# PXI General Purpose Chassis & Backplanes Model 52100 Series



#### **KEY FEATURES-** CHASSIS

- High-capacity 8-slot/14-slot/18-slot PXI/cPCI backplane
- Low-profile 4U rugged design
- Easily convertible for rack or bench used
- 51 CFM for 3/4/6 high pressure tube-axial fans
- 175W/ea plug-in power supply
- Removable fans and air filter
  Optional DC (24V) input configuration
- available
- Comprehensive EMC shielding

#### **KEY FEATURES**- BACKPLANES

- Compliant With PXI Specification R2.0
- Accepts Both PXI and CompactPCI (PICMG 2.0 R3.0) 3U Modules
- Standard 3U Form Factor
- Two ATX Sockets and Screw Terminals for +3.3V, +5V, +12V & -12V DC Output Connection
- 64-Bit PCI BUS On P1 & P2, Supports N-1 BUS- Mastering I/O Slots. (N : Slots)
- System Controller Slot Is Located In Slot 1
- Trigger Controller Slot Is Located In Slot 2, Providing Individual Triggers To All Other Peripherals
- Dimension :
  - 8-slot / 227.3mm x 128.7 mm x 3.2 mm
  - 14-slot / 337.5mm x 128.7mm x 3.2mm
  - 18-slot / 420.6mm x 128.7mm x 3.2mm

#### Chassis

The PXI-52100 platform features the industrystandard, 8-slot/14-slot/18-slot PXI/ CompactPCI backplane integrated into a 3U Eurorack enclosure with a bay for removable power supplies.

With hot pluggable power supplies and optional battery packs, 52100 offers the widest application range of all chassis on the market.

Mounting attachment locations allow the PXI-52100 to be mounted against a wall or bulkhead, with the card cage extended in front for easy access to adapter card. The rear of the card cage is enclosed to protect the backplane from contamination as well as provide shielding for RFI/ EMI.



## **Power Supplies**

The PXI-52100 chassis accepts removable power supply modules of the cPWR series. The power connector is a PCI 47M 400A1 connector, compliant with PICMG 2.11 Power Interface Specification standard, a mechanically and electrically roBust connector.

### Backplanes

PXI (PCI eXtensions for Instrumentation) defines a rugged PC platform for measurement and instrumentation. PXI products are compatible with the CompactPCI industrial computer standard but offer additional features, such as environmental specifications, software requirements, and built-in timing and triggering. Moreover, PXI backplane provides configuration control and longer product lifetimes than typical desktop design.

PXI backplane is designed for instrumentation computer. Its architecture makes rapid repair by board substitution possible and system upgrades and changes are greatly simplified, with minimum resulting system downtime.

SPECIFICATIONS			
Chassis	52101	52102	52105
Backplane	• 3U-sized; PXI backplane • Compliant with PXI Specification R2.0 • PXI and CompactPCI (PICMG 2.0 R3.0) 3U modules		
Accessible Slots	8 slots	14 slots	18 slots
Power Supply	Output: 175W max. x 2 sets		Output: 175W max. x 4 sets
	AC Input: 90V to 264V  DC Input: 18V to 36V		
BUS Width	64-bit		
Rack Mounting	4U, 19" EIA format		
Cooling Capacity	Slot cooling capacity in worst-case slot is 50W		
Module Cooling	Forced air circulation ( positive pressurization)	Forced air circulation ( positive pressurization)	Forced air circulation ( positive pressurization)
	via 51 cfm (x3)	via 51 cfm (x4)	via 51 cfm (x6)
Slot Airflow Direction	P1 to P2, bottom of module to top of module		
Module Cooling Fan MTBF	75,000+hr		
Weight	8.5kg	9.5kg	13.5kg
Dimensions (WxDxH) mm	• Desktop: 442.2 x 257.8 x 192.1		• Desktop: 442.2 x 481.2 x 192.1
	• Rack-mount: 482.6 x 257.8 x 177.0		• Rack-mount: 482.6 x 481.2 x 177.0
Operating Temp.	0°C ~ 55°C		
Storage Temp.	-20°C ~ 70°C		
Humidity	10 ~ 95% @ 40°C, non-condensing		
Packaged Vibration	5 ~ 100Hz: 0.015G2/Hz; 100 ~ 200Hz: -6 dB/Oct; 200 Hz: 0.0038 G2/Hz		
Unpackaged Vibration	5 ~ 55 ~ 5Hz 0.38mm Peak to Peak		
Drop Test	Falling Height: 76 cm; Falling: 1 corner/3 edges/6 faces		
Shock Test (Operating)	Acceleration: 10G; Pulse width: 11ms; Pulse shape: half sine wave; No. of shock: 3 shocks for bottom side		

<b>ORDERING INFORMATION</b>			
	Chassis (w/Backplane)	AC Power Supply (Input 110/220Vac)	
52101-1/52102-1	1	2	
52105-1	1	4	
52101-A	8-Slot, 3U 64-Bit PXI Backplane		
52102-A	14-Slot, 3U 64-Bit PXI Backplane		
52105-A	18-Slot, 3U 64-Bit PXI Backplane		



52101-A : 8-slot backplane





52102-A: 14-slot backplane

52105-A : 18-slot backplane