

# General-Purpose 8-Slot Chassis for PXI

## Specifications

Complies with PXI Specification  
 Accepts modules compliant with CompactPCI, PICMG 2.0 specification

### Electrical

#### AC Input

Input voltage range .....	100 to 240 VAC
Operating voltage range <sup>1</sup> .....	90 to 264 VAC
Input frequency .....	50/60 Hz
Operating frequency range <sup>1</sup> .....	47 to 63 Hz
Input current rating .....	8 A
Over-current protection .....	10 A circuit breaker
Line regulation	
3.3 V .....	<±0.2%
5 V .....	<±0.1%
±12 V .....	<±0.1%
Efficiency .....	70% typical

<sup>1</sup>The operating range is guaranteed by design.

#### DC output

DC current capacity—steady state

Voltage	0-50 °C	55 °C
+3.3 V	20 A	18 A
+5 V	29 A	25 A
+12 V peripheral slot	3.5 A	3.5 A
+12 V system slot	0.5 A	0.5 A
-12 V	2 A	2 A

#### Load regulation

Voltage	Load Regulation
+3.3V	< 5%
+12V	< 5%
+5V	< 5%
-12V	< 5%

#### Maximum ripple and noise (20 MHz bandwidth)

Voltage	Maximum Ripple and Noise
+3.3V	50 mV <sub>pp</sub>
+12V	120 mV <sub>pp</sub>
+5V	50 mV <sub>pp</sub>
-12V	120 mV <sub>pp</sub>

### Cooling

Fans .....	2 @ 60 cfm, with filters
Per-slot capacity .....	31 W worst-case, fan speed HIGH

### Physical

Number of PXI slots .....	8 (1 controller, 7 peripheral)
Number of controller expansion slots .....	3 (left of controller slot)
Dimensions .....	177 x 271.3 x 396.5 mm (6.97 x 10.68 x 15.61 in.)
Height for rack-mount installation .....	4U
Weight .....	8.4 kg (18.6 lb)

### Operating Environment

Ambient temperature range .....	0 to 55 °C (Meets IEC-60068-2-1 and IEC-60068-2-2)
Relative humidity range .....	10 to 90% noncondensing (Meets IEC 60068-2-56)
Altitude .....	2000 m (at 25 °C ambient temperature)

### Storage Environment

Ambient temperature .....	-20 to 70 °C (Meets IEC-60068-2-1 and IEC-60068-2-2)
Relative humidity .....	5 to 95% noncondensing (Meets IEC 60068-2-56)

### Backplane

Backplane bare-board material .....	UL 94 V-0 recognized
Backplane connectors .....	Conform to IEC 917 and IEC 1076-4-101, UL 94 V-0 rated

### 10 MHz System Reference Clock (PXI\_CLK10)

Maximum clock skew between slots .....	250 ps
Built-in 10 MHz clock	
Accuracy .....	±25 ppm (guaranteed over the operating temperature range)
Maximum jitter .....	5 ps <sub>rms</sub> in 10 Hz to 1 MHz range
External clock sources	
Connectors .....	BNC on rear of chassis (ground referenced) or Slot 2 J2 (pin D17; refer to Table B-4, P2 (J2) Connector Pinout for the Star Trigger Slot)
Input frequency .....	10 MHz ±100 ppm or better
Input amplitude	
Rear connector .....	200 mV <sub>pp</sub> to 5 V <sub>pp</sub> , 10 MHz squarewave or sinewave
Slot 2 .....	5 or 3.3 V, 10 MHz TTL signal
Input impedance .....	50 ± 5 Ω (rear connector)
Maximum jitter introduced by backplane circuitry .....	
	1 ps <sub>rms</sub> in 10 Hz to 1 MHz range
External clock output	
Connector .....	BNC on rear of chassis (ground-referenced)
Output amplitude .....	1 V <sub>pp</sub> ±20% square wave into 50 Ω 2 V <sub>pp</sub> into open circuit
Output impedance .....	50 ± 5 Ω

### Shock and Vibration

Functional shock .....	30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC 60068-2-27. Test profile developed in accordance with MIL-T-28800E.)
Random Vibration	
Operating .....	5 to 500 Hz, 0.31 g <sub>rms</sub>
Nonoperating .....	5 to 500 Hz, 2.46 g <sub>rms</sub> (Tested in accordance with IEC 60068-2-64. Nonoperating test profile developed in accordance with MIL-T-28800E and MIL-STD-810E Method 514.)

### Safety

This product is designed to meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 3111-1
- CAN/CSA C22.2 No. 1010.1

NOTE: For UL and other safety certifications, refer to the product label or to [ni.com](http://ni.com)

### Electromagnetic Compatibility

Emissions .....	EN 55011 Class A at 10 m. FCC Part 15A above 1 GHz
Immunity .....	EN 61326-1:1997 + A1:1998, Table 1

CE, C-Tick and FCC Part 15 (Class A) Compliant

NOTE: For EMC compliance, operate this device with shielded cabling.

### CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE Marking, as follows:

Low-Voltage Directive (safety): .....	73/23/EEC
Electromagnetic Compatibility Directive (EMC): .....	89/336/EEC

NOTE: Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click Declarations of Conformity Information at [ni.com/hardref.nsf/](http://ni.com/hardref.nsf/)