

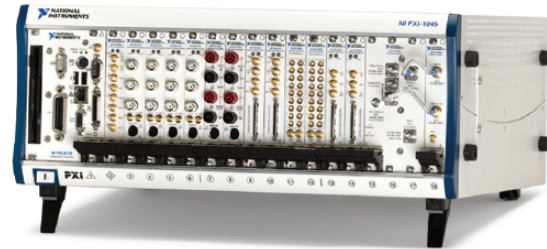
General-Purpose 18-Slot Chassis for PXI

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.

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.

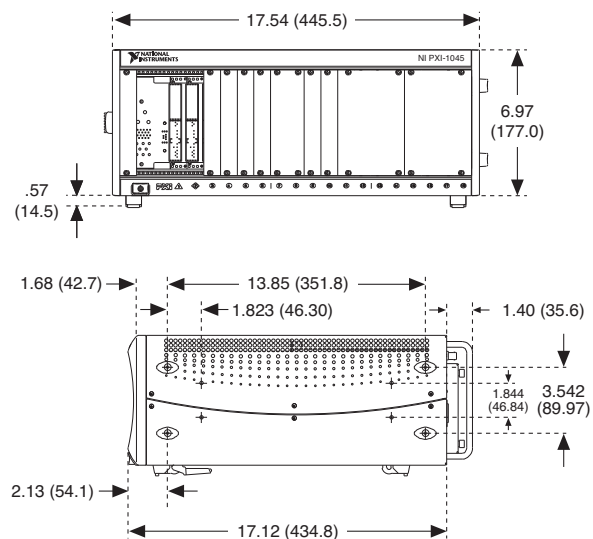


Figure 1. PXI-1045 Front and Side Dimensions in Inches (mm)

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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.

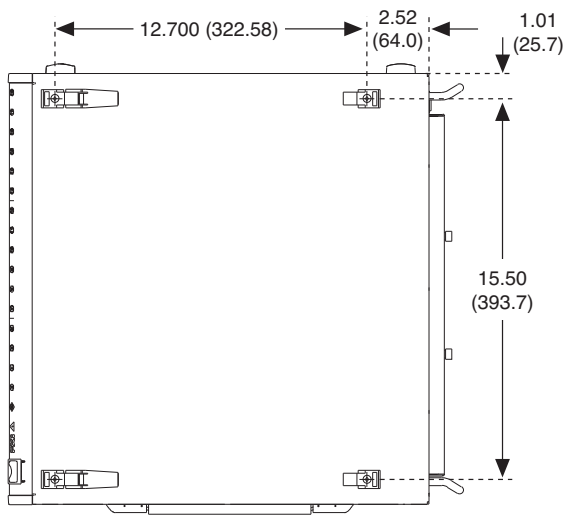
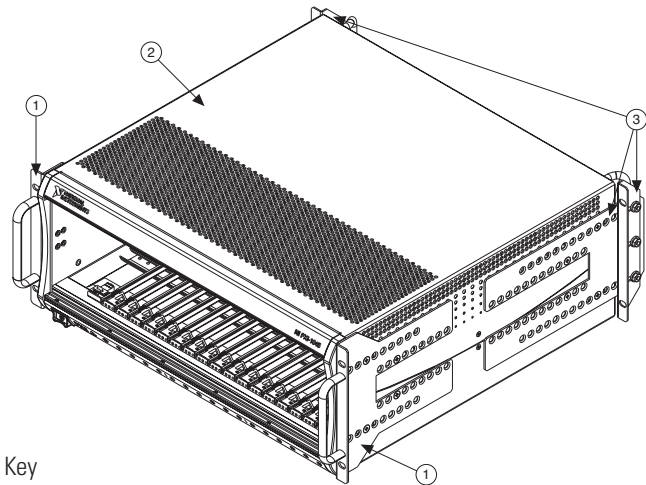


Figure 2. PXI-1045 Bottom Dimensions in Inches (mm)



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-1045778645-01

Step 2. Select one or more power cords.

U.S. 120 VAC763000-01

Japan 100 VAC763000-01

United Kingdom 240 VAC763064-01

Swiss 220 VAC763065-01

Australian 240 VAC.....763066-01

Universal Euro 240 VAC763067-01

North American 240 VAC763068-01

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 kit¹ (7 single-slot, 1 double-slot,
and 2 quadruple-slot)778646-01

Slot blockers² (2 single-slot)778678-01

¹Every PXI-1045 includes a filler panel kit

²Slot 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 Systems960596-01

BUY NOW!

For complete product specifications, pricing, and accessory information, call 800 813 3693 (U.S.) or go to ni.com/pxi.

NI Services and Support



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We also offer service programs that provide automatic upgrades to your application development environment and higher levels of technical support. Visit ni.com/ssp.

Hardware Services

NI Factory Installation Services

NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with ni.com/pxiadvisor.

Calibration Services

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. We provide manual calibration procedures, services to recalibrate your products, and automated calibration software specifically designed for use by metrology laboratories. Visit ni.com/calibration.

Repair and Extended Warranty

NI provides complete repair services for our products. Express repair and advance replacement services are also available. We offer extended warranties to help you meet project life-cycle requirements. Visit ni.com/services.



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