6-Slot PXI Chassis for Remote Control

NI PXI-1036, NI PXI-1036DC

- 6-slot low-cost chassis for remote control applications
- Compact chassis accepts 1 or 2-slot wide embedded controllers
- AC and AC/DC power options
- Accepts both 3U PXI and CompactPCI modules

PXI-1036

- 300 W universal AC power supply
- Acoustic noise as low as 41 dBA
- Rugged, compact package accepts up to 5 peripheral modules

PXI-1036DC

- Combination AC and 11 to 30 VDC power supply
- Portable, DC-powered, real-time solution

Options

- Compatible with all PXI-103x family accessories
  - PXI-103x rack-mount kit
  - PXI-103x handle and feet kit
- DC power cord, customizable length up to 18 ft

Overview

The National Instruments PXI-1036 and PXI-1036DC chassis are low-cost chassis designed for remote control applications. They offer five peripheral slots for modules in the same size package as the PXI-1031 and PXI-1031DC 4-slot compact chassis. The PXI-1036 and PXI-1036DC accept two more peripheral modules because they are designed to use up to a 2-slot embedded controller instead of a 4-slot controller like other National Instruments chassis.

PXI-1036 and PXI-1036DC

The PXI-1036 chassis series works with all remote controllers from National Instruments, including MXI-4 and MXI-Express, for control from a PC. The PXI-1036 also accepts up to 2-slot embedded controllers, such as the PXI-8145 RT real-time controller, for a real-time compact, portable solution.

Low-Cost PXI Remote Control System

The PXI-1036 6-slot chassis and the new MXI-Express remote controller kit lower the PXI setup cost per slot when compared to 4-slot PXI-1031 chassis and the MXI-4 kit. With this low-cost PXI entry point, engineers can control up to five PXI/CompactPCI modules across a remote link that offers 110 MB/s of sustained analog bandwidth – more than a 40 percent increase compared to MXI-4 PCI remote control of PXI.

Lightweight, Portable System

With the same dimensions as the existing 4-slot PXI-1031 portable chassis, the NI PXI-1036 chassis adds two slots for PXI/CompactPCI modules by reducing the width alotted for and of an embedded controller. The compact, rugged, and portable chassis weighs less than 12 pounds and has a small footprint for portability. It features an operating temperature range of 0 to 50 °C and shock and vibration of 30 g.

Quiet Acoustic Emissions for Improved Development Environment

The PXI-1036 series offers an AUTO/HIGH fan-speed selector that provides a HIGH fan setting to maximize cooling and AUTO fan setting to minimize acoustic emissions. When set in AUTO, the PXI-1036 and PXI-1036DC chassis monitor air intake temperature and adjust fan speed accordingly. Table 1 shows PXI-1036 Series acoustic emissions.

| Acoustic Emissions		
Sound Pressure Level[1] (dBA) (measured at operator interface)	PXI-1036	PXI-1036DC
Auto Fan (25 °C ambient)	40.7	45.5
High Fan	49.4	49.4

[1]Tested in accordance with ISO 7779.

Table 1. PXI-1036 Series Acoustic Emissions

AC/DC-Powered PXI-1036DC Offers Portable, Flexible Solution

The PXI-1036 DC chassis offers a combined AC and DC power supply. This combination delivers the flexibility to develop an application with AC power at your desk or factory and then, without changing hardware, deploy to a DC-powered application. The PXI-1036DC accepts 11 to 30 VDC input. With the PXI-8145 real-time controller, this system becomes a compact, portable real-time solution that can operate in environments where AC power is not available.

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6-Slot PXI Chassis for Remote Control
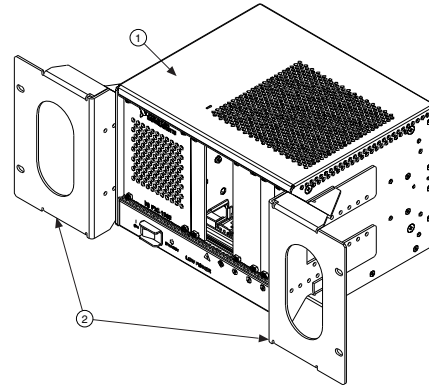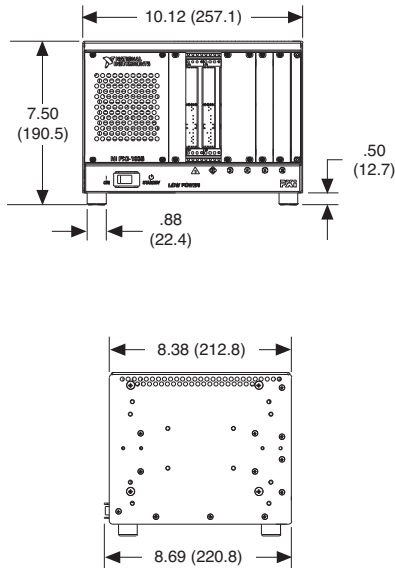
1. PXI-1036/PXI-1036DC Chassis

2. Rack-Mount Kit

Visit the PXI advisor at **ni.com/pxiadvisor** to configure a PXI system.

Ordering Information

Step 1. Select your chassis.
NI PXI-1036 779382-01
NI PXI-1036DC 779383-01

Step 2. Select one or more power cords.
AC Power Cords
U.S. 120 VAC...763000-01
Japanese 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

DC Power Cord
PXI-1031DC DC Power Cord 763419-01

Step 3. Select additional accessories.
PXI-103x rack-mount kit 778948-01
PXI filler-panel kit for chassis[1] 778933-01
PXI-103x side-handle and rubber-feet kit 778949-01
PXI chassis slot-blocker kit
(2 single-slot blockers).................................778678-01
[1]Every PXI-1036 includes three single filler panels and
one double filler panel.

Step 4. Select system setup and installation services.
Receive this system with software installed and an additional
one-year warranty on all components. Order through Factory
Installation Services.
PXI 4 and 6-Slot FIS and Extended Warranty 960597-04

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

6-Slot PXI Chassis for Remote Control

Specifications

Complies with *PXI Hardware Specification*, Revision 2.2.
Accepts modules compliant with CompactPCI and PICMG.

Electrical

AC Input
Input voltage range
PXI-1036 .... 100 to 240 VAC
PXI-1036DC... 100 to 120/200 to 240 VAC
Operating voltage range
PXI-1036 .... 90 to 264 VAC
PXI-1036DC... 90 to 132/180 to 264 VAC
Input frequency .... 50/60 Hz
Operating frequency range[1] .... 47 to 63 Hz
Input current rating .... 4 to 2 A
Over-current protection
PXI-1036 .... 5 A fuse in power supply (no user-serviceable components inside chassis)
PXI-1036DC... 6.3 A fuse in power supply (no user-serviceable components inside chassis)
Efficiency .... >65% at full load, normal input voltage

[1]The operating range is guaranteed by design.

DC Input – PXI-1036DC
Input voltage range .... 11 to 30 VDC
Input current rating .... 30 A maximum
Efficiency .... 65% typical

DC Output

DC Current Capacity (IMP)	PXI-1036	PXI-1036DC
Voltage	0 to 50 °C	0 to 50 °C
+3.3 V	12 A	12 A
+5 V	17 A	17 A
+12 V	2 A	2 A
-12 V	0.8 A	0.8 A

PXI-1036DC Notes:
1. For AC-powered applications, and DC applications above 12.3 V input, the combined loading must not exceed 145.6 W.
2. For AC/DC applications, the combined loading on the +5 and +3.3 VDC must not exceed 112 W.
3. For DC-powered applications, at 11 VDC input the combined loading on +5, +3.3, +12, and -12 VDC must not exceed 137 W. At 12.3 VDC or higher input, the combined loading must not exceed 145.6 W.
4. For DC applications, the output power is derated 5 W/°C above 45 °C.
5. National Instruments does not guarantee measurement accuracy for brief periods when switching between AC and DC input.

Low-Power Compliance

The PXI-1036 series is designed for portable applications and surpasses the power requirements outlined in the PXI specification for low-power chassis. These requirements are:

	5 V		3.3 V		+12 V	-12 V
	System Slot	Each Peripheral Slot	System Slot	Each Peripheral Slot	Each Slot	Each Slot
	6 A	2 A	6 A	2 A	0.5 A	0.25 A
Total Required Current	10 A		10 A		1.5 A	0.75 A

Acoustic Emissions	PXI-1036	PXI-1036DC
Sound Pressure Level[1] (dBA) (measured at operator interface)		
Auto Fan (25 °C ambient)	40.7	45.5
High Fan	49.4	49.4
Sound Power (dBA)		
Auto Fan (25 °C ambient)	51.8	54.3
High Fan	57.5	58.2

[1]Tested in accordance with ISO 7779.

Chassis Cooling
Per-slot cooling capacity .... 25 W
Fan .... 86 cfm

Environmental
Operating location... Indoor use
Altitude .... 2,000 m
Measurement Category II
Pollution Degree.. 2

Operating Environment
Ambient temperature range............................. 0 to 50 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)
Relative humidity .... 10 to 90%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Storage Environment
Ambient temperature range............................. -20 to 70 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)
Relative humidity .... 5 to 95%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Shock and Vibration
Operational shock .... 30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC-60068-2-27. Test profile developed in accordance with MIL-PRF-28800F.)

Random Vibration
Operating... 5 to 500 Hz, 0.3 g_{rms}
Nonoperating... 5 to 500 Hz, 2.4 g_{rms}
(Tested in accordance with IEC-60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

Mechanical
Overall dimensions (standard chassis)
Height .... 177 mm (6.97 in.)
Width .... 257.1 mm (10.12 in.)
Depth .... 212.8 mm (8.38 in.)
Weight .... 5 kg (11.0 lbs)
Note: 12.7 mm (0.50 in.) is added to height when feet are installed.

Safety
The PXI-1036/PXI-1036DC chassis were evaluated using the criteria of EN 61010-1 and meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:
EN 61010-1, IEC 61010-1
UL 61010-1
CAN/CSA-C22.2 No. 61010-1
Note: For UL and other safety certifications, refer to the product label, or visit **ni.com/certification**, search by model number or product line, and click the appropriate link in the Certification column.

Electromagnetic Compatibility
Emissions.. EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Immunity... EN 61326:1997 + A2:2001
EMC/EMI .... CE, C-Tick, and FCC Part 15 (Class A) Compliant
Note: For EMC compliance, operate this device with shielded cabling. In addition, you must install all covers and filler panels.

CE Compliance (CE)
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, visit **ni.com/certification**, search by model number or product line, and click the appropriate link in the Certification column.

Backplane
PXI-1036 series backplane is 32-bit PCI-compatible.

NI Services and Support

NI has the services and support to meet your needs around the globe and through the application life cycle – from planning and development through deployment and ongoing maintenance. We offer services and service levels to meet customer requirements in research, design, validation, and manufacturing. Visit **ni.com/services**.
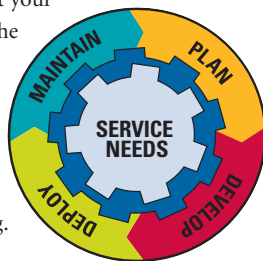
Training and Certification

NI training is the fastest, most certain route to productivity with our products. NI training can shorten your learning curve, save development time, and reduce maintenance costs over the application life cycle. We schedule instructor-led courses in cities worldwide, or we can hold a course at your facility. We also offer a professional certification program that identifies individuals who have high levels of skill and knowledge on using NI products. Visit **ni.com/training**.

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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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