

- High Performance 19 Slot PXI/cPCI Backplane
- 3 Slot PXI System Controller Compatible
- 600W Industrial Grade Power Supply
- Compact Benchtop Footprint
- Integrated Carrying Handles
- Low Profile 4U Rugged Design
- Remote Chassis Monitoring System
- Power, Temperature and Fan Monitoring LEDs
- Low Audible Operating Noise
- Optional Rack Mounting Kit
- RoHS Compliant
- 3 Year Warranty



Pickering Interfaces' 40-923A PXI Chassis is a fully compliant 19 slot PXI chassis that can accept any 3U PXI or cPCI module. It is ideal for bench top use or for use in a rack system.

The 40-923A includes all the features and performance required by the PXI standard and supports a control interface or embedded controller and up to 18 additional 3U peripheral modules. The control interface can be provided by a Pickering's 41-924 PCIe to PXI interface kit, allowing the chassis to be controlled from a PC.

The chassis is fitted with a 600W industrial grade power supply mounted at the rear of the unit with sufficient capacity to support PXI modules with very high current demands.

An intelligent chassis management system monitors the power supply voltage, internal temperature and cooling fan speed. The current condition of the chassis is displayed on front panel status LEDs and can also be monitored remotely via an RS232 port

Three 120mm 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 +55°C.

The 40-923A chassis can also be supplied with mounting brackets for installation into a standard 19" rack. These brackets are adjustable allowing the chassis to be recessed by up to 10cm, allowing clearance for connector blocks and module wiring.

The system slot is compatible with any PC-PXI bridge and any 3 slot wide PXI controller.

40-923A PXI chassis with 63-103-001 optional rack mounting hardware fitted allowing the front of the chassis to be recessed by up to 10cm in the host rack



Specifications

| | |
|--------------------|---|
| Number of Slots: | 1 system slot, 18 peripheral slots. |
| System Slot: | Accepts any 3 slot or narrower PXI compatible controller or interface. Pickering Interfaces recommends the 41-924 interface for remotely controlled configurations. Particularly, Adlink controllers are recommended for applications requiring embedded control. |
| Chassis Backplane: | Incorporates all the features of the PXI specification Rev 2.2. The backplane is 64-bit with PXI triggers, Star Trigger, Local Bus & internal PXI clock. |

Cooling

| | |
|----------------------------|--|
| Airflow: | Bottom intake, rear exhaust. |
| Per-slot Cooling Capacity: | 25W at 55°C ambient 40W at 40°C ambient |
| Fans: | 3 off 185.9cfm fans with filters |

Power Supply

| | |
|--|------------------------|
| Input Voltage Range: | 90 - 264VAC full range |
| Input Frequency: | 47 to 63Hz |
| Supplied with a 600W DC output power supply with the following total capacity: | |
| DC Outputs | Max Current |
| +3.3V | 42A |
| +5V | 45A |
| +12V | 15A |
| -12V | 4.75A |

Chassis Monitoring

| | |
|-------------------|--|
| Front Panel LEDs: | Power supply status Cooling fan status Internal temperature status |
| Remote Interface: | RS232 port on rear panel |

Frequency Standard

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

Mechanical Specification

| | |
|-------------|---|
| Cardcage: | Front loading 3U x 160mm, 19 slots, IEEE 1101.1, 1101.10 and 1101.11 |
| Dimensions: | Width: 444mm (17.48") Height: 178mm (7.01") Depth: 455mm (17.91") |
| Weight: | 13.4kg (29.5 lbs) without PXI modules |

Product Order Codes

| | |
|---|-----------------------|
| 19-Slot, 3U, PXI Chassis | 40-923A-001 |
| Optional 19 inch rack mounting hardware | 63-103-001 |
| PCIe to PXI Control Interface Kit (for full details of our fast PCI to PXI control Interface see the 41-924 data sheet). | 41-924-001-KIT |

Operating/Storage Conditions

Operating Conditions

(operating with specified airflow)

| | |
|------------------------|---------------------------|
| Operating Temperature: | 0°C to +55°C |
| Humidity: | 10% to 90% non-condensing |

Storage and Transport Conditions

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

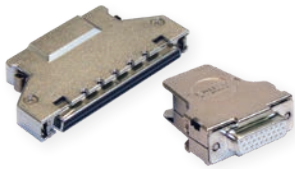
Safety, CE & RoHS Compliance

All modules 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 40-923A 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 sister company, Pickering Electronics. 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 is also compatible with Real-Time Operating Systems such as LabVIEW 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+)
- **Keysight VEE**
- **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

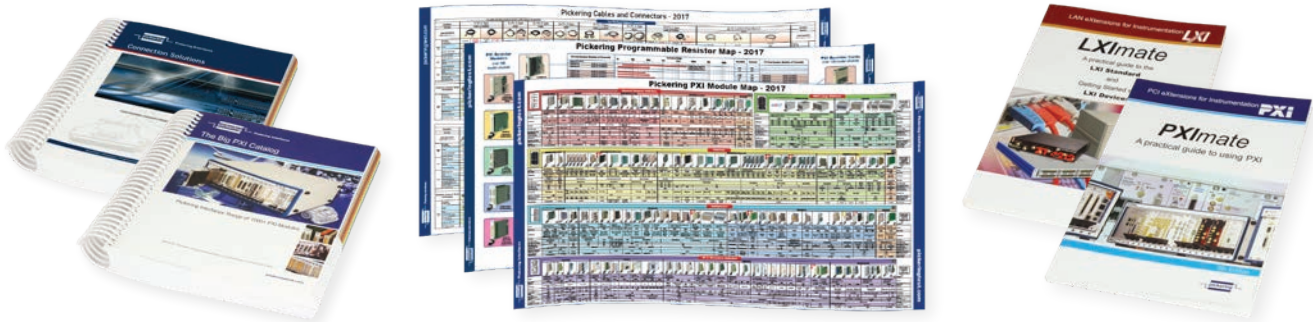


Three Year Warranty & Guaranteed Long-Term Support

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, as well as complete product catalogs and product reference maps to assist when looking for the switching, simulation and cable and connector solutions you need. We have also published handy reference books 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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