



## Data sheet

### 6U NI PXI-1045

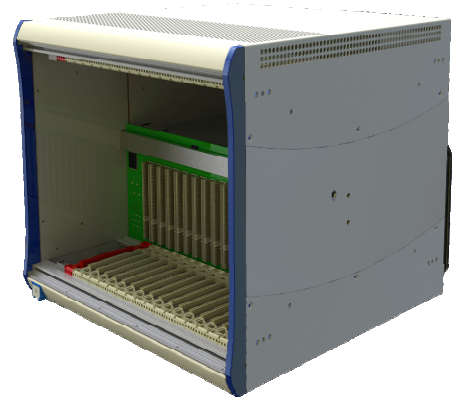
CompactPCI chassis level product

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## 6U CompactPCI / PXI Chassis

### Features

- High-performance 18-slot chassis
- Accepts both 6U/3U CompactPCI / PXI modules
- Software programmable trigger routing between bus segments
- Low jitter (<5 ps) 10 MHz reference clock
- External 10 MHz reference clock with BNC I/O connectors
- Removable, high-performance 600 W power supply with universal AC input
- Extended 0 to 55 °C operating range
- Temperature controlled fan speed
- Remote power-inhibit control and voltage monitoring



### Description

This chassis is based on National Instruments PXI-1045 PXI chassis and modified to accept 6U modules. It is a high-performance 18-slot chassis for 6U and 3U modules and designed for a wide range of test and measurement applications. By programmatically configuring the trigger routing on the chassis backplane, triggers can be routed between devices with ease. The wide operating temperature range of 0 to 55 °C is ideal for extended-temperature environments. The CompactPCI-compatible chassis features a low-jitter 10 MHz reference clock for device synchronization. For importing or exporting system reference clocks, the IC6U includes two BNC I/O connectors on the rear of the chassis.

The chassis modular design ensures a high level of maintainability, resulting in a very low mean time to repair (MTTR). The chassis complies with the *PXI Hardware Specification, Revision 2.1*, offering advanced timing and synchronization features.

The 3U backplane is interoperable with 5 V and universal PXI-compatible products and standard CompactPCI products. This is an important feature, because some PXI systems may require components that do not implement PXI-specific features. For example, you may want to use a standard CompactPCI network interface cards in a PXI chassis.

The signals on the backplane P1 connectors meet the requirements of the CompactPCI specification for both peripheral and system modules. The PXI-specific signals are on the backplane P2 connectors and are found only on those signal lines reserved or not used in the CompactPCI 64-bit specification. Therefore, all modules that meet the requirements of the CompactPCI 64-bit specification will function in the chassis.

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## Technical Specifications

### AC INPUT

- Input voltage range : 100–240 VAC
- Operating voltage range : 90–264 VAC (guaranteed by design)
- Input frequency : 50/60 Hz
- Operating frequency range : 47–63 Hz (guaranteed by design)
- Input current rating : 10–5 A
- Over-current protection : 12 A circuit breaker
- Line regulation
- 3.3 V : <±1%
- 5 V : <±1%
- ±12 V : <±1%
- Efficiency : 70% minimum

### DC OUTPUT

- DC current capacity ( $I_{MP}$ )
- +3.3 V : 40 A
- +5 V : 59 A
- +12 V Peripheral slots : 8.5 A
- +12 V System slot : 0.5 A
- -12 V : 4.5 A
- Load regulation
- +3.3 V : <0.5%
- +12 V : <0.5%
- +5 V : <0.5%
- -12 V : <0.5%
- Maximum ripple and noise (20 MHz bandwidth)
- +3.3 V : 50 mV<sub>pp</sub>
- +12 V : 120 mV<sub>pp</sub>
- +5 V : 50 mV<sub>pp</sub>
- -12 V : 120 mV<sub>pp</sub>
- Over-current protection : All outputs protected from short circuit and overload with automatic recovery when the short or overload is removed.
- Over-voltage protection
- +3.3 V : 140 to 150% above nominal output voltage
- +5 V, +12 V, -12 V : 120 to 130% above nominal output voltage

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#### MTTR

- Power supply shuttle MTTR : Replacement in under 5 minutes

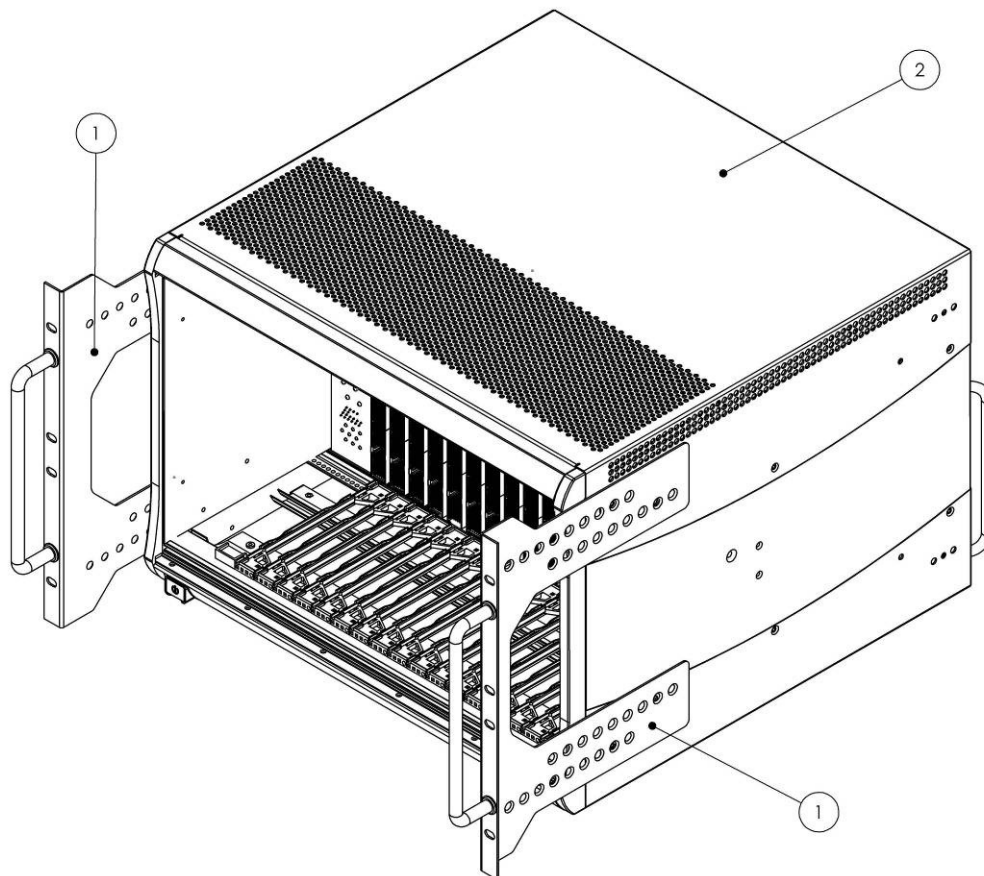
#### MECHANICAL

- Height : 310.0 mm
- Width : 445.5 mm
- Depth : 434.8 mm

#### WARRANTY

: 1 year

\* Please refer to the user manual of the NI PXI-1045 chassis for further detailed specifications. The manual can be found on [www.ni.com](http://www.ni.com)



- 1: Optional front mount kit  
2: 6U NI PXI-1045 chassis

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