

# GX6616



## HIGH DENSITY SWITCH MATRIX PXI CARD

- Six switching groups allow multiple configurations up to 2 x 96
- Fast switching time with 500 mA current switching capability
- Single-ended or differential switching capability
- Optional built-in test adapter simplifies maintenance and support
- 6U PXI Instrument



## DESCRIPTION

The GX6616 is a 6U PXI switch matrix board that provides either differential or single-ended multiplexing capability through software commands, along with six groups of 2 x 16 that may be used in various configurations.

## FEATURES

The GX6616 consists of six switching groups, A through F, which provide connections between two rows and 16 channels. Each switching group can be connected either horizontally or vertically to an adjacent group via on-board jumpers. Typical configurations include:

- Six groups of 2 x 16
- Three groups of 4 x 16
- Three groups of 2 x 32
- One group of 2 x 96

An optional self-test adapter is available externally to perform a complete self-test of the GX6616.

## 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)
- Data Acquisition
- Process Control
- High density switching systems



# GX6616



## SPECIFICATIONS

CONTACT SPECIFICATIONS	
Relay Contact Resistance	<0.2
Contact Life Rating at Low Level at 28 VDC @ 0.5 A	5 x 10 <sup>6</sup> (typ)
Switchable Voltage, Maximum	200 VDC
Switchable Current	0.5 A (max)
Contact Carry Current	1.2 A (max)
Operate Time	500 µs (max)
Release Time	250 µs (max)
POWER REQUIREMENTS	
Operating Voltage	+5 VDC
Power Consumption	600 mA (typ); 1.1 A (max)
ENVIRONMENTAL	
Operating Temperature	0 °C To +55 °C
Storage Temperature	-20 °C To +85 °C
Vibration	5 G at 500 Hz
Shock ½ Sine	5 G for 6 ms
PHYSICAL	
Size	6U PXI Slot
Weight	18 oz
Connections	78-Pin D Sub-Type Connectors. Includes Mating Connectors.

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

<b>GX6616</b>	High Density 6 x 2:16 Switch Matrix PXI Card
<b>GX6616-M</b>	High Density 6 x 2:16 Switch Matrix PXI Card (Ruggedized and conformal coated)
ACCESSORY	
<b>GT97104</b>	1 foot Harness, 78-Pin Male Connector on Both Ends
<b>GT97103</b>	1 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT97102</b>	3 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT96107</b>	3 Feet Harness, 78-Pin Male Connector on Both Ends
<b>GT96302</b>	Replacement Relay for GT6416 and GX6616
<b>GX96302</b>	Replacement Relay for GX6616 & GX6338
<b>GT96303</b>	Self-Test Adapter for GT6416 and GX6616
<b>GX98601</b>	6U "Wireless" Scout Adapter for GX6616/GX6264 (200-Pin Scout Signal Connector)
<b>GT96002</b>	Connector, D-Type 78-Pin Male with Crimp Pins
<b>GT96078</b>	78-Pin Connector to Screw Terminal Interface
<b>GX96105</b>	6 ft harness, 78 pin male connector on one end, loose wires (numbered) on other end
<b>GX96106</b>	6 ft. Harness, 78 Pin Male Connector on Both Ends
<b>GT96110</b>	5 ft Cable, 78-Pin Male Connector on Both Ends
<b>GT97112</b>	15' Cable, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT97113</b>	15 ft Cable, 78-Pin Female Connector on One End, Loose Wired (Numbered) Other End