

Electrical Specifications	
Maximum AC Power Output	3000 W
Waveform	True Sinewave, current source
AC Voltage (nominal)	211 to 264 VAC (240 VAC)
AC Frequency (nominal)	59.3 to 60.5 Hz (60Hz)
DC Input Voltage Range	195 to 600 VDC
Peak Power Tracking Voltage Range	195 to 550 VDC
Current THD	< 5%
Power Factor	Unity
Peak Inverter Efficiency	94.6%
Maximum Continuous Output Current	14.2 A
Over Current Protection	20 A
Night Time Power Consumption	1W (Communications & LCD continuously active)
Regulatory Compliance	CSA listed to UL 1741 & CSA107.1-01, FCC Class B

Mechanical Specifications	
Operating Temperature Range	-25°C to +65°C (-13°F to +149 °F)
Enclosure Type	NEMA 3R
Unit Weight	45 lbs (20.4 kg)
Shipping Weight	58.7 lbs (26.6 kg)
Shipping Dimensions	34.1" x 20.4" x 10.3" (86.6 cm x 51.8 cm x 26.2 cm)
Inverter Dimensions (H x W x D)	28.5" x 15.9" x 5.7" (72.5 cm x 40.3 cm x 14.6 cm)
Mounting	Wall Mount (mounting bracket included)

Features	
PV/Utility Disconnect	Eliminates need for external PV (DC) disconnect. Complies with NEC
Cooling	Convection (no fan 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" today, fault messages, and installer customizable screens
Communications	RS 232 and two Xanbus RJ45 ports
Wiring Box	PV, Utility, Ground, and Communications connections. Wiring box can be separated from inverter
Warranty	5 year parts and labor (10 year extended warranty available)
Part Number / Model Number	864-0001 / GT 3.0-NA-DS-240
MSRP	\$2,500 US

Options	
GT 3.0 Fan Kit	864-0201/For extreme temperatures and/or south facing inverter installations
Extended Warranty	Ten year available

Note: Specifications are subject to change without notice.

## The new standard in solar grid tie inverters



### About Xantrex

Xantrex Technology Inc. is a world leader in advanced power electronics. Our technology is a key enabler for renewable energy systems, efficiently converting raw electrical energy from any source such as solar, wind, or microhydro, into high-quality household power.

More than 200,000 homes and businesses rely on Xantrex power electronics to bring them electricity anytime, anywhere. Xantrex products allow customers around the world to increase energy efficiency and freedom, while making a positive impact on the environment.

Almost a quarter century of experience goes into creating renewable energy products at Xantrex. Our Distributed Power team has led the renewable energy movement since the 1980s. This knowledge and experience in advanced power electronics is helping to accelerate the adoption of renewable energy.

As part of our commitment to a sustainable future, Xantrex participates in the Green Tags program. Our manufacturing facilities in Arlington, Washington and Livermore, California operate on 100% green electricity.

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### Xantrex GT 3.0 Grid Tie Solar Inverter

- ▶ Breakthrough price/performance
- ▶ Superior PV energy harvest
- ▶ All-in-one three kilowatt system design
- ▶ Lightweight, easy to install



As part of the Bonneville Environmental Foundation Green Tags program, Xantrex manufacturing facilities in the US operate on 100% green electricity.



### Our Design Team Included the Installation Team

When Xantrex set out to develop the GT 3.0 Grid Tie Solar Inverter we listened to the experts – renewable energy dealers and installers. The result is a high performance inverter that makes utility interactive installations easier and more cost effective.

### Redefining the grid-tie inverter is a tall order, but that's exactly what Xantrex has done with the Xantrex GT 3.0 Grid Tie Solar Inverter.

Our three-kilowatt high performance PV string inverter offers superior PV energy harvest, easy installation, state-of-the-art design and high reliability. It's also setting a new standard for inverter cost by offering the best price/performance ratio in the industry!

#### Easy Installation

The Xantrex GT 3.0 Inverter makes life easier for installers of solar power systems. Its modular design and integrated, lockable 600 volt PV/Utility disconnect switch eliminates the need for costly external disconnects and results in simpler, cleaner installations.

Its attached wiring box provides protection for all AC and DC connections, eliminating exposed wiring during inverter installation and removal. The wiring box includes eight 3/4 inch knockouts and easy access DC and AC terminal blocks that accept wire sizes from #14 to #6 AWG.

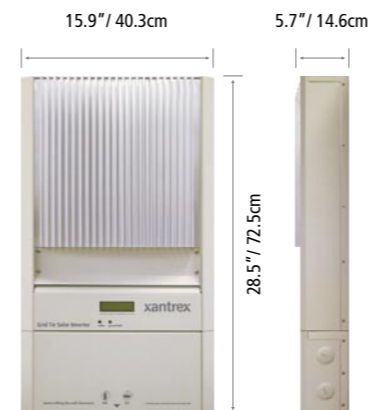
The GT 3.0 is packaged in a rugged NEMA 3R rated enclosure for reliable outdoor installation. To make mounting single and multiple inverters simple, the GT 3.0 incorporates a slotted, hook-style back plate. For large systems, multiple inverters can be mounted side by side centered on standard 16" stud spacing to reduce visible conduit and make installations look more attractive.

#### Improved Local Display

GT inverters come standard with a backlit 16-character two line Liquid Crystal Display. Useful for troubleshooting and system feedback, the LCD provides a variety of information including up to the minute inverter power, daily and lifetime energy production, PV array voltage and current, utility voltage and frequency, time online "selling" today, fault messages, and two installer customizable screens. Tapping a finger close to the LCD activates the backlight display. With each tap, the display cycles through all the communication screens. The LCD is always on standby, ready to provide information even at night. When inverters are daisy chained using standard CAT5 Ethernet cable, each inverter display will report the output of the entire system in addition to individual inverter output.

*"When Xantrex asked me what I wanted in an ideal inverter, I told them to make it lower cost, easier to install, include an NEC compliant DC disconnect, and give me a true three kW inverter with a manageable size and weight. I've been testing the GT 3.0 on my arrays since June 2004 and I am happy to say Xantrex delivered."*

– Scott Carlson, Carlson Solar  
Xantrex Certified Dealer



**Weighing only 45 lbs / 20.4 kg, the GT 3.0 can be easily mounted by one installer.**

#### Standard Communications

Our GT 3.0 offers an isolated RS232 port and two Xanbus RJ45 communication ports. Unlike competitive inverters, no additional communication ports or cards are needed to connect a PC. The LCD can be used simultaneously, even when a PC is connected to the RS232 port. Xantrex offers the GT Solar Inverter Viewer software, which can be downloaded from our Web site.



#### High Reliability

To ensure the GT 3.0 is a dependable, high-quality product, Xantrex engineers have tested it extensively during the design process using an evaluation method called Highly Accelerated Life Testing. HALT combines powerful thermal and vibration technologies to stress a product beyond its specifications. This enables our engineers to find and fix product defects that may not be discovered by testing methods typically used by other inverter manufacturers. Our sophisticated HALT techniques go beyond conventional testing, which results in improved product reliability and quality.

The GT 3.0 was also thoroughly field-tested. Prior to market introduction, the GT 3.0 logged more than 15,000 test hours in home installations.



#### Superior PV Energy Harvest

Engineered to make the most of a PV grid tie system investment, our GT 3.0 provides high power conversion efficiency, excellent thermal performance, and rapid Maximum Power Point Tracking.

#### Rapid Maximum Power Point Tracking

The Xantrex GT 3.0 Maximum Power Point Tracking algorithm's rapid response to insolation events, like moving cloud coverage, maximizes the output energy of connected PV strings. It has a wide input range from 195 to 550 volts DC ensuring the inverter begins to operate earlier in the day, and is more resistant to array shading. It also allows more flexible array sizing.

#### High Efficiency

For small and large systems, our GT 3.0 offers high peak and average efficiency to convert all the valuable energy produced by solar panels into useable electricity.

#### Excellent Thermal Performance

As temperatures climb, solar panels and inverters heat up and produce slightly less energy. To minimize energy loss due to heat, our GT 3.0 has a large aluminum heat sink to keep its electronics cool even in the hottest climates. Unlike competitive inverters that start to derate as early as 25°C (77°F), the GT 3.0 provides 3000 watts of power up to 30°C (86°F) and 2,500 watts of power up to 45°C (113°F). So all the energy produced by the solar panels is efficiently converted to AC power and sent to the utility grid. For added protection from heat in desert extremes or south facing inverter installations, an optional fan kit can be ordered.

**To ensure reliability, the HALT chamber combines powerful thermal and vibration technologies to test a product and its components beyond product specifications.**

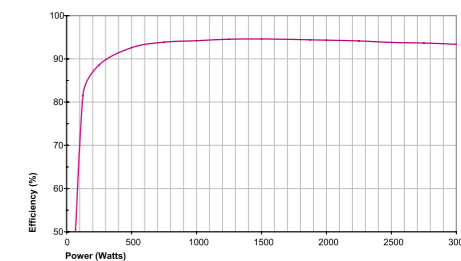


*As a seasoned independent technical evaluator and proven grid tie system designer, I was involved from the early engineering prototypes through production release to validate performance of the new Xantrex GT 3.0. I ran extensive side-by-side tests with the best competitive inverters using laboratory quality power analyzers.*

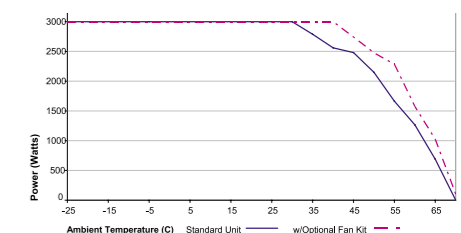
*I found that the GT 3.0 delivers the highest daily energy harvest of ANY commercially available grid-tie inverter. Whereas other manufactures just make peak efficiency claims, the Xantrex GT 3.0 makes the power.*

– Henry H. Cutler, Senior Technical Evaluator/Designer  
[www.solar-guppy.com/forum](http://www.solar-guppy.com/forum)

GT 3.0 Efficiency vs. Output Power



GT 3.0 Output Power vs. Ambient Temperature



**Our GT 3.0 has an easy access wiring box and integrated 600 volt DC/AC PV/Utility disconnect.**