

GX7404

POWER INTERFACE AND PROTOTYPE BOARD

- +3.3 V, +5 V, +12 V, and -12 V power outputs
- Software controlled on/off switching
- Monitors voltage and current remotely
- External power inhibit line
- On-board prototyping area
- 3U PXI board



DESCRIPTION

The GX7404 power interface board is a low cost method of providing controlled power to interface and test target circuitry. The GX7404 permits +5V, +3.3V, +12V, and -12V power outputs present on the PXI motherboard to be switched through a DB25 connector for use by the unit under test and interface circuitry.

FEATURES

The GX7404 is configured with four relays that apply or remove voltages to a DB25 connector. Each voltage is fused and an optional UUT discharge component may be added.

In addition, the GX7404 has special features, including external inhibit, UUT discharge, and a prototype area. The external inhibit is a TTL compatible input that removes all voltages from GX7404 outputs.

Optional areas can be populated with UUT discharge components. Each of the four relays on the board can switch the UUT load between the GX7404 outputs and the discharge components.

The GX7404 provides an 13 row by 15 column prototype area on 100 mil centers. Power rails are present in the prototype area.

SOFTWARE

The GX7404 is supplied with a virtual instrument panel, which includes the 32-bit DLL driver libraries and documentation. The virtual panel can be used to interactively adjust and control the instrument from a window that displays the current instrument settings and measurements.

In addition, various interface files provide access to the library for programming tools and languages such as ATEasy, LabVIEW, Microsoft® and Borland® C/C++, Microsoft Visual Basic®, Borland Delphi, and more.

APPLICATIONS

- Automatic Test Equipment
- Power source for interfacing circuitry
- Power source for test target circuitry

GX7404

SPECIFICATIONS

POWER OUTPUT*	
+3.3 V	2 A (Max.)
+5 V	2 A (Max.)
+12 V	0.5 A (Max.)
-12 V	0.5 A (Max.)
CURRENT READ BACK	
RESOLUTION	16 bits
ACCURACY	+/-1 mA
VOLTAGE READ BACK	
RESOLUTION	12 bits
ACCURACY	+/-10 mV
PROTECTION CIRCUITRY	
ISOLATION RELAYS	All output channels
REMOTE INHIBIT	Opens all output channel relays
FUSE (3.3 V, 5 V)	2 A, 2 AG Fast Acting
FUSE (+/-12 V)	0.5 A, 2 AG Fast Acting
UUT DISCHARGE	Discharge resistors footprint available on GX7404. Not installed by default. User specified.
ENVIRONMENTAL	
OPERATING TEMPERATURE	-0° C to +55° C
STORAGE TEMPERATURE	-20° C to +70° C
SIZE	3U PXI
WEIGHT	12 oz.

Note: Specifications are subject to change without notice.

* No line sensing available

** This channel output not referenced to ground. Factory default output voltage is 5 V.
User may specify other outputs (i.e., 12 V, 15)

ORDERING INFORMATION

GX7404	Power interface Board
GT25-CON	Connector, D-type 25 male with solder pins
GT25-MCON	Military grade connector, D-type 25 male with solder pins

PIN ASSIGNMENT

OUTPUT CHANNELS CONNECTOR (J3)			
+5 V	1	14	+5 V
+5 V	2	15	+5 V
N/C	3	16	N/C
GND	4	17	GND
+12 V	5	18	+12 V
N/C	6	19	N/C
GND	7	20	GND
-12 V	8	21	N/C
N/C	9	22	GND
GND	10	23	GND
+3.3 V	11	24	Reserved
+DC/DC	12	25	GND
Inhibit	13	---	---