

GX7100A SERIES

3U/6U COMBINATION PXI *SMART* CHASSIS

- Slots for one 6U (embedded) or 3U (remote) PXI controller, six 6U or 3U instruments, and seven 3U instruments
- Built-in peripherals (hard disk drive, floppy disk drive, and a CD-ROM or CD-RW drive) for embedded controller configurations
- * Integral *Smart* functions provide internal temperature monitoring, power supply monitoring, and PXI trigger mapping
- Innovative forced-air cooling controlled by embedded chassis temperature monitor
- Optional cable tray, recessed card cage, and hinged front panel configurations for mass interconnect devices



DESCRIPTION

The GX7100A Series are 14-slot combination chassis that accommodate 3U and 6U PXI controllers and instruments in 4U of rack space. The GX710xA's unique format includes seven 3U-only slots and seven 3U/6U slots arranged horizontally to reduce the overall size of the chassis, providing the versatility and high-density necessary to address many PXI applications and requirements.

FEATURES

The GX7100A Series offers a full range of features and options including an innovative forced-air cooling system comprised of eight (8) 20 CFM fans controlled by built-in temperature sensors. The fans provide airflow according to PXI revision 2.1 specifications. This cooling configuration provides optimum cooling for the chassis regardless of the type or number of instruments used. Additional cooling is provided for the system power supply.

The GX7100A *Smart* Chassis supports the monitoring of internal chassis temperatures and system power supply voltages as well providing the ability to program or map each PXI trigger line from one PCI segment to another. In addition, the user can program the temperature monitoring function for specific warning and shutdown limits. All user specific setups can be stored in non-volatile memory as a user configuration and can be used as the default setup for normal chassis operation.

For applications requiring mass interconnect and cable routing to/from the rear of the chassis, the GX7102A and GX7112A offer the ideal system solution. These chassis include an integrated 2U cable tray, a hinged front-panel that accommodates all popular mass

interconnect devices, optional openings at the top and bottom of chassis for cable routing, and recessed PXI instruments (recessed by 2.5" or 5"). The combination of front panel and the recessed instruments provides up to 8" of space for interface wiring.

The GX7100A Series provides 560W of system power and complies with the PXI Hardware Specification 2.1.

CONFIGURATION

Slot 1 (6U) is dedicated to the system controller (embedded or remote, using a PXI bus expander). Slot 2 can be used by a PXI Star Trigger Controller or by any PXI or cPCI instrument. Slots 3-14 support the PXI Star Trigger. The PXI local bus interconnects cards within PXI segment A or segment B. The PXI trigger lines are buffered / enabled at the PXI segment A / segment B boundary.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Data Acquisition
- Process Control
- Production Test
- Scientific Applications
- Industrial Systems
- Portable Systems



GX7102

GX7100A SERIES

SPECIFICATIONS

CHASSIS (ALL MODELS)	
INPUT AC POWER	100-250 VAC, 47-63 Hz, 10 A Max with PFC
TOTAL AVAILABLE DC POWER	560W
+5V +3.3V +12V -12V	60 A (Max) 40 A (Max) 32 A (Max) 3 A (Max) (Note: 5V & 3.3V power cannot exceed 300W).
WEIGHT	
GX7100A	26 lbs
GX7110A, GX7111A	23 lbs
GX7102A	28 lbs
GX7112A	25 lbs
DIMENSIONS	
GX7100A, GX7110A, GX7111A	4U (7") H x 17.6" W x 16" D same as above
GX7102A, GX7112A	6U (10.5")H x 17.6"W x 23"D
COOLING	Eight 20CFM fans for instruments. Additional fan for power supplies
PXI CLOCK	Integrated 10 MHz PXI clock with auto-detect function. Presence of an external 10 MHz PXI clock will disable the internal clock. PXI clock is distributed to all peripheral slots. Optional external clock via slot 2
TEMPERATURE MONITORING	<ul style="list-style-type: none"> • 7 temperature sensors, centrally located across segment A, 1 reading /sec/ sensor • 4 second moving average value • User selectable alarm criteria: <ul style="list-style-type: none"> -Maximum slot temperature -Average slot temperature • Accuracy: +/- 1 °C • Default warning and shutdown limits: +50 °C & +70 °C • Warning and shutdown limits programmable via software driver • Status: Query via software driver and audible alarm for a warning limit condition.
POWER SUPPLY MONITORING	Monitored voltages: 3.3, 5, +12, -12, VIO value Accuracy: +/- 1% of reading
PXI TRIGGERS	Slots: 2- 14 Number: 8 per segment Software controlled segment mapping supports: <ul style="list-style-type: none"> • Isolate a trigger line within a segment • Map a trigger line from segment A to B • Map a trigger line from segment B to A
SLOTS	14 PXI or cPCI Slots: Seven dedicated 3U instrument slots Seven 3U/6U instrument slots
ENVIRONMENTAL TEMPERATURE RANGE	
OPERATING	0° C to 50° C
STORAGE	-20° C to 60° C

Note: Specifications are subject to change without notification.

ORDERING INFORMATION

GX7100A	6U/3U, 14 Slot PXI Master Desktop Combo Chassis w/CD-ROM & Hard/Floppy Disk drives
GX7100AR	6U/3U, 14 Slot PXI Master Rackmount Combo Chassis w/CD-ROM & Hard/Floppy Disk drives
GX7110A	6U/3U, 14 Slot PXI Slave Desktop Combo Chassis for use with GX7990, GX7910 and GX7992 PXI Bus Expander
GX7110AR	6U/3U, 14 Slot PXI Slave Rackmount Combo Chassis for use with GX7990, GX7910 and GX7992 PXI Bus Expander
GX7102A	PXI Master Combo Chassis with an integrated Cable Tray and a Hinged front panel for Mass Interconnect (rack mount configuration)
GX7112A	PXI Slave Combo Chassis with an integrated Cable Tray and a Hinged front panel for Mass Interconnect (rack mount configuration)
GX7112A-5FT	GX7110 with a flat hinged front panel, card cage recessed 12cm, and top & bottom openings for cable routing
PXI CONTROLLERS (EMBEDDED & REMOTE)	
GX7910-22512	CPU Plug-in Controller for GX7100A Series. 2.2GHz P4/512MB
GX7910-24512	CPU Plug-in controller for GX7100A 2.4 GHz P4/512 MB
GX7910-17512E	CPU Plug-in controller for GX7100A. 1.7 GHz P4/512 MB, Extended Temperature
GX7920-181024	CPU Plug-in controller for GX7100A, LV Pentium M 1.8GHz, 1 GB RAM
GX7920-141024	CPU Plug-in controller for GX7100A, Pentium M 1.4GHz, 1 GB RAM
GX7920-06512	CPU Plug-in controller for GX7100A, Celeron 600 MHz, 512 MB RAM
MXI-4-C	MXI-4 Kit, Copper interface, PCI to PXI, 3 M cable
MXI-4-F	MXI-4 Kit, Fiber optic interface, PCI to PXI, 10 M cable
GX7990	PXI Bus Expander for GX7010 & GX7110, PCI to PXI. Two card set with a 5 ft cable
GX7990-1	PXI Bus Expander for GX7010 & GX7110, PXI to PXI. Two card set with a 5 ft cable
PXI CHASSIS & CONTROLLER ACCESSORIES	
GX97005	3U to 6U Panel Adapter (allows a 3U instrument to fit into a 6U chassis)
GX97011	6U Blank Panel, 1-Slot wide
GX97012	6U Blank Panel, 2-Slots wide
GX97014	6U Blank Panel, 4-Slots wide
GX97111	3U Blank Panel, 1-Slot wide
GX97112	3U Blank Panel, 2-Slots wide
GX97114	3U Blank Panel, 4-Slots wide
GX7100A-CDRW	Upgrade any GX7xxx CD-ROM drive to CD-RW drive
GX7000A-DVDRW	Upgrade any GX7xxx CD-ROM to DVDRW drive
GX97406	6ft (2 meters) cable for GX7992 and GX7992-1
GX97415	15ft (5 meters) cable for GX7992 and GX7992-1
GX97430	30ft (10 meters) cable for GX7992 and GX7992-1
PXI-INT	Integration service for PXI instruments
GX97914	14-Slot PXI Chassis Installation/Integration Service (includes 2nd year warranty)