

# zSeries 18-Slot Chassis

## 18-Slot 3U PXI Express Chassis with AC – Up to 8 GB/s





The LitePoint zSeries 18-slot chassis is an 18-slot PXI Express chassis, compliant with PXI Express and cPCI Express specifications and offering one system slot, one system timing slot, ten hybrid peripheral slots, and six PXI Express peripheral slots for a wide variety of testing and measurement applications requiring enhanced bandwidth.

The zSeries 18-slot chassis provides a configurable PCIe switch fabric and is configurable in two-link, and four-link PXI express deployments, with 8 GB/s system bandwidth and up to 4 GB/s slot bandwidth for dedicated peripheral slots, thanks to PCIe gen2 signaling technology. The zSeries 18-slot chassis implements a smart system monitoring controller, reporting full chassis status, including fan speed, system voltages, and internal temperature.

Equipped with an industrial grade AC power supply, the zSeries 18-slot chassis provides 800 W under 55°C, and superior cooling capacity, from three 120 mm fans on the rear of the chassis, and two BNC connectors for 10 MHz clock input/output on the rear panel increase chassis flexibility, enabling synchronization with supplementary devices. All in all, zSeries 18-slot chassis is a superior PXI Express platform choice for testing and measurement requirements.

## Features

- PXITM-5 PXI Express hardware specification Rev.1.0 compliant
- 18-slot PXI Express chassis with one system slot, one system timing slot, 10 hybrid peripheral slots, and 6 PXI Express peripheral slots
- Configurable PCIe switch fabric, can be configured as four-link, two-link, PXI Express chassis
- Up to 8 GB/s system bandwidth
- Up to 4 GB/s peripheral bandwidth for dedicated slots
- 0°C to 55°C extended operating temperature range
- Intelligent chassis management
  - Automatic fan speed control
  - Chassis status monitoring and reporting
  - Remote chassis power on/off control
- BNC connectors for 10 MHz clock input/output
- Maximum total usable power of 800 W under 55°C
- Power, temperature, and fan monitoring LEDs

## Highlights

### Configurable PCIe Switch Fabric

The zSeries 18-slot chassis provides a configurable PCIe switch fabric and is configurable in two-link x8, and four-link x4 PXI express deployments, allowing users to fully utilize the PCIe gen2 bandwidth for high-bandwidth applications.

### Hybrid Peripheral Slot Design

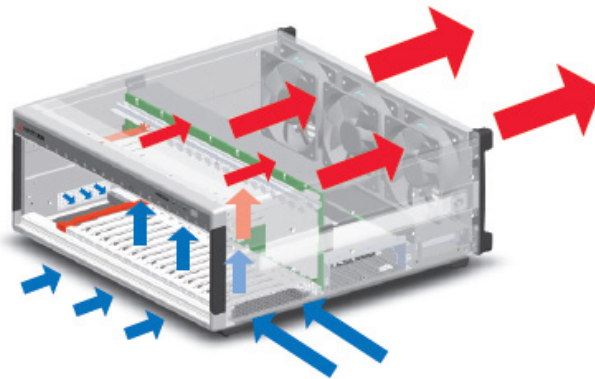
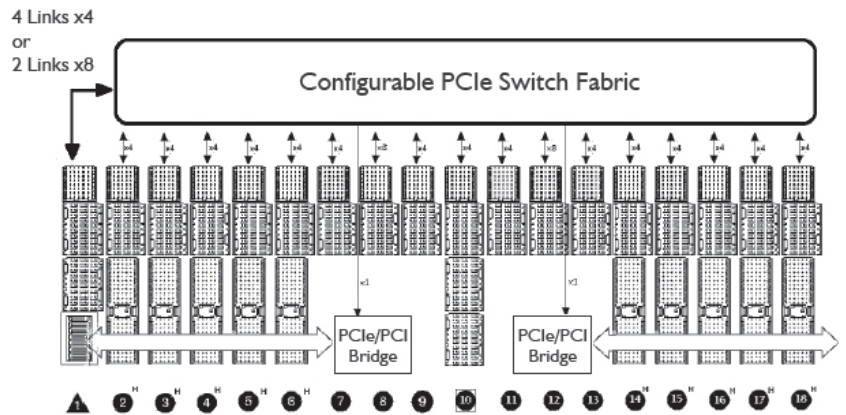
The LitePoint zSeries 18-slot chassis features 10 hybrid peripheral slots, with PXI Express, cPCI Express, PXI, and CompactPCI modules compatible with every hybrid slot.

### Intelligent Chassis Management

The zSeries 18-slot chassis built-in system monitoring controller monitors and manages full chassis status, including internal temperature, fan speed, and DC voltages, with monitored data accessible with the embedded controller or remote PC via standard RS-232 connector.

### Innovative Cooling

The LitePoint zSeries 18-slot chassis features an innovative heat dissipation solution, with three 185.9CFM cooling fans in the rear section of the chassis drawing cool air through lower apertures, then exhausting through the back. This design normalizes airflow for each PXI slot, delivering exceptional cooling. When installed in a rack, the cooling design minimizes intake of hot air from the rear side, separating airflow for modules and power supplies, while isolating source (fan) noise from modules and maintaining a steady internal temperature.



### Notes:

1. LitePoint's PXI Express chassis accepts hybrid slot-compatible PXI-5 modules (with XJ4 connector). Legacy PXI-1 boards (with J2 connector) need to be upgraded to hybrid slot-compatible PXI modules.
2. Contact your LitePoint sales representative for assistance in upgrading LitePoint legacy PXI modules. If the PXI modules were purchased from a third party, please contact the original vendor.

## General Technical Specifications

### Power Supply

Parameter	Specifications
AC Input	Input voltage range: 100 to 240 VAC
	Input voltage frequency: 50 to 60 Hz
DC Output	Maximum total usable power is 800 W

### Bus Interface

Parameter
Four-link/ Two-link/ capacity PXI Express chassis
Up to 8 GB/s system bandwidth
Up to 4 GB/s peripheral bandwidth for dedicated slots

### IO/Switch on Rear Panel

Parameter
BNC connectors for 10 MHz clock input/output
Fan speed selector switch
Inhibit mode selector switch
D-SUB9 connector for voltage monitoring and remote inhibit
D-SUB9 connector for remote monitoring

### Cooling

Parameter
Fans: 3 x 185.9 CFM fans, filtered
Per-slot cooling capacity: 38.2 W

### Physical

Parameter	Specifications
Number of Slots	1 system slot + 1 system timing slot + 10 hybrid peripheral slots + 6 PXI Express peripheral slots
Dimensions	464.3 mm (W) x 191.4 mm (H) x 465.3 mm (D) (18.1" x 7.46" x 18.14")
Weight	11.9 kg (26.2 lbs)

### Acoustic Emission

Parameter	Specifications
Sound Pressure Level (dBA)	Auto fan (up to 25 °C ambient): 46.3 dBA
	High fan: 64.5 dBA
Sound Power (dBA) (Tested in accordance with ISO 7779)	Auto fan (up to 25 °C ambient): 56.0 dBA
	High fan: 76.0 dBA

### Operating Environment

Parameter	Specifications
Ambient temperature	0°C to 55°C (32°F to 131°F)
Relative humidity	10% to 90%, non-condensing

### Storage Environment

Parameter	Specifications
Ambient temperature	-20°C to 70°C (-4°F to 158°F)
Relative humidity	10% to 90%, non-condensing

### Shock and Vibration

Parameter	Specifications
Functional shock	30 G, half-sine, 11 ms pulse duration
Random vibration	Operating: 5 to 500 Hz, 0.3 Grms, 3 axes
	Non-operating: 5 to 500 Hz, 2.46 Grms, 3 axes

### Emissions Compliance

Parameter
EN 61326-1
FCC Class A

### CE Compliance

Parameter	Specifications
Safety	EN 61010-1
Immunity	EN 61326-1

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### Recommended System Controller

Parameter	Specifications
z3975	Embedded Controller based upon Intel® Core™ i5 processor

### Ordering Information

Parameter	Specifications
zSeries 18-slot chassis	3U 18-slot PXI Express chassis with universal AC power supply

### Optional Accessories

Parameter	Specifications
zSeries 18-slot chassis Rack-mount Kit	Flexible rack-mount kit for zSeries 18-slot chassis

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#### CONTACT INFORMATION

LitePoint Corporation  
965 W. Maude Ave.  
Sunnyvale, CA 94085-2803  
United States of America

Telephone: +1.408.456.5000

#### LITEPOINT TECHNICAL SUPPORT

[www.litepoint.com/support](http://www.litepoint.com/support)  
Telephone: +1.408.456.5000  
Available: weekdays 8am to 6pm,  
Pacific Standard Time.  
E-mail: [support@litepoint.com](mailto:support@litepoint.com)

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