

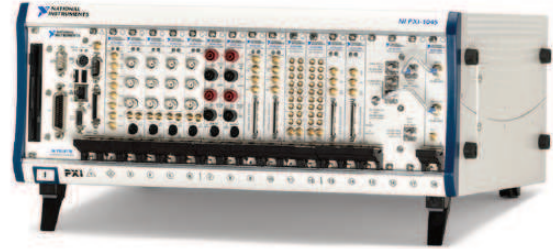
# General-Purpose 18-Slot Chassis for PXI

## NI PXI-1045

- High-performance 18-slot PXI chassis
- Accepts both 3U PXI and 3U CompactPCI 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 power supply with universal AC input
- Extended 0 to 55 °C operating range
- Temperature controlled fan speed
- Remote power-inhibit control and voltage monitoring

### Options

- Front and rear rack-mount kits
- Replacement power supply and fan shuttle
- Slot blockers for improved cooling performance
- Factory installation services



>> For complete specifications, see the **NI PXI-1045 User Manual** at [ni.com/manuals](http://ni.com/manuals).

## High-Performance 18-Slot PXI Chassis

The National Instruments PXI-1045 chassis is a high-power 18-slot chassis designed for a wide range of test and measurement applications. With its large slot capacity and modular structural design, the NI PXI-1045 is well suited for high-channel-count, multi-instrument benchtop or rack-mounted systems. The combination of integrated trigger buses and precise timing features provides the ideal platform for multiple-instrument synchronization and automated testing.

## Software System Configuration

The NI PXI-1045 is configured directly through National Instruments Measurement & Automation Explorer (MAX). With this software configuration tool, you can easily configure PXI systems without manual installation of initialization files. With MAX, you can reserve PXI trigger lines on the backplane of the PXI-1045 to prevent instruments from double-driving the trigger lines. In addition, you can programmatically configure the two trigger routing modules on the PXI-1045 backplane to route triggers to and from any of the three bus segments in the chassis.

## CompactPCI-Compliant 18-Slot PXI Backplane

The PXI-1045 backplane supports all 3U PXI-compatible devices, as well as standard 3U CompactPCI devices. Three separate bus segments on the backplane of the PXI-1045 are connected with two 64-bit/33 MHz PCI-to-PCI bridges. Each bus segment on the backplane contains eight PXI trigger lines for routing timing and synchronization signals. The backplane also includes a dedicated matched trace-length star trigger line for passing precise trigger signals from slot 2 to slots 3 through 15 with less than 1 ns of skew.

## 10 MHz System Reference Clock

A low jitter (<5 ps) 10 MHz system reference clock is supplied to each peripheral slot of the PXI-1045 18-slot chassis. You can use the internal system reference clock, with a skew of less than 250 ps between slots, to synchronize multiple devices and perform unique phase-correlated measurements. You can source external reference clocks, which are automatically detected by the chassis backplane, with a precise PXI timing device in slot 2 of the PXI-1045 chassis (such as the NI PXI-6608 32-bit counter/timer) or an imported 10 MHz source on the BNC connector on the rear of the chassis.

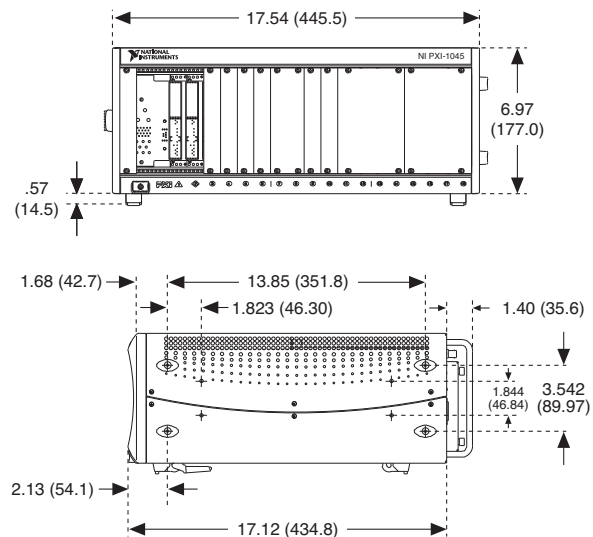


Figure 1. PXI-1045 Front and Side Dimensions in Inches (mm)

## General-Purpose 18-Slot Chassis for PXI

### Accessories

The PXI-1045 has a number of optional accessories for complete system integration and optimized chassis functionality. Front and rear rack-mount kits are available for 19 in. rack mounted systems. Spare power supplies are easily replaced with little system downtime because of the modular nature of the PXI-1045 power supply and fan shuttle. You can use slot blockers to improve the overall cooling performance of the chassis. For online configuration of a complete PXI system, including information about factory installation services, visit the PXI Advisor at [ni.com/advisor](http://ni.com/advisor).

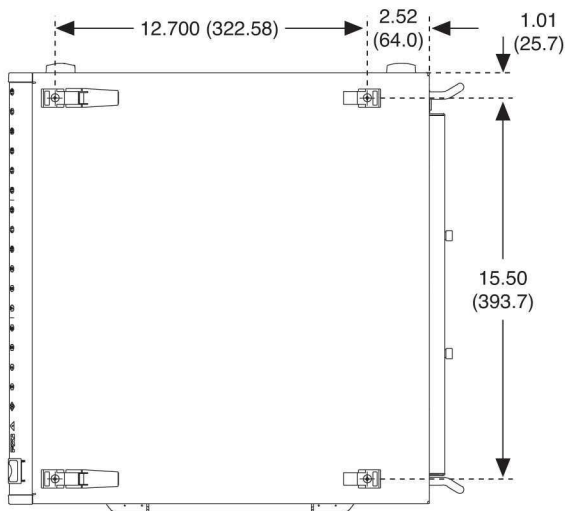
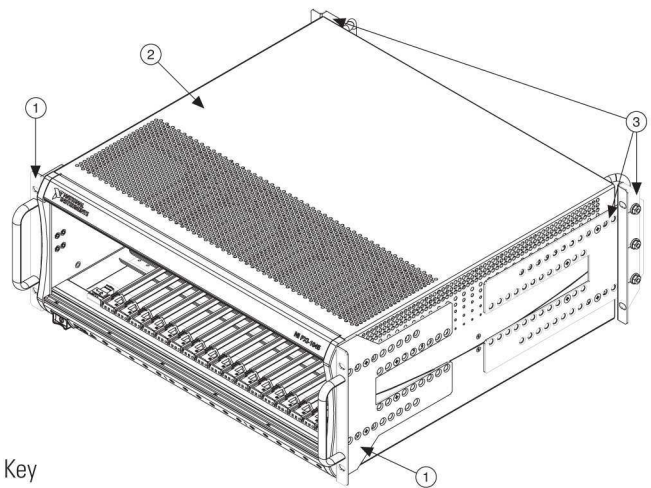


Figure 2. PXI-1045 Bottom Dimensions in Inches (mm)



Key

- 1. Front rack-mount kit
- 2. PXI-1045 chassis
- 3. Rear rack-mount kits

Figure 3. PXI-1045 Chassis with Optional Front and Rear Rack-Mount Kits

### Ordering Information

#### Step 1. Select your chassis.

NI PXI-1045 .....778645-01

#### Step 2. Select one or more power cords.

U.S. 120 VAC .....763000-01  
 Japan 100 VAC .....763000-01  
 United Kingdom 240 VAC .....763064-01  
 Swiss 220 VAC .....763065-01  
 Australian 240 VAC.....763066-01  
 Universal Euro 240 VAC .....763067-01  
 North American 240 VAC .....763068-01

#### Step 3. Select additional accessories.

Front rack-mount kit (for 19 in. rack).....778644-01  
 Rear rack-mount kit (for 19 in. rack) .....778644-02  
 Spare power supply and fan shuttle.....778647-01

Filler panel kit<sup>1</sup> (7 single-slot, 1 double-slot,  
 and 2 quadruple-slot) .....778646-01

Slot blockers<sup>2</sup> (2 single-slot) .....778678-01

<sup>1</sup>Every PXI-1045 includes a filler panel kit

<sup>2</sup>Slot blockers are optional for improved thermal performance of your PXI-1045 system. Refer to PXI-1045 user manual for more information.

#### Step 4. Select system setup and installation services.

If you are ordering this chassis as part of a system, select NI Factory Installation Services to have your hardware/software installed and receive your new PXI system ready to use right out of the box.

NI Factory Installation Services – PXI Systems .....960596-01