

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 and San Diego, California; Elkhart, Indiana; Barcelona, Spain; and Reading, England. Xantrex is publicly listed on the Toronto Stock Exchange under the ticker symbol "XTX".



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Smart choice for power™

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Smart choice for power™

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Improved
GT100E

Xantrex GT100E Grid Tie Inverter

100 kW three-phase
inverter for grid connected
photovoltaic arrays



www.xantrex.com

Xantrex GT100E 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 GT100E 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, our technology has generated more than 3000 megawatts of power conversion capacity.

Expandable and Easy to Operate

The GT100E is a 100 kilowatt three-phase power conversion system for grid connected photovoltaic arrays. Designed to be easy to install and operate, it automates startup, shutdown, and fault detection. With user-definable power tracking that matches the inverter to the array and adjustable delay periods, users are able to customize system startup and shutdown sequences. Multiple inverters are easily paralleled for larger power installations.

Efficient and Cost-effective

The GT100E 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

The GT100E is designed to meet all CE requirements. It is approved by the TÜV Rheinland and complies with the Royal Decree (RD661/2007) in Spain.

Built-in Protection Features

The GT100E 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 GT100E comes with a standard warranty that covers parts and labor. Xantrex offers extended warranty and performance guarantee packages. Our customer service network, based in Germany and Spain, is providing installation and commissioning support, product training, a hotline and maintenance service across Europe.

European References

Xantrex is committed to the European solar market. Xantrex has installed and commissioned multiple GT100E products in Germany and Spain. Important clients like Juwi Gruppe, Phönix Solar AG, HaWi Energietechnik GmbH, EnBW Regional AG, Siliken S.L., Grupo Enepal, Alternativas Energéticas Vaquero S.L., Technosun and Solon AG have trusted the reliability of Xantrex GT100E inverters.



▲ Installation with Asur in Spain

Software and Display

The GT100E has an onboard four-line, 80-character VFD display with a keypad to show detailed operating status. The inverter comes with software that provides an overview of the status of the system in real time. The software's graphical user interface offers the option to provide real time communications directly with a PC or via a modem connection. It also has diagnostic and archive functionality.



▲ Installation with Grupo Enepal in Spain

Electrical Specifications

Continuous power rating	100 kW
Nominal DC power rating	105 kW
Nominal AC voltage	400 Vac three phase
Nominal AC frequency	50 Hz
Line power factor	> 0.99 above 20% rated power
Maximum AC line current	164 amps AC
AC current distortion	< 3% THD at rated power
Maximum open circuit voltage	650 Vdc
Power tracking window range	300 to 650 Vdc
Maximum DC input current	319 amps DC
Peak inverter efficiency	96,6% (includes transformer)
European weighted efficiency	96,0% (includes transformer)
Stand-by tare losses	93 watts

General Specifications

Temperature range	
Ambient	-10 °C to +45 °C
Enclosure environmental rating	IP21
Enclosure	Rittal TS Series
Weight	870 kg
Dimensions (H x W x D)	190,5 x 120,5 x 60,6 cm
Altitude	Up to 2000 m without de-rating
Relative humidity	0 to 95% non-condensing

Features & 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	four-line, 80-character VFD with a keypad
Disconnects (AC & DC)	Integral to inverter assembly
Isolation transformer	Integral to inverter assembly
Communication software	Serial communications and control software
Data acquisition & logging	Adjustable
Interfaces	RS232, Telephone modem for remote monitoring and fault signal notification

Note: Specifications subject to change without notice.

▲ Installation with Alternativa Energética in Spain

Approvals and Safety

The GT100E is compliant to applicable European Directives and CE marked:

- EMC Directive: EN 50081-2, EN 50082-2
- Low Voltage Directive: EN 50178

The GT100E complies with the grid protection requirements of VDEW

The GT100E fulfills Royal Decree (RD661/2007), Spain



▲ Installation with Asur in Spain