

GX6315 SERIES



HIGH CURRENT 45 RELAY PXI CARD

- 45 individual high current single pole double throw (SPDT) Form C relays
- 7 A contact rating per channel
- 9 additional relay drivers for external relays or other devices
- 6U PXI Instrument



DESCRIPTION

The GX6315 is a 45 channel, high current relay board that plugs directly into any 6U PXI slot. The GX6315 also provides nine transistor-driven channels for external relays. These outputs may be used to drive external loads, such as heavy duty relays, lamps or other devices.

FEATURES

The GX6315 consists of three groups: A, B, and C. Each group has 15 high current relays, three open collector relay drivers, and a 50-pin D type connector. The three open collector drivers in each group are connected via diodes to the same fly-back signal. The fly-back signal can be connected to the external relay supply to provide suppression for voltage spikes generated by the relays' coils.

PROGRAMMING AND SOFTWARE

The board is supplied with the GXSW library, a software package that includes a virtual instrument panel, and a Windows 32/64-bit DLL driver library and documentation. The virtual panel can be used to interactively program and control the instrument from a window that displays the instrument's current settings and status. In addition, interface files are provided to support access to programming tools and languages such as ATEasy, LabView, LabView/Real-Time, C/C++, Microsoft Visual Basic®, Delphi, and Pascal. An On-Line help file and PDF User's Guide provides documentation that includes instructions for installing, using and programming the board.

A separate software package - [GtLinux](#) - provides support for Linux 32/64 operating systems.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Power switching
- Alarm Outputs
- Data Acquisition Systems
- Process Control Systems

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SPECIFICATIONS

CONTACT SPECIFICATIONS	
Relay Format	45 SPDT Form C
Relay Contact Resistance	0.1 ohm Initial
Contact Life Rating at Low Level	10 x 10 ⁶ (typ)
At 28 VDC @ 0.5 A	5 x 10 ⁵ (typ)
Switchable Voltage, Maximum	30 VDC / 300 VAC
Switchable Current	7 ADC / 7.5 AAC
Contact Carry Current	7 A
Operate Time	10 ms (max)
Release Time	10 ms (max)
DRIVER OUTPUTS	
Driver Channels	9 Open Collector outputs
Current	500 mA sink per drive
POWER REQUIREMENTS	
Operating Voltage	+5 VDC
Power Consumption	
+3.3 V	100 mA
+5 V	70 mA per channel (typ); 3 A (max)
ENVIRONMENTAL	
Operating Temperature	GX6315: 0°C to +55°C GX6315-M: 0°C to +85°C
Storage Temperature	GX6315: -20 °C to 85 °C GX6315-M: -51 °C to +85 °C
Relative Humidity (operating)	GX6315: 5% to 85%, temperature range 0°C to 60°C GX6315-M: 5% to 95%, temperature range 0°C to 60°C GX6315, GX6315-M: 5% to 60% for operating temperatures above 60°C
Altitude (operating)	4600 meters (max)
Vibration	9 g at 10 - 55 Hz
Shock ½ Sine	100 G for 6 mS

PHYSICAL	
Size	6U PXI
Weight	16 oz
Connections	50-pin D Sub-type connectors. Includes three mating connectors.

Note: Specifications are subject to change without notice

ORDERING INFORMATION

GX6315	45 Channel High-Current Relay Card with 9 Additional Relay Drivers
GX6315-M	45 Channel High-Current Relay Card (Ruggedized and Conformally Coated)
ACCESSORY	
GX96301	Replacement Relay for GX6315
GT96108	Connector, D-Type 50-Pin Male with Crimp Pins
GT97106	1' Harness, 50-Pin Male Connector on One End, Loose Wired (Numbered) Other End
GT97107	3' Harness, 50-Pin Male Connector on One End, Loose Wired (Numbered) Other End
GT97108	1' Harness, 50-Pin Male Connector on Both Ends
GT97109	3 Feet Harness, 50-Pin Male Connector on Both Ends
GX98602	6U "Wireless" Scout Adapter for GX6315/GX6325/GX6338 (2 x 96-Pin, 10A Scout Connectors)