# **GX1164 SERIES**

#### **PROGRAMMABLE RESISTOR PXI BOARD**

- 4 or 8 Programmable Resistor channels
- Multiple configurations available for range and resolution
- On-Board EEPROM for storing application specific calibration data
- Hybrid slot compatible



### DESCRIPTION

The GX1164 is a 3U PXI programmable resistor module with 4 channels of 16 resistors each or 8 channels of 8 resistors each. The module is available in various resistance ranges and resolutions. When used in the 4-channel configuration, each channel can simulate resistances with the following ranges:

- 0.25  $\Omega$  to 16  $k\Omega$
- 0.5  $\Omega$  to 32  $k\Omega$
- 1 Ω to 64 kΩ
- 2 Ω to 128 kΩ
- 4 Ω to 256 kΩ
- 8 Ω to 512 kΩ

# FEATURES

The GX1164 can be used in multiple configurations including an 8 channel, 4 channel, two channel, 1 channel or 2 channel potentiometer with wiper configuration.

The GX1164 includes an on-board EEPROM that contains calibration data. The EEPROM can also be used to "personalize" the GX1164 for custom resistance ranges and resolutions.

# **PROGRAMMING AND SOFTWARE**

The board is supplied with the GXPRES software, 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 -  $\underline{GtLinux}$  - provides support for Linux 32/64 operating systems.

## **APPLICATIONS**

- ATE systems
- Event timing measurements
- Sensor simulation and emulation
- Automated calibration and alignment



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#### **SPECIFICATIONS**

RESISTOR CHANNELS	
Number of Channels	4
Channel Resistance Ranges	0.25 $\Omega$ to 16 k $\Omega$ 0.5 $\Omega$ to 32 k $\Omega$ 1 $\Omega$ to 64 k $\Omega$ 2 $\Omega$ to 128 k $\Omega$ 4 $\Omega$ to 256 k $\Omega$ 8 $\Omega$ to 512 k $\Omega$ .
Resolution	0.25 Ω, 16 KΩ range 0.5 Ω, 32 KΩ range 1 Ω, 64 KΩ range 2 Ω, 128 KΩ range 4 Ω, 256 KΩ range 8 Ω, 512 KΩ range
Accuracy	$\pm$ (1% of programmed value + resolution)
Current	0.5 A (max) per channel
Voltage	200 V (max) per channel
Power	0.5 W (max) per channel
Power Requirements 3.3 V 5 V	300 mA (max) 600 mA (max)
PHYSICAL	
Size	3U PXI
Weight	1 lb
Operating Temperature	0 °C to +55 °C
Humidity (Non-Condensing)	20% to 95%

Note: Specifications are subject to change without notice

#### ORDERING INFORMATION

GX1164	Programmable Resistor Card. 4 Channels 1 Ohm to 64 KOhm, 1 Ohm Resolution	
GX1164-0.25	Programmable Resistor Card. 4 channels 0.25 Ohm to 16 KOhm, 0.25 Ohm Resolution	
GX1164-0.5	Programmable Resistor Card. 4 Channels 0.5 Ohms to 32 KOhms, 0.5 Ohm Resolution	
GX1164-2	Programmable Resistor Card. 4 Channels 2 Ohm to 128 KOhm, 2 Ohm Resolution	
GX1164-2M	Programmable Resistor Card. 4 Channels 2 Ohm to 128 KOhm, 2 Ohm Resolution (Ruggedized and Conformally Coated)	
GX1164-4	Programmable Resistor Card. 4 Channels 4 Ohm to 256 KOhm, 4 Ohm Resolution	
GX1164-8	Programmable Resistor Card. 4 Channels 8 Ohm to 512 KOhm, 8 Ohm Resolution	
ACCESSORY		
GX91801	25 Pin Male Mating Connector for GX1838/GX1164/GX7404	
GX91802	25 Pin Male Mating Connector for GX1838/GX1164 with a 3' Unterminated Harness	
GX91803	3' harness for GX1838/GX1164, 25 pin male/female connectors on both ends	
CALIBRATION		
GX91805	GX1164 Calibration Service (Includes Pre/Post Data Analysis)	
GX91805-4	GX1164 Calibration Service - 4 Years (Includes Pre/Post Data Analysis). Calibration Cycle is Every Two Years.	
GX91805-6	GX1164 Calibration Service - 6 Years (Includes Pre/Post Data Analysis). Calibration Cycle is Every Two Years.	
GX1164-CAL	GX1164 Calibration/Verification Service. 2 year calibration cycle. Includes pre-verification data (post calibration data provided if applicable)	
GX1164-CAL-4	GX1164 Calibration/Verification Service - 4 Years. Calibration Cycle is Every Two Years. Includes pre- verification data (post calibration data provided if applicable)	
GX1164-CAL-6	GX1164 Calibration/Verification Service - 6 Years. Calibration Cycle is Every Two Years. Includes pre- verification data (post calibration data provided if applicable)	

