

About Xantrex

Xantrex Technology Inc. (www.xantrex.com) is a world leader in the development, manufacturing and marketing of advanced power electronic products and systems for the renewable, portable, mobile, and programmable power markets. The company's products convert raw electrical power from any central, distributed, or backup power source into high-quality power required by electronic and electrical equipment. Headquartered in Vancouver, British Columbia, the company has facilities in Arlington, Washington; Livermore, California; Elkhart, Indiana; Barcelona, Spain; and Reading, England. Xantrex is publicly listed on the Toronto Stock Exchange under the ticker symbol "XTX".



xantrex

Smart choice for power

Xantrex Technology Inc.

Headquarters

8999 Nelson Way
Burnaby, British Columbia
Canada V5A 4B5
604 422 8595 Phone
604 420 1591 Fax

Europe

Edificio Diagonal 2A,
C/Constitución 3,4 º2 º^a
08960 Sant Just Desvern
Barcelona, Spain
+34 93 470 5330 Phone
+34 93 473 6093 Fax

europesales@xantrex.com

Xantrex partner:



Xantrex GT250E Grid Tie Inverter

A highly efficient 250 kW three-phase
power conversion system for grid
connected photovoltaic arrays



Xantrex GT250E Grid Tie Inverter – The Smart Choice for PV Systems

More than 250,000 customers around the world rely on Xantrex inverters and system components to bring them electricity every day. The Xantrex GT250E Grid Tie Inverter is based on a reliable platform that is used in grid connected photovoltaic and wind turbine applications in North America and Europe. In the last decade, this Xantrex technology has generated more than 3000 megawatts of power conversion capacity.

Expandable and Easy to Operate

The GT250E is a 250 kilowatt three phase power conversion system for grid connected photovoltaic arrays. Designed to be easy to install and operate, it has automatic startup, shutdown, and fault detection. Users are able to customize system startup and shutdown sequences with adjustable delay periods and user-definable power tracking that matches the inverter to the solar array. Multiple inverters are easily paralleled for larger power installations. The design allows direct integration to a low voltage or medium voltage grid using one step voltage transformation to any required grid voltage.

The integrated combiner box/master slave configuration is designed to connect to two inverters, which allows an optimized energy harvest during periods of low irradiance.

Efficient and Cost-effective

The GT250E incorporates advanced Maximum Power Point Tracking (MPPT) technology to maximize the energy harvested from a PV array. To reduce power losses during the conversion process, the inverter's state-of-the-art switching technology uses insulated gate bi-polar transistors (IGBT), so you get the best results from your photovoltaic system.

Designed for Europe and Manufactured in Europe

The GT250E is compliant to applicable European directives. The GT250E is produced by a manufacturing partner in Germany.

Built-in Protection Features

The GT250E offers applicable protection features including over and under voltage and frequency safeguards. Its anti-islanding protection prevents the inverter from feeding power to the grid in the event of a utility outage. It has an inverter shut-off and reset toggle switch.

Service and Warranty

The GT250E comes with a standard warranty that covers parts and labor. Xantrex offers extended warranty and performance guarantee packages. The Xantrex customer service network, based in Germany and Spain, provides installation and commissioning support, product training, a hotline, and maintenance service across Europe.



Xantrex installation, Ikea, Spain (Abasol).

European References

Xantrex is committed to the European solar market. Xantrex has installed and commissioned multiple grid tie inverters in Germany and Spain. Important clients like Kopf AG Umwelt und Energietechnik, HaWi Energietechnik, Dachland GmbH, Siliken S.L., Grupo Enepal, Alternativas Energeticas and Vaquero S.L. have trusted the reliability of Xantrex inverters.

High Reliability

GT250E high reliability means reduced system down time and higher energy production. To ensure the GT250E is a dependable, high quality product, Xantrex engineers tested it extensively during the design process on a component level, using an evaluation method called Highly Accelerated Life Testing (HALT). HALT combines powerful thermal and vibration technologies to stress a product beyond its specifications. This enables Xantrex engineers to find and fix product defects that may not be discovered by testing methods typically used by other inverter manufacturers. Xantrex's sophisticated HALT techniques go beyond conventional testing, which results in improved product reliability and quality.



Springerville solar array:

Xantrex 's 150 kW Grid Tie Inverters are installed in one of the world 's most productive grid connected photovoltaic power systems in Springerville, Arizona. Tucson Electric Power's giant solar field consists of 34.980 solar panels that generate up to 4,6 MW of power. The GT250E is based on the same platform as the Xantrex inverters installed at the Springerville site.

Xantrex GT250E Grid Tie Inverter

- ▶ Extremely reliable
- ▶ High energy production due to direct conversion to medium voltage and master slave option
- ▶ Easy to install: flexible AC & DC connectivity
- ▶ Local service network
- ▶ Extended warranty offerings
- ▶ Worldwide experience in large grid connected photovoltaic arrays
- ▶ Manufactured in Germany

Electrical Specifications

Nominal power rating (AC)	250 kW
Nominal AC voltage	315 V
Nominal AC frequency	50 Hz (optional 60 Hz)
Line power factor	> 0,99 above 20% rated power
AC current distortion	< 3% THD at rated power
Max AC line current	460 A
Stand-by tare losses	~100 W
Night consumption	~100 W
Min DC voltage for feed-in	450 V
Suggested PV power	280 kWp
Max DC current	555 A
Max open circuit voltage	880 V
Power Tracking window range	450 V - 800 V
Max efficiency	97,5%
European efficiency	96,6%

General Specifications

Ambient temperature range	-10° - 45°C
Enclosure environmental rating	IP21
Enclosure	Rittal TS Series
Weight	1160 kg
Dimensions (H x W x D)	211,2 x 200,6 x 60,5 cm
Altitude	up to 1500 m without de-rating
Relative humidity	0 - 95% non-condensing

Features and Options

Cooling method	Forced convection cooling
Protective functions	AC over/ under voltage, AC over / under frequency, over temperature, AC and DC over current, DC over voltage
User display standard	LCD, 4-line, 20-character with keypad
Disconnects (AC and DC)	Integral to inverter assembly
Communications software	Graphical user interface software for real time communications and control
Data acquisition and logging	Adjustable
Interfaces	Webserver or telephone modem for remote system monitoring and fault notification
Combiner Boxes	Optional feature (information on request)
Container solution	Optional feature (information on request)

Approvals and Safety

The GT250 complies with applicable European Directives
The GT250 complies with the requirements of VDEW

Note: Specifications subject to change without notice