

# PXI

## AEROFLEX 20-SLOT CHASSIS

PXI Chassis and System Controller Interface

**AEROFLEX**  
A passion for performance.



20-slot chassis with system control interface

### PXI Chassis Assembly Features

- 20-slot PXI Chassis compliant with PXI Specification Rev. 2.2
- One 3U high system controller slot
- Nineteen 3U high PXI/CompactPCI peripheral slots
- A choice of either MXI-4 or MXI-Express interface for external system control
- Includes 19 inch rack mounting brackets

### Introduction

The Aeroflex PXI Chassis assembly complete with external controller interface kit and rack mounting is equipped with advanced features and functionality compliant with PXI and CompactPCI specifications.

This chassis offers one 3U high system controller slot and up to nineteen 3U high peripheral slots. Geared towards capacity, the PXI Chassis assembly is the perfect compliment to Aeroflex 3000 Series PXI modular RF instruments for high volume RF manufacturing environments.

The chassis is supplied with either a MXI-4 or MXIExpress interface kit to enable high speed external control from a compatible personal computer with a single vacant full height PCI expansion slot or a PCIe expansion slot. Each kit comprises a PXI controller module supplied fitted in slot one of the chassis, a PC plug-in interface card and a 3m interface cable. The MXIexpress interface variant is adaptable to be compatible with PCs with either full or half height PCIe expansion slots. Both the MXI-4 and the MXIExpress interfaces bridge to the PCI backplane of the PXI chassis thus providing a transparent interface from the PC controller to PXI instrument module resources.



### High Capacity RF Test System

This Chassis assembly populated with Aeroflex 3000 Series instruments and Aeroflex application software together form a complete and formidable RF test system for research and development or manufacturing. This open architecture platform is scalable and re-configurable simply by module addition or exchange. Applications served by any given hardware configuration are completely software definable.

#### Applications

The chassis assembly enhances the versatility for applications using Aeroflex 3000 Series modules. With 19 available slots, this chassis assembly provides generous expansion opportunities.

For RF testing this permits 2 complete RF transceiver test channels with full duplex interfaces to be populated comprising any configuration of Aeroflex PXI 3000 Series 3 GHz or 6 GHz modules leading to a significantly smaller test system footprint and a lower cost.

Likewise, it is possible to configure systems that provide up to six RF signal generators or signal analyzers in any combination each with either 3 GHz or 6 GHz frequency range in a single 19 inch wide by 4U high rack mountable chassis.

#### Highlights

The chassis features an intelligent control board that dynamically monitors and manages the chassis status including the fan speed, system voltages, and internal temperature.

The chassis is equipped with a 1100 W dual AC power supply and a forced-air cooling system provided by a dual fan system located at the rear of the chassis. This cooling configuration, in conjunction with air plenums within the chassis, provides airflow for all module slots per the PXI specification and requires no additional rack space for inlet or outlet air.

## SPECIFICATIONS - PXI CHASSIS

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### POWER SUPPLY

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#### AC INPUT

##### Input voltage range

100 to 240 VAC

##### Input voltage frequency

50 to 60 Hz

##### Input current rating

15 A/115 VAC or 10 A/230 VA

#### DC OUTPUT

Total DC power output: 1120 W

VDC	Maximum
+5 V	120 A (max)
+12 V	64 A (max)
+3.3 V	80 A (max)
-12 V	6 A (max)

### COOLING

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#### Fans

2 x 235 CFM fans with filters

### PHYSICAL

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Number of PXI slots: 20 (1 system slot, 19 peripheral slots)

#### Dimensions

447 mm x 178 mm x 406 mm (W x H x D)

17.6" x 7" x 16" (W x H x D)

#### Weight (Chassis only)

13.6 kg (30 lbs.)

### OPERATING ENVIRONMENT

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#### Ambient temperature

0°C to 55°C

### STORAGE ENVIRONMENT

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#### Ambient temperature

-20°C to 60°C

### GENERAL

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#### Standard warranty

24 months

#### Safety

IEC 61010-1/EN 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

### ELECTROMAGNETIC COMPATIBILITY

#### Immunity

EN 61326-1

### CE COMPLIANCE

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The 20 slot chassis meets the essential requirements of applicable European Directives.

## **SPECIFICATION - MXI & MXI EXPRESS BOARDS**

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### **MXI-4 (NI PXI-PCI8331)**

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#### **CORE FEATURES - PHYSICAL**

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##### **Dimensions**

PXI card	1-slot 3U PXI module
PCI card	107 x 175 (mm) [4.4 x 6.9 in]

##### **Slot requirements**

PXI card	1 system slot
PCI card	1 full height PCI slot

##### **Cable length**

3 m

#### **ENVIRONMENT**

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##### **Operating temperature**

0 to 55°C

##### **Storage temperature**

-20 to 70°C

##### **Relative humidity**

5 to 95%, non-condensing

#### **GENERAL**

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##### **Standard warranty**

24 months

### **MXI EXPRESS (NI PXI-PCIE8361)**

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#### **CORE FEATURES - PHYSICAL**

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##### **Dimensions**

PXI card	1-slot 3U PXI module
PCIe card	107 x 175 (mm) [4.4 x 6.9 in]

##### **Slot requirements**

PXI card	1 system slot
PCI card	1 full height PCI slot

##### **Cable length**

3 m

#### **ENVIRONMENT**

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##### **Operating temperature**

0 to 55°C PXI / 0 to 40°C PCI

##### **Storage temperature**

-20 to 70°C

##### **Relative humidity**

5 to 95%, non-condensing

#### **GENERAL**

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##### **Standard warranty**

24 months

## **VERSIONS, OPTIONS AND ACCESSORIES**

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When ordering please quote the full ordering number information.

All variants of the 20-slot chassis are supplied with:

EMC blanking panels

CDROM

#### **Ordering Numbers**

82548

82547

#### **Accessories**

44991/784

43139/742

43139/768

43139/767

#### **Versions**

20 Slot PXI Chassis with MXI express interface and rack mount

20 Slot PXI Chassis with MXI-4 interface and rack mount

Connector Panel

TypeN(f) bulkhead to SMA(m) Cable Assembly

BNC(f) bulkhead to SMA(m) Cable Assembly

BNC(f) bulkhead to SMB(m) Cable Assembly

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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.