

#### MULTI FUNCTION RELAY PXI CARD

- · Flexible configuration in a 3U form-factor
- Five 10 A, single pole Form A relays
- Four 2 A, single pole Form A relays
- Four 2 A, single pole Form C relays
- Dual 16x2, configurable relay matrix
- · PXI hybrid slot compatible



#### **DESCRIPTION**

The GX6377 3U PXI multi function switch card provides users with the ability to switch both high current and general-purpose signals using only one 3U PXI switch module. The card features multiple channels of high current switching capability for 10 A and 2 A applications as well as two, 16 x 2 switch matrix groups, which can also be configured as a 32 x 2 or 16 x 4 matrix.

#### **FEATURES**

The GX6377 offers a total of 3 high current, independent relays — five 10 A, Form A; four 2 A, Form A; and four 2 A, Form C. The dual 16 x 2 relay matrix is rated for 500 mA and is hardware configurable as a 16 x 4 matrix or software configurable as a 32 x 2 matrix.

#### 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 - <u>GtLinux</u> - provides support for Linux 32/64 operating systems.

#### APPLICATIONS

- Automatic Test Equipment (ATE)
- Automotive
- Power switching
- Industrial control
- Data Acquisition Systems
- Process Control Systems





#### **SPECIFICATIONS**

RELAY / MATRIX SPECIFICATIONS		
Relay Configuration	5 SPST Form A	
Relay Contact Resistance	0.1 ohm Initial	
Contact Life Rating at Low Level at 28 V <sub>DC</sub> @ 10A	10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ)	
Switchable Voltage, Maximum	30 V <sub>DC</sub> / 240 V <sub>AC</sub>	
Switchable Current	10 A	
Contact Carry Current	10 A	
Switching Power Rating	210 W or 277 VA	
Operate Time	10 ms @ nominal voltage	
Release Time	10 ms @ nominal voltage	
RELAY / MA	TRIX SPECIFICATIONS	
Relay Configuration	4 SPDT Form A, 4 SPST Form C	
Relay Contact Resistance	50 m ohm Initial	
•	50 m ohm Initial  10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ)	
Resistance  Contact Life Rating at Low Level at 30 V <sub>DC</sub> @	10 X10 <sup>6</sup> (typ)	
Resistance  Contact Life Rating at Low Level at 30 V <sub>DC</sub> @ 2A  Switchable Voltage,	10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ)	
Resistance Contact Life Rating at Low Level at 30 V <sub>DC</sub> @ 2A Switchable Voltage, Maximum Switchable	10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ) 220 V <sub>DC</sub> / 250 V <sub>AC</sub> @ 300 mA	
Resistance  Contact Life Rating at Low Level at 30 V <sub>DC</sub> @ 2A  Switchable Voltage, Maximum  Switchable Current  Contact Carry	10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ) 220 V <sub>DC</sub> / 250 V <sub>AC</sub> @ 300 mA	
Resistance Contact Life Rating at Low Level at 30 V <sub>DC</sub> @ 2A Switchable Voltage, Maximum Switchable Current Contact Carry Current Switching	10 X10 <sup>6</sup> (typ) 5 X10 <sup>5</sup> (typ) 220 V <sub>DC</sub> / 250 V <sub>AC</sub> @ 300 mA 2 A	

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RELAY / MA	TRIX SPECIFICATIONS	
Matrix Configuration	16 X 2 (X2) / 32 X 2 / 16 X 4	
Relay Contact Resistance	<0.2 ohm	
Contact Life Rating at Low Level at 28 V <sub>DC</sub> @ 500 mA	10 X 10 <sup>6</sup> (typ) 5 X 10 <sup>6</sup> (typ)	
Switchable Voltage, Maximum	200 V <sub>DC</sub>	
Switchable Current	500 mA	
Contact Carry Current	1.2 A	
Switching Power Rating	10 W	
Operate Time	500 μs (max)	
Release Time	250 μs (max)	
ENVIRONMENTAL		
Operating Temperature	0 °C to +55 °C	
Storage Temperature	-20 °C to +85 °C	
Vibration	5 G @ 500 Hz	
Shock 1 / 2 Sine	5 G for 6 mS	
PHYSICAL		
Size	3U PXI	
Weight	8.8 oz	
Connections	78-Pin D Sub-Type Connector. Includes Mating Connector.	

Note: Specifications are subject to change without notice





#### ORDERING INFORMATION

GX6377	Multifunction Switch Card. 5 Channels 10A, 8 Channels 2A, Two 2:16 Matrix	
ACCESSORY		
GT96002	Connector, D-Type 78-Pin Male with Crimp Pins	
GT96078	78-Pin Connector to Screw Terminal Interface	
GT97103	1 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End	
GT97102	3 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End	
GT97104	1 foot Harness, 78-Pin Male Connector on Both Ends	
GX96106	6 ft. Harness, 78 Pin Male Connector on Both Ends	
GT96107	3 Feet Harness, 78-Pin Male Connector on Both Ends	
GX98302	3U "Wireless" Scout Adapter for GX6138/GX6125/GX6377/GX6384/GX1648 (200- Pin Connector)	
GX96105	6 ft harness, 78 pin male connector on one end, loose wires (numbered) on other end	
GT96110	5 ft Cable, 78-Pin Male Connector on Both Ends	
GT97112	15' Cable, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End	
GT97113	15 ft Cable, 78-Pin Female Connector on One End, Loose Wired (Numbered) Other End	





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