

## Xantrex™ GT Series Grid Tie Solar Inverters



When Xantrex set out to develop grid tie solar inverters 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. Our PV string inverters offer high efficiency, lower installed cost, improved aesthetics and high reliability. The GT series inverter are high quality products that offer the best price/performance ratio in the industry. Compact and weighing only between 19.5 and 22.3 kg, the Xantrex GT series interters can be easily installed by one person. The unique design saves labor costs for system owners and installers. The result is a rugged, high-quality product that is built to withstand extreme environmental conditions.

## Xantrex™ Three Phase GT30E Grid Tie Solar Inverter



The Xantrex GT30E Grid-Tie Solar Inverter is a high performance inverter that makes utility-interactive installations easier and more cost effective. The GT30E is manufactured in Germany with a compact, isolated high frequency design that weighs only 80 kilograms so it can be wall-mounted, which is a first for an inverter at this power level. The GT30E has a peak efficiency rating over 95% and it incorporates advanced Maximum Power Point Tracking (MPPT) technology to maximize the energy harvested from a PV array.

## Xantrex™ Three Phase GT90E/GT100E Grid Tie Solar Inverters



The Xantrex GT90E and GT100E Grid Tie Inverters are based on a reliable platform that is used in grid-connect photovoltaic and wind turbine applications in North America and Europe. The GT90E and GT100E have a high efficiency and a low weight. Easy to install and operate, both inverters automate start up, and shut down. They incorporate advanced Maximum Power Point Tracking Technology to maximize the energy harvested from a PV array. To minimize power losses during the conversion process, the inverter's switching technology uses insulated gate bi-polar transistors.

## Xantrex™ Three Phase GT250E/GT500E/GT630E Grid Tie Solar Inverters



Designed for European PV installations, the Xantrex GT250E, GT500E and GT630E are extremely reliable and easy to install providing flexible AC & DC conductivity. They enable high energy production due to direct conversion to medium voltage and master slave option.

The GT250E, GT500E and GT630E are manufactured in Germany and meet all applicable European grid connected regulations. The Xantrex European customer service network in Spain and Germany provides installation and commissioning support, product training and a hotline for maintenance service.

Electrical Specifications	GT2.8SP	GT3.8SP	GT5.0SP
Max AC Power Output	2800 W	3800 W	5000 W
Nominal AC Power Output	2500 W	3300 W	5000 W
Recommended PV array power	3070 W	4180W	5300W
AC Voltage (nominal)	230 VAC	230 VAC	230 VAC
AC Frequency (nominal)	50Hz	50Hz	50Hz
DC Input Voltage Range	195 to 600 VDC	195 to 600 VDC	240 to 600 Vdc
Current THD	<3%	<3%	<3%
Peak Inverter Efficiency (incl transformer)	95.0%	95.3%	96.0%
Euro efficiency (incl. transformer)	94.0%	94.5%	95.2%
Max Continuous Output Current	14.5 Aac	19 Aac	23 Aac
Over Current Protection	20 A	20A	30A
Night time tare loss	<1W	<1W	<1W

General Specifications			
Operating Temperature Range	-25 °C to +65 °C		
Enclosure environmental rating	IP54	IP54	IP54
Unit Weight	19.5 kg	20.0 kg	22.3 kg
Inverter Dimensions (H x W x D)	59.7 cm x 40.3 cm x 13.6 cm		

Features and Options	
Cooling	Convection (no fan required)
Display	Backlit, two line, 16 character Liquid Crystal Display
Communications	RS 232 and two Xanbus RJ45 ports
Warranty	5 year parts and labor (10 year extended warranty available)

Regulatory Compliance CE marked according to the following EU Directives and standards: EMC Directive: EN 61000-6-1, EN 61000-6-3, EN61000-3-2, EN61000-3-3 Low Voltage Directive: EN 50178 Royal Decree, Spain

Note: Specifications subject to change without notice

Electrical Specifications	
Nominal power rating (AC)	29.9 kW
Max continuous power (AC)	32.9 kW
Nominal AC voltage	400 V, 3-phase
Nominal AC frequency	50 - 60 Hz
Line power factor	> 0.99 above 20% rated power
AC current distortion	< 4% THD at rated power
Max input current (DC)	77.4 Adc
Night consumption	<1W
Min DC voltage for feed-in	450 Vdc
Suggested PV power	25 - 35 kWp
Nominal power rating (DC)	31.9 kW
Max open-circuit voltage	840 Vdc
Power tracking window range	450 - 800 Vdc
Max efficiency	95.0% incl. transformer
European efficiency	94.2% incl. transformer

General Specifications	
Ambient temperature range	- 0° to 50 °C
Enclosure environmental rating	IP20
Enclosure	Powder-coated aluminum
Weight	80 kg
Dimensions (H x W x D)	710 x 475 x 347 mm
Relative humidity	0 - 95%, non-condensing

### Features and Options

Cooling Method	Temperature-dependent forced-convection cooling
Protective functions	AC over/under voltage, AC over/under frequency, over-temperature, AC and DC over-current, DC over-voltage and reverse-polarity protection
User-display standard	LCD, four-line text display with keypad
Ground-fault protection	DC isolation monitoring
Disconnects	AC contactor integral to inverter assembly
Transformer	HF transformer
Installation / Mounting	Prepared for wall mounting
Output relays	Four relay contacts (three user-settable)
Interfaces	RS232/485, optional telephone modem for remote system monitoring
Combiner boxes	Optional feature — includes DC over-voltage protection and disconnect, calibrated AC power metering, string fusing and monitoring, Weblog Pro and irradiance meter

### Approvals and Safety

Labeled with CE mark and complies with applicable European Directives: EMC Directive: EN50081-2, EN50082-2; Low Voltage Directive: EN50178; complies with the requirements of VDEW and fullfills Royal Decree, Spain

Note: Specifications subject to change without notice

Electrical Specifications	GT90E	GT100E
Continous power rating	90kW	100 kW
Suggested power PV field	105kW	115kW
Nominal AC voltage	400 Vca, 3-phase	
Nominal AC frequency	50 Hz	
Line power factor	> 0.99 above 20% rated power	
AC current distortion	< 3% THD at rated power	
Max AC line current	148 Aac	164 Aac
Stand-by tare losses	93 W	
Max DC input current	312 Adc	347 Adc
Max open-circuit voltage	650 Vdc	
Power tracking window range	300 a 650 Vdc	
Max efficiency	96.6% (includes transformer)	
European efficiency	96.0% (includes transformer)	

### General Specifications

Ambient temperature range	- 10 to 45 °C
Enclosure environmental rating	IP21
Enclosure	Rittal TS Series
Weight	870 kg
Dimensions (H x W x D)	1905 x 1205 x 606 mm
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, 80-character with 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 system monitoring and fault signal notification

### Approvals and Safety

Labeled with CE mark and complies with applicable European Directives: EMC Directive: EN50081-2, EN50082-2; Low Voltage Directive: EN50178; complies with the requirements of VDEW and fullfills Royal Decree, Spain

Note: Specifications subject to change without notice

Electrical Specifications	GT250E	GT500E	GT630E
Continous power rating	250 kW	500 kW	630 kW
Suggested power PV field	280 kW	560 kW	705 kW
Nominal AC Voltage	315 Vac 3-phase (other voltage levels on request)	375 Vac 3-phase (other voltage levels on request)	
Nominal AC Frequency	50 Hz (60 Hz on request)		
Line power factor	>0.99 above 20% rated power	> 0.99 above 20% rated power (adjustable 0.93 leading to 0.93 lagging with grid interactive feature)	
AC current distortion	<3% THD at rated power		
Max AC line current	460 Aac	1040 Aac	
Minimum DC voltage for feed-in	450 Vdc	450 Vdc (495 Vcc for grid interactive option)	575 Vdc
Max DC input current	555 Aac	1120 Aac	
Stand-by tare losses	< 100 W		
Max open-circuit voltage	880 Vdc	940 Vdc	940 Vdc
Power tracking window range	450 to 800 Vdc	450 to 880 Vdc (495 to 880 Vdc for grid interactive version; reduced current above 820 Vdc)	575 to 880 Vdc (reduced AC current above 820 Vdc)
Max efficiency	97.5%	98.1%	98.6%
European efficiency	96.6%	97.6%	98.1%

General Specifications	GT250E	GT500E	GT630E
Ambient temperature range	-10 to 45°C		
Enclosure environmental rating	IP20		
Enclosure	Rittal TS Series		
Weight	1160 kg	1770 kg	>1770 kg (without 1000V Vdc option)
Dimensions (H x W x D)	2112 x 2006 x 605 mm (GT250E) 2112 x 2406 x 605 mm (GT500E / GT630E) (GT630E – 1000V Vdc option)		
Relative humidity	0 - 95%, non-condensing		
Altitude	Full power up to 1500 m, with power derating above 1500 m		

### Features and Options

Cooling method	Temperature-dependent 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 (DC & AC)	Integral to inverter assembly
Communication software	Graphical user interface software for real time communications and control
Data acquisition & logging	Adjustable
Interfaces	Webserver or telephone modem for remote system monitoring & fault notification

### Approvals and Safety

Labeled with CE mark and complies with applicable European Directives: EMC Directive: EN50081-2, EN50082-2; Low Voltage Directive: EN50178; complies with the requirements of VDEW

Note: Specifications subject to change without notice



Xantrex Technology Inc. (www.xantrex.com), a subsidiary of Schneider Electric, is a world leader in the development, manufacturing and marketing of advanced power electronic products and systems for the renewable and mobile power markets. The company's products convert and control raw electrical power from any central, distributed, renewable, or backup power source into high-quality power required by electronic equipment and the electricity grid. Xantrex is headquartered in Vancouver, Canada, with facilities in the United States, Germany, Spain, India, and a joint venture in China



# XANTREX™ GRID TIE SOLAR INVERTER

From 2.8 kW to 630 kW



Xantrex  
is becoming  
**Schneider**  
Electric

Our evolution to Schneider Electric, the global specialist in energy management, re-affirms our commitment to provide you with innovative solutions, best-in-class customer service, and exceptional quality in everything we do. We are proud to be your partner, and we are dedicated to helping you make the most of your energy.

[www.xantrex.com](http://www.xantrex.com)



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