude | up to 6600' (2012 m) without de-rating | | | |
| Relative humidity | 0 to 95% non-condensing | | | |
| Features & Options | | | | |
| Cooling method | Forced convection cooling/sealed design | | | |
| AC/DC disconnect | Standard and integrated within the inverter enclosure | | | |
| Isolation transformer | Standard and integrated within the inverter enclosure | | | |
| User display | Standard bright fluorescent green vacuum display | | | |
| Ground-fault detection/interruption | Standard and integrated within the inverter enclosure | | | |
| Communications | Optional RS485/Modbus and RS232 communications interface kit | | | |
| Sub-array combiner | Optional and integrated within the inverter enclosure, 100 A, 150 A or 200 A circuits | | | |
| Regulatory Approvals | | | | |
| Certified to UL 1741 (2005 Edition) and CSA | 107.1-01 | | | |
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FCC Part 15 Class A
Specifications subject to change without notice.