- High Performance 18-slot PXIe Backplane
- 1 PXIe System Slot, 1 PXIe Timing Slot & 16 PXI Express Hybrid Slots
- Gen2 High Performance PCIe Switching With a Default Four-Link (4x4) System Slot
- High Data Bandwidth (Max. 8 GB/s System & 2 GB/s Slot-to-Slot)
- Rear Panel External 10 MHz Clock Input/Output
- 1200 W Industrial Grade Power Supply
- Compact Benchtop Footprint
- Low Profile 4 U Rugged Design
- Remote Chassis Monitoring System
- Low Audible Operating Noise
- 3 Year Warranty

Pickering Interfaces' 42-926 PXIe Chassis provides one PXIe system slot, 1 PXIe timing slot and 16 hybrid-compatible slots for application flexibility. The chassis utilizes a single PCI segment with a dedicated PCIe-to-PCI bridge module for the hybrid slots. The PXI specific high accuracy clocks and trigger signals are generated and controlled by an independent clock module attached to the rear of the backplane.

The chassis is fitted with a 1200 W industrial grade power supply mounted at the rear of the unit with sufficient capacity to support PXI modules with very high current demands.

Pickering's Range of PXI & PXIe Chassis			
Chassis Type	Slots	Chassis Size	Model No.
PXI	8	4U Full Rack	40-908
PXI	14	4U Full Rack	40-914
PXI	19	4U Full Rack	40-923A
PXI	8	4U Half Rack	40-924
PXIe Hybrid (Gen 3)	8	4U Half Rack	42-924
PXIe Hybrid (Gen 3)	18	4U Full Rack	42-925
PXIe Hybrid (Gen 2)	18	4U Full Rack	42-926
PXI with LXI Control*	7	4U Half Rack	60-102D
PXI with LXI Control*	18	4U Full Rack	60-103D
PXI with LXI/USB Control	2	1U Half Rack	60-104
PXI with LXI/USB Control	4	2U Half Rack	60-105
PXI with LXI/USB Control*	6	1U Full Rack	60-106

*Includes Scan List Sequencing and optional Triggering function.

An intelligent chassis management system monitors the power supply voltage, internal temperature and cooling fan speed. The current condition of the chassis can be monitored remotely via a port on the rear panel.

Three 120 mm fans insure maximum PXI module cooling and an efficient direct convection design allows the chassis to operate over an extended ambient temperature range of 0 °C to +50 °C.

Rear of the 42-926 PXIe Chassis Showing Cooling Air Outlets, Reference Clock Connectors, Voltage Monitoring Port and Power Connector

pickering

Specifications

Number of Slots:	1 PXIe System slot. 1 PXIe Timing slot. 16 PXIe Hybrid-compatible slots
Bus Interface:	Four-link capacity PXI Express system slot. High data bandwidth (max. 8 GB/s system and 2 GB/s slot-to-slot) PXI-1 compatible with 32 bit / 33 MHz PCI bus.

Cooling

Airflow:	Front & bottom panel intake, rear exhaust.
Per-slot Cooling Capacity:	50 W at 15 K
Fans:	3 off 120 mm fans

Power Supply

Input Voltage Range:	100 - 240 VAC full range
Input Frequency:	50 to 60 Hz

Supplied with a 1200 W DC output power supply with the following total capacity:

DC Outputs	Max Current	Ripple
+3.3 V	72 A	±50 mV
+5 V	36 A	±50 mV
+5 V aux	2 A	±50 mV
+12 V	40 A	±100 mV
-12 V	5 A	±100 mV

Chassis Monitoring

Monitoring Functions:	Chassis voltage level monitoring Power supply monitoring/control Cooling fans monitoring/control Chassis temperature monitoring
Status LEDs:	Chassis temperature, power supply voltage and fan monitoring
Remote Interface:	Monitor port on rear panel

Frequency Standard

Source:	Either 10 MHz PXI compliant internal standard or external 10 MHz standard applied to rear panel BNC connector.

Mechanical Specification

Cardcage:	Front loading 3 U x 160 mm, 18 slots, IEEE 1101.1, 1101.10 and 1101.11
Dimensions:	Width (with brackets): 482.6 mm (19") Height (without feet): 177 mm (6.97") Height (with feet): 192 mm (7.56") Depth (without handles: 355.25 mm (13.99")
Weight:	14.0 Kg without PXI modules

Product Order Codes

18-slot, 3 U, PXIe Chassis	42-926-001

Operating/Storage Conditions

Operating Conditions

(operating with specified airflow)

Operating Temperature:	0 °C to +50 °C
Humidity:	20 % to 80 % non-condensing

Storage and Transport Conditions

Storage Temperature:	-20 °C to +70 °C
Humidity:	10 % to 90 % non-condensing

Safety, CE & RoHS Compliance

All products are fully CE compliant and meet applicable EU directives: Low-voltage safety EN61010-1:2001, EMC Immunity EN61000-6-1:2001, Emissions EN55011:1998.

The 42-926 Chassis also complies with the European Restriction of Hazardous Substances directive (RoHS).

Connectivity Solutions

We provide a full range of supporting cable and connector solutions for all our switching products—20 connector families with 1200+ products. We offer everything from simple mating connectors to complex cables assemblies and terminal blocks. All assemblies are manufactured by Pickering and are guaranteed to mechanically and electrically mate to our modules.

Connectors & Backshells

Multiway Cable Assemblies

RF Cable Assemblies

Connector Blocks

We also offer customized cabling and have a free online **Cable Design Tool** that can be used to create custom cable solutions for many applications. Visit: pickeringtest.com/cdt to start your design.

Mass Interconnect

We recommend the use of a mass interconnect solution when an Interchangeable Test Adapter (ITA) is required for a PXI or LXI based test system. Our modules are fully supported by both Virginia Panel and MacPanel.

Pickering Reed Relays

We are the only switch provider with in-house reed relay manufacturing capability via our Relay Division. These instrument grade reed relays feature *SoftCenter™* technology, ensuring long service life and repeatable contact performance.

To learn more, please go to: pickeringrelay.com

Programming

Pickering provide kernel, IVI and VISA (NI & Keysight) drivers which are compatible with all Microsoft supported versions of Windows and popular older versions. For a list of all supporting operating systems, please see: pickeringtest.com/os

The VISA driver support is provided for LabVIEW Real Time Operating Systems (Pharlap and Linux-RT). For other RTOS support contact Pickering. These drivers may be used with a variety of programming environments and applications including:

- **Pickering Interfaces Switch Path Manager**
- **National Instruments** products (LabVIEW, LabWindows/CVI, Switch Executive, MAX, TestStand, VeriStand, etc.)
- **Microsoft Visual Studio** products (Visual Basic, Visual C++)
- **Programming Languages** C, C++, C#, Python
- **Keysight** VEE and OpenTAP
- **Mathworks** Matlab
- **Marvin** ATEasy
- **MTQ Testsolutions** Tecap Test & Measurement Suite

Drivers for popular Linux distributions are available, other environments are also supported, please contact Pickering with specific enquiries. We provide Soft Front Panels (SFPs) for our products for familiarity and manual control, as well as comprehensive documentation and example programs to help you develop test routines with ease.

To learn more about software drivers and development environments, please go to: pickeringtest.com/software

Signal Routing Software

Our signal routing software, Switch Path Manager, automatically selects and energizes switch paths through Pickering switching systems. Signal routing is performed by simply defining test system endpoints to be connected together, greatly accelerating Test System software development.

To learn more, please go to: pickeringtest.com/spm
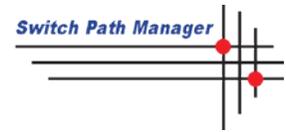
Diagnostic Relay Test Tools

eBIRST Switching System Test Tools are designed specifically for our PXI, PCI or LXI products, these tools simplify switching system fault-finding by quickly testing the system and graphically identifying the faulty relay.

To learn more, please go to: pickeringtest.com/ebirst

Three Year Warranty & Guaranteed Long-Term Support

All standard products manufactured by Pickering Interfaces are warranted against defective materials and workmanship for a period of three years from the date of delivery to the original purchaser. Extended warranty and service agreements are available for all our modules and systems with various levels to suit your requirements. Although we offer a 3-year warranty as standard, we also include guaranteed long-term support—with a history of supporting our products for typically 15-20 years. To learn more, please go to: pickeringtest.com/support

Available Product Resources

We have a large library of product resources including success stories, product and support videos, articles and white papers as well as application specific product brochures to assist when looking for the switching, simulation and connection solutions you need. We have also published handy reference books on Switching Technology and for the PXI and LXI standards.

To view, download or request any of our product resources, please visit: pickeringtest.com/resources

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