

GX7400A



6U POWER SUPPLY MAINFRAME. ACCEPTS TWO PROGRAMMABLE POWER MODULES

- Two programmable, isolated 150 W output supplies
- Configurable with 15 V, 30 V or 60 V modules
- Externally powered - 120 V / 240 V
- Read-back voltage and current at output
- Over-voltage and over-current protection
- Remote inhibit via front panel connector



DESCRIPTION

The GX7400A is a dual output programmable DC power supply designed for use in 6U PXI systems. The GX7400A occupies three slots and is controlled via the PXI bus. The AC power is provided using a panel-mounted receptacle. The power supplies are fully isolated and can be externally connected in series to provide higher voltage.

FEATURES

The GX7400A can accommodate two programmable power modules. The power section is optically isolated from the PXI bus and the outputs are isolated from each other. A 14-bit DAC and a 16-bit A/D provide extremely accurate programming and readback capabilities. Input AC power is supplied by 120 VAC or 240 VAC and is auto-selectable - providing world-wide power compatibility and flexibility.

PROGRAMMING AND SOFTWARE

The GX7400A is supplied with a software package that includes a virtual panel, driver, and on-line documentation. The virtual panel can be used to interactively control the instrument from a window that displays the instrument's current settings and allows you to control and change them. The driver includes a library of functions that is used to control and change the instrument settings from within your application and is compatible with the Windows operating system (32 bit DLL).

In addition to the driver library, various interface files provide access to the library from your favorite programming tools and languages. These interface files support ATEasy, C/C++, Microsoft Visual Basic, Delphi and other application development environments.

APPLICATIONS

- Power Supply testing
- Automated Test Equipment (ATE)
- R & D verification systems



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SPECIFICATIONS

VOLTAGE			
	GX7415	GX7430	GX7460
Type	Programmable Output	Programmable Output	Programmable Output
Voltage	0 - 15 V	0 - 30 V	0 - 60 V
Power	150 W	150 W	150 W
Maximum Current	10 A	5 A	2.5 A
Programming accuracy (14 bit resolution)	±10 mV	±10 mV	±20 mV
Voltage Mode Noise and Regulation			
RMS	8 mV	8 mV	8 mV
Peak-to-Peak	20 mV (typ)	30 mV (typ)	45 mV (typ)
Load Regulation	±10 mV	±10 mV	±10 mV
Line Regulation	±10 mV	±10 mV	±10 mV
READBACK ACCURACY (16 BIT RESOLUTION)			
	GX7415	GX7430	GX7460
Voltage	±2 mV	±3 mV	±5 mV
Current	±1 mA	±1 mA	±1 mA
OUTPUTS			
Modes of Operation	Constant Voltage & Current Limit		
Programming Resolution	14 bits		
Readback Resolution	16 bits		
Remote / Local Sense	Up to 2 VDC may be dropped across sense lines. Drop decreases voltage available at load.		
PROTECTION CIRCUITRY			
Over-Voltage	105% of full scale (fixed)		
Current Limit	Programmable from 0 to FS. Output will automatically switch into constant current mode when limit is reached.		
Current Trip	105% of full scale (fixed)		
Over-Temperature	Automatically disables output if maximum allowable temperature is exceeded.		
Short Circuit	Outputs are protected in the event of a short across output terminals.		
Isolation Relays	Independently controllable for each output. Circuitry is provided to protect relays from switching under load.		

Remote Inhibit	Provides for remote hardware shutdown of outputs via front panel interlock pins.
INPUT POWER	
Configuration	Single Phase
Voltage	85 to 230 VAC (auto-selectable)
Frequency	47 - 63 Hz
Efficiency	Typical > 75% (depends on programmed voltage and current)
Power Factor	> 0.85
PHYSICAL	
Format	6U PXI
Size	6U PXI, 3-slots wide
Weight	7 lbs
Operating Temperature	0 °C to +55 °C
Humidity (Non-Condensing)	20% - 95%
Cooling	PXI chassis cooling plus one fan per programmable module
PXI Compliance	PXI-1 Hardware Specification, Revision 2.2
CALIBRATION	
Calibration Interval	1 year

Note: Specifications are subject to change without notice

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ORDERING INFORMATION

GX7400A	6U Power Supply Mainframe. Accepts Two Programmable Power Modules
POWER MODULES (SELECT ONE OR TWO)	
GX7415	0-15VDC, 10A Programmable Power Supply module for GX7400
GX7430	0-30VDC, 5A Programmable Power Supply module for GX7400
GX7460	0-60VDC, 2.5A Programmable Power Supply module for GX7400
ACCESSORY	
GX97601	Mating Connector for GX7400
GX97602	Mating Connector for GX7400A with a 6' Unterminated Harness
GX97603	3' Harness for GX7400A, D-Type Connector on Both Ends (Female to Male)
GX97607	3' Harness for GX7400A, D-Type Connector on Both Ends (Male-to-Male)
GX97606	6' Harness for GX7400A, D-Type Connector on Both Ends (Male-to-Female)
GX97608	6' Harness for GX7400A, D-Type Connector on Both Ends (Male-to-Male)
CALIBRATION	
GX7400-CAL	GX7400/GX7400A Calibration/Verification Service. Includes pre-verification data (post calibration data provided if applicable)
GX97605	Calibration Software for GX7400A
OPTION	
GX7100C	6U/3U, 14 Slot Smart PXI Master Desktop Combo Chassis w/Solid state Disk Drive
GX7100CR	6U/3U, 14 Slot Smart PXI Master Rackmount Combo Chassis w/Solid state Disk Drive
GX7110C	6U/3U, 14 Slot Smart PXI Slave Desktop Combo Chassis for Use with PXI Remote Controllers
GX7110CR	6U/3U, 14 Slot Smart PXI Slave Desktop Combo Chassis for Use with PXI Remote Controllers w/rack mount
GX7112C	GX7110C with an Integrated Cable Tray & a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7112C-5FT	GX7112C with the card cage recessed 5", Top Cable Routing Opening, Flat Front Panel
GX7112CR-5FT	GX7112C with the card cage recessed 5", Top Cable Routing Opening, Flat Front Panel w/Rack Mount
GX7100B	6U/3U, 14 Slot Smart PXI Master Desktop Combo Chassis w/DVD-RW & Hard Disk Drive

GX7100BR	6U/3U, 14 Slot Smart PXI Master Rackmount Combo Chassis w/DVD-RW & Hard Disk Drive
GX7102B	GX7100B with an Integrated Cable Tray & a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7102B-5TB	GX7102B with the card cage recessed 5", & top/bottom cable routing openings (formerly GX7102B-5)
GX7110B	6U/3U, 14 Slot Smart PXI Slave Desktop Combo Chassis for Use with PXI Remote Controllers
GX7110B-2	GX7110B with a 2" recessed instrument card cage (formerly GX7111B)
GX7110BR	GX7110B with Rackmount
GX7110BR-2	GX7110B with a 2" recessed instrument card cage w/rack-mount (formerly GX7111BR)
GX7112B	GX7110B with an Integrated Cable Tray & a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7112B-5FT	GX7112B with the card cage recessed 5", Top Cable Routing Opening, Flat Front Panel
GX7112B-5NB	GX7112B with the card cage recessed 5", Bottom Cable Routing Opening, no door (Replaces GX7112B-5N)
GX7112B-5NBT	GX7112B with the Card Cage Recessed 5", Top/Bottom Cable Routing Opening, No Door
GX7112B-5NBTS	GX7112B with the Card Cage Recessed 5", Top/Bottom Cable Routing Opening, No Door, Countersink Screw
GX7112B-5TB	GX7112B with the card cage recessed 5", & top/bottom cable routing openings (Formerly GX7112B-5)
GX7100B-ESATA	GX7100B Master Combo Chassis with Rear-Panel ESATA Interface
GX7100BR-HP1	GX7100BR Smart Master Combo Chassis with Additional Cooling for High-Performance Digital
GX7103	PXI Master Combo Chassis with Removable Hard Drive and Power Supply, an Integrated Cable Tray, and a Hinged Front Panel for Mass Interconnect (Rack Mount Configuration with Handles)
GX7103-2	PXI Master Combo Chassis with Removable Hard Drive and Dual Redundant Power Supplies, an Integrated Cable Tray, and a Hinged Front Panel for Mass Interconnect (Rack Mount Configuration with Handles)
GX7102B-5	GX7102B with the Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7111B	GX7110B with a 2" Recessed Instrument Card Cage
GX7111BR	GX7110B with a 2" Recessed Instrument Card Cage w/Rack-Mount



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GX7112B-5	GX7112B with the Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7100A	6U/3U, 14 Slot Smart PXI Master Desktop Combo Chassis w/DVD-ROM & Hard/Floppy Disk Drives
GX7100A-ESATA	GX7100 Master Combo Chassis w Internal SATA HDD and Rear-Panel eSATA Interface
GX7100AR	6U/3U, 14 Slot Smart PXI Master Rackmount Combo Chassis w/DVD-ROM & Hard/Floppy Disk Drives
GX7100AR-HP1	GX7100AR Smart Master Combo Chassis with Additional Cooling for High-Performance Digital
GX7102A	Smart PXI Master Combo Chassis with an Integrated Cable Tray and a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7102A-5	GX7102A with the Card Cage Recessed 5", and Top/Bottom Cable Routing Openings
GX7110A	6U/3U, 14 Slot Smart PXI Slave Desktop Combo Chassis for Use with PXI Remote Controllers
GX7110AR	GX7110A with Rackmount
GX7111A	Smart PXI Slave Combo Chassis with a 2" Recessed Instrument Card Cage
GX7111AR	Smart PXI Slave Combo Chassis with a 2" Recessed Instrument Card Cage w/rRack-Mount
GX7112A	Smart PXI Slave Combo Chassis with an Integrated Cable Tray and a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7112A-5	GX7112A with the Card Cage Recessed 5", and Top/Bottom Cable Routing Openings
GX7112B-5N	GX7112B with the Card Cage Recessed 5", Bottom Cable Routing Opening, No Door
GX7110BR-HP1	GX7110BR with additional cooling for high-performance digital instrumentation
GX7100B-HP1	GX7100B Smart Master Combo Chassis with Additional Cooling for High-Performance Digital Subsystems
GX7110B-HP1	GX7110B Smart PXI Slave Combo Chassis with Additional Cooling for High-Performance Digital Subsystems
GX7000A	6U, 20 Slot Smart PXI Chassis with Built-in CD-ROM, Hard Disk, and Floppy Disk
GX7000AR	6U, 20 Slot Smart PXI Chassis with DVD-ROM, Hard Disk, and Floppy Disk Drives, w/Rack-Mount
GX7010A	6U, 20 Slot Smart PXI Chassis for Use with PXI Remote Controllers
GX7010AR	6U, 20 Slot Smart PXI Chassis for Use with PXI Remote Controllers, w/Rack-Mount
GX7000A-1100	GX7000A with 1100W of Available Power
GX7010A-1100	GX7010A with 1100W of Available Power

GX7010AR-1100	GX7010AR with 1100W of Available Power
GX7002A	GX7000AR with an Integrated Cable Tray and a Hinged Front Panel for Mass
GX7002A-MP	GX7002A with a MacPanel SCOUT Mass Interconnect Receiver
GX7002A-5	GX7002A with Card Cage Recessed 5", and Top/Bottom Cable Routing Openings
GX7002A-1100	GX7000AR-1100 with an Integrated Cable Tray and a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7002A-1100-5FT	20 Slot PXI Master 6U Chassis with 1100 Watts Power and a Flat Front Panel, Card Cage Recessed 5", and Top/Bottom Cable Routing Openings
GX7002A-HPD	GX7002A-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7002A-MP-HPD	GX7002A-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7005A	GX7002B with Additional Power Rails & Special Cooling to Support High-Performance Digital Cards (GX5055 & GX5960 Families)
GX7005A-MP	GX7005A with MacPanel SCOUT Mass Interconnect Receiver
GX7012A	GX7010AR with an Integrated Cable Tray and a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7012A-5FT	GX7012 with a Flat Hinged Front Panel, 5" Recessed Card Cage, and Top-Bottom Openings for Cable Routing
GX7012A-1100	GX7010R-1100 with an Integrated Cable Tray and a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7012A-1100-5FT	20 Slot PXI Slave 6U Chassis with 1100 Watts Power and a Flat Front Panel, Card Cage Recessed 5", and Top/Bottom Cable
GX7012A-MP	GX7012A with a MacPanel SCOUT Mass Interconnect Receiver
GX7012A-5	GX7012A with Card Cage Recessed 5", and Top/Bottom Cable Routing Openings
GX7012A-HPD	GX7012A-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7012A-MP-HPD	GX7012A-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7015A	GX7012B with Additional Power Rails & Special Cooling to Support High-Performance Digital Cards (GX5055 & GX5960 Families)



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GX7015A-MP	GX7015A with MacPanel SCOUT Mass Interconnect Receiver
GX7000B	6U, 20 Slot Smart PXI Chassis with Built-In DVD-ROM, Hard Disk Drive
GX7000BR	6U, 20 Slot Smart PXI Chassis with DVD-ROM, Hard Disk Drive, w/Rack-Mount
GX7010B	6U, 20 Slot Smart PXI Chassis For Use with PXI Remote Controllers
GX7010BR	6U, 20 Slot Smart PXI Chassis For Use with PXI Remote Controllers, w/Rack-Mount
GX7000B-1100	GX7000B with 900W of Available Power
GX7000BR-1100	GX7000BR with 900W of Available Power
GX7010B-1100	GX7010B with 900W of Available Power
GX7010BR-1100	GX7010BR with 900W of Available Power
GX7002B	GX7000BR with an Integrated Cable Tray & a Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7002B-MP	GX7002B with a MacPanel SCOUT Mass Interconnect Receiver
GX7002B-5	GX7002B with the Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7002B-5FT	20 Slot PXI Master 6U Chassis with 900 Watts Power & a Flat Front Panel, Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7002B-1100	GX7000BR-1100 with an Integrated Cable Tray & A Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7002B-1100-5FT	20 Slot PXI Master 6U Chassis with 900 Watts Power & A Flat Front Panel, Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7002B-HPD	GX7002B-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7002B-MP-HPD	GX7002B-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7005B-MP	GX7005B with MacPanel SCOUT Mass Interconnect Receiver
GX7012B	GX7010BR with an Integrated Cable Tray & A Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7010BR	20 Slot PXI Slave 6U Chassis with 900 Watts Power & a Flat Front Panel, Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7012B-5	GX7012B with the Card Cage Recessed 5", & Top/Bottom Cable Routing Openings

GX7012B-1100	GX7010BR-1100 with an Integrated Cable Tray & A Hinged Front Panel for Mass Interconnect (Rackmount Configuration)
GX7012B-1100-5FT	20 Slot PXI Slave 6U Chassis with 900 Watts Power & A Flat Front Panel, Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7012B-MP	GX7012B with a MacPanel SCOUT Mass Interconnect Receiver
GX7012B-HPD	GX7012B-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7012B-MP-HPD	GX7012B-1100 with Additional Power Rails and Special Cooling to Support High-Performance Digital Cards (GX5055 Family)
GX7015B-MP	GX7015B with MacPanel SCOUT Mass Interconnect Receiver
GX7012C-5FT	20 Slot PXI Slave 6U Chassis with 900 Watts Power & a Flat Front Panel, Card Cage Recessed 5", & Top/Bottom Cable Routing Openings
GX7000D	6U, 20 Slot Smart PXI Chassis
GX7000DR	6U, 20 Slot Smart PXI Chassis with Rack-Mount
GX7000C	6U, 20 Slot Smart PXI Chassis with built-in DVD-RW, Hard Disk drive
GX7000CR	6U, 20 Slot Smart PXI Chassis with DVD-RW, Hard Disk drive, w/Rack-Mount
GX7010C	6U, 20 Slot Smart PXI Chassis for use with PXI Remote Controllers
GX7010CR	6U, 20 Slot Smart PXI Chassis for use with PXI Remote Controllers, w/rack-mount
GX7002C	GX7000CR with an integrated Cable Tray & a Hinged front panel for Mass
GX7012C	GX7010CR with an integrated Cable Tray & a Hinged front panel for Mass Interconnect (rackmount configuration)
GX7002C-5FTB	20 slot PXI Master 6U Chassis with 850 watts power & a flat front panel, card cage recessed 5", & top/bottom cable routing openings (supersedes GX7002x-5FT models)
GX7012C-5FTB	20 slot PXI Slave 6U Chassis with 850 watts power & a flat front panel, card cage recessed 5", & top/bottom cable routing openings (supersedes GX7012x-5FT models)
GX7002C-5TB	GX7002C with the card cage recessed 5", & top/bottom cable routing openings (supersedes GX7002x-5 models)
GX7012C-5TB	GX7012C with the card cage recessed 5", & top/bottom cable routing openings (supersedes GX7012x-5 models)

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GX7002C-MP	GX7002C with a MacPanel SCOUT Mass Interconnect Receiver
GX7012C-MP	GX7012C with a MacPanel SCOUT Mass Interconnect Receiver
GX7005C	GX7002C with additional power rails & special cooling to support High-Performance Digital Cards (GX5055 & GX5960 families)
GX7015C	GX7012C with additional power rails & special cooling to support High-Performance Digital Cards (GX5055 & GX5960 families)
GX7005C-MP	GX7005C with MacPanel SCOUT Mass Interconnect Receiver
GX7015C-MP	GX7015C with MacPanel SCOUT Mass Interconnect Receiver
GX7012C-5F	20 slot PXI Slave 6U Chassis with 850 watts power & a flat front panel, card cage recessed 5"
GX7016	GENASYS Switching Subsystem with SCOUT 6U Receiver
GX7017	GENASYS Switching / Digital Subsystem with SCOUT 6U Receiver
GX7017-01	GENASYS Switching / Digital Subsystem with SCOUT 6U Receiver, HV Input Power Configuration