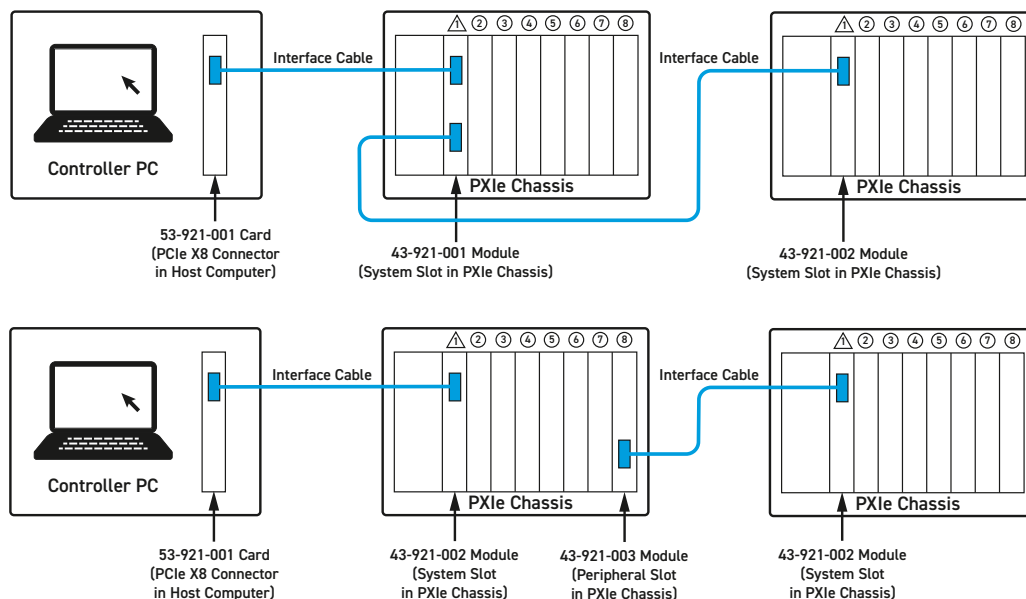


- PXI-5 PXI Express Hardware Specification rev.2.0 Compliant
- PCI Express® Base Specifications rev.2.0 Compliant
- PCIe Gen 2 x8 Ports Each Support up to 4 GB/s
- PXI Express Link Capability:
  - Four Link Configuration: x4 x4 x4 x4
  - Two Link Configuration: x16 x8
- Expansion Distance up to 5 m With 2 m or 5 m Expansion Cables
- Comprehensive Hardware & Software Transparency
- Flexible Option for Multi-chassis Expansion as a Daisy-chain or Star-chain Configured
- 3 Year Warranty



The 43-921 PCI Express-to-PXI Express expansion kit allows control of PXI Express modules installed in a PXI Express chassis using high bandwidth PCI Express technology. The extension kit provides up to 4 GB/s using PCIe Gen 2 x8 signalling. The 43-921 PCI Express-to-PXI Express expansion kit provides additional PXI instrument slots to the host computer by implementing a PCI Express-based control of PXI modules. The technology consists of a 53-921-001 adapter card installed in the host computer, a PCIe x8 cable, and a 43-921-00x 3U (Eurocard) remote control interface module. The 53-921-001 comes in a PCI Express x8 footprint and is equipped with a PCIe x8 cable connector.

The 43-921-001 with dual ports has the capability of multi-chassis control in a daisy-chain configuration. The upper port is connected to a 53-921-001 installed in a host PC and the lower port is connected to a 43-921-002 in the system slot of a second chassis. Alternatively, a 43-921-003 module fitted to a peripheral slot in the first chassis can be used to control the 43-921-002 module in the second chassis - see diagram below. With comprehensive hardware and software transparency, the expansion kit enables fast and convenient detection of any PXI cards installed in the system, requiring no additional drivers or software.



Control of two PXIe Chassis -  
43-921-001 Control Interface in  
First Chassis Daisy-chained to  
43-921-002 Control Interface in  
Second Chassis

Alternative Control of two PXIe  
Chassis - 43-921-003 Peripheral  
Interface in First Chassis Daisy-  
chained to 43-921-002 Control  
Interface in Second Chassis

## Specification

Compliance:	PXI-5 PXI Express hardware specification Rev.2.0 compliant
Maximum Data Throughput:	43-921-001: Two PCIe gen 2 x8 ports each up to 4 GB/s 43-921-002: PCI Express gen 2 x8 link with 4 GB/s
Connection Distance:	Up to 5 m
Installation:	Controller slot 1 (43-921-001 and 43-921-002)
Dimensions - 53-921-001:	Low-profile PCI Express card: 142 mm (W) x 69 mm (H)
Dimensions - 43-921-00x:	PXI Express system module: 175 mm (W) x 107 mm (H)

## Operating/Storage Conditions

Operating Temperature:	0 °C to +55 °C
Humidity:	10 % to 90 % non-condensing
Storage/Transport Temperature:	-20 °C to +75 °C
Humidity:	10 % to 90 % non-condensing

## Safety & CE Compliance

All modules are fully CE compliant and meet applicable EU directives: Low-voltage safety EN61010-1:2010, EMC Immunity EN61326-1:2013, Emissions EN55011:2009+A1:2010.

## Product Order Codes

PCIe-to-PXIe Kit with 2 m Cable with Daisy-chain Facility	43-921-001-KIT
(includes one 53-921-001, one 43-921-001 and one 43-921-200 2 meter cable)	
PCIe-to-PXIe Kit with 2m Cable	43-921-002-KIT
(includes one 53-921-001, one 43-921-002 and one 43-921-200 2 meter cable)	
PCIe Remote Control Interface Card (for fitting to Host PC)	53-921-001
PCIe Low Profile Front Panel (for use with 53-921-001 Interface Card)	53-921-LPF
PXIe Remote Control Interface Module with Daisy-chain Facility (for fitting to PXIe System Controller Slot)	43-921-001
PXIe Remote Control Interface Module (for fitting to PXIe System Controller Slot)	43-921-002
PXIe Remote Control Interface Module (for fitting to PXIe Peripheral/Hybrid Slot)	43-921-003
Interface Cable 2 m	43-921-200
Interface Cable 5 m	43-921-500

43-921 Remote Control Interface Fitted to 42-925 18-Slot PXIe Chassis

43-921 Remote Control Interface Fitted to 42-924 8-Slot PXIe Chassis

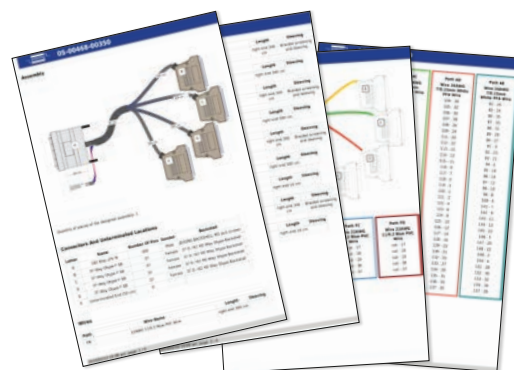


We provide a full range of supporting cable and connector solutions for all our switching products—20 connector families with **1200+** products. We offer everything from simple mating connectors to complex cables assemblies and terminal blocks. All assemblies are manufactured by Pickering and are guaranteed to mechanically and electrically mate to our modules. These accessories are detailed in Connector Accessories data sheets, where a complete list and documentation can be found for each accessory.



## Connector Blocks

- Fully supported on modern browsers and tablet operating systems.
- Built-in tutorials and videos allow you to get quickly up to speed.
- Store cable assemblies in the Cloud and develop over time.
- Each cable design has a downloadable PDF documentation file detailing all specifications



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.

## 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 more information go to [pickeringtest.com/os](http://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, Simulink**
- **Marvin ATEasy**
- **MTQ Testsolutions** Tecap Test & Measurement Suite

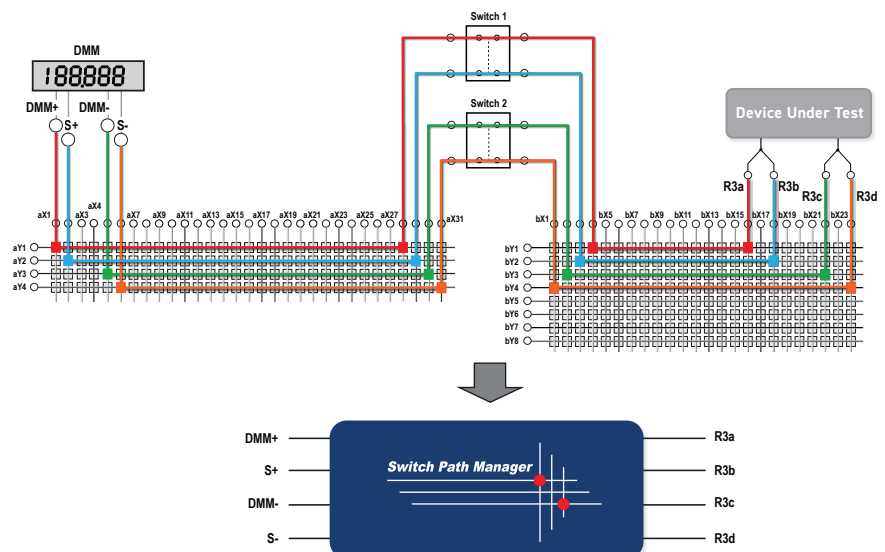
Drivers for popular Linux distributions are available, other environments are also supported, please contact Pickering with specific enquiries. We provide Soft Front Panels (SFPs) for our products for familiarity and manual control, as well as comprehensive documentation and example programs to help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

To learn more about software drivers and development environments go to [pickeringtest.com/software](http://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 go to [pickeringtest.com/spm](http://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 go to [pickeringtest.com/ebirst](http://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 three years from the date of delivery to the original purchaser. Extended warranty and service agreements are available with various levels for 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 go to [pickeringtest.com/support](http://pickeringtest.com/support)

## Available Product Resources

We have a library of resources including success stories, product and support videos, articles and white papers as well as application-specific brochures to assist you. We have also published reference books on switching technology and the PXI and LXI standards.

To view, download or request any of our product resources go to [pickeringtest.com/resources](http://pickeringtest.com/resources)

