KPCI-488LPA KUSB-488B

- PCI and USB bus versions
- IEEE-488.2 compatible for fast data transfer
- Windows® 7/Vista/XP/2000 drivers included
- LabVIEW® and LabWindows/CVI support
- Compatible with any standard GPIB instrument

Ordering Information

KPCI-488LPA IEEE-488.2 Interface Board for the PCI Bus KUSB-488B IEEE-488.2 USB-to-GPIB Interface Adapter for USB Port.

Built in 2m (6.6 ft) cable

IEEE-488 (GPIB) Interface Solutions



Keithley's GPIB interface solutions make it easy to add standard IEEE-488.2 bus control to any PC system. These high speed tools can control as many as 14 GPIB instruments or other devices over a distance of up to 20 meters. They are ideal for use with automated test equipment in laboratory and industrial applications.

The Keithley Model KPCI-488LPA is a low-profile, GPIB interface plug-in card that is 32-bit/33MHz PCI bus compatible. Its PCI interface supports both 3.3V and 5V PCI environments, making it suitable for most desktop computers and industrial PCs, including the new low-profile desktop systems. This low-cost solution supports Windows 7/Vista/XP/2000, and its driver library is command compatible with National Instruments™ and Capital Equipment Corporation™ command functions.

The Keithley **Model KUSB-488B** USB-to-GPIB interface turns any computer with a USB port into a fully functional GPIB controller. The KUSB-488B's small form factor makes it perfect for use with laptop computers in portable

applications or for other applications in which the computer has no available PCI plug-in board slots. The product is USB 2.0 compliant and has an IEEE data transfer rate upwards of 1.5 MB/s through the USB port. No external power is required. KUSB-488B has a built-in 2-meter USB cable.

Software

The included utility software simplifies the setup and use of Keithley GPIB interface solutions and saves programming time. Every solution ships with 32-bit dynamic link libraries for Application Development Environments (ADEs) running under Windows 7/Vista/XP/2000 and drivers for the most current programming languages. This adds up to full compatibility with a full array of software, including:

- Microsoft Visual Studio 6.0 (Visual Basic, Visual C++)
- Microsoft Visual Studio .NET (Visual Basic .NET, C#)
- Microsoft Visual Studio 2005 and up
- Borland Delphi, Borland C Builder 6.0
- LabVIEW Version 7.0 and up (VISA and IEEE-488.2)
- LabWindows[™]/CVI Version 7.0 and up (VISA and IEEE-488.2)

Hardware Compatibility

These GPIB Interface solutions are fully compatible with all of Keithley's GPIB capable instruments. The Model 7010 adapter is required for the Model 428-PROG when used with the KUSB-488B.

KPCI-488LPA KUSB-488B

Bus/Form Factor	PCI	USB	
Dimensions	4.7×2.5 in $(120 \times 64.5 \text{ mm})$	$3.2 \times 2.6 \times 1.1$ in $(81.7 \times 66.1 \times 27.8 \text{ mm})$	
Power (Current @ 5VDC)	400 mA typ., 750 mA max.	500 mA	
Transfer Speed	1.5 Mbyte/s	1.5 Mbyte/s	
EMC	European Directive 2004/108/EEC	European Directive 2004/108/EEC	
Environmental	Operating: 0° to 55°C, 10% to 90% RH non-condensing	Operating: 0° to 55°C, 10% to 90% RH non-condensing	
	Storage: -20° to 80°C, 5% to 90% RH non-condensing	Storage: -20° to 80°C, 5% to 95% RH non-condensing	

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IEEE-488 (GPIB) Interface Solutions



- PCI, PXI, and USB bus versions
- IEEE-488.2 compatible for fast data transfer
- Windows® XP/2000/Vista drivers included
- LabVIEW® and LabWindows/CVI support
- Compatible with any standard GPIB instrument

Ordering Information

KPCI-488LPA IEEE-488.2 Interface Board for the PCI Bus

KPXI-488 IEEE-488.2 Interface Board for the PXI Bus

KUSB-488A IEEE-488.2 USB-to-GPIB Interface Adapter for USB Port. Built in 2m (6.6 ft) cable

SERVICES AVAILABLE

KPXI-488-5Y-EW 1-year factory warranty extended to 5 years from date of shipment

TRN-RCMI-1-C Course: Integrating Mixed Instruments with a Single Software Interface

The KPCI-488LP and KPXI-488 are not compatible with the TestPoint™ Test & Measurement Development Package. Users of TestPoint must use the KUSB-488A, KPCI-488A, or KPCI-488 interfaces. Please contact Keithley Sales and Support for further details and availability of the KPCI-488(A) interfaces.

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Keithley's GPIB interface solutions make it easy to add standard IEEE-488.2 bus control to any PC or PXI system. These high speed tools can control as many as 14 GPIB instruments or other devices over a distance of up to 20 meters. They are ideal for use with automated test equipment in laboratory and industrial applications.

The Keithley Model KPCI-488LPA is a low-profile, GPIB interface plug-in card that is 32-bit/33MHz PCI bus compatible. Its PCI interface supports both 3.3V and 5V PCI environments, making it suitable for most desktop computers and industrial PCs, including the new low-profile desktop systems. This low-cost solution supports Windows XP/2000/Vista, and its driver library is command compatible with National Instruments™ and Capital Equipment Corporation™ command functions.

The Keithley Model KPXI-488 adds GPIB capability to any PXI measurement system. With the KPXI-488, you can create powerful hybrid measurement systems using Keithley's line of PXI data acquisition modules and precision DMMs, SourceMeter® instruments, switch systems, and sensitive measurement products. The KPXI-488 supports Windows XP/2000/Vista, and its driver library is also command compatible with National Instruments and Capital Equipment Corporation command functions.

The Keithley Model KUSB-488A USB-to-GPIB interface turns any computer with a USB port into a fully functional GPIB controller. The KUSB-488A's small form factor makes it perfect for use with laptop computers in portable applications or for other applications in which the computer has no available PCI plug-in board slots. The product is USB 2.0 compliant and has an IEEE data transfer rate upwards of 1.8 MB/s through the USB port. No external power is required. KUSB-488A has a built-in 2-meter USB cable.

Software

The included utility software simplifies the setup and use of Keithley GPIB interface solutions and saves programming time. Every solution ships with 32-bit dynamic link libraries for Application Development Environments (ADEs) running under Windows XP/2000/Vista and drivers for the most current programming languages. This adds up to full compatibility with a full array of software, including:

- Microsoft Visual Studio 6.0 (Visual Basic, Visual C++)
- Microsoft Visual Studio .NET (Visual Basic .NET, C#)
- Borland Delphi, Borland C Builder 6.0
- LabVIEW Version 7.0 and up (VISA and IEEE-488.2)
- LabWindows™/CVI Version 7.0 and up (VISA and IEEE-488.2)

Hardware Compatibility

These GPIB Interface solutions are fully compatible with all of Keithley's GPIB capable instruments. The Model 7010 adapter is required for Models 428-PROG, 237, and 590 when used with the KUSB-488A.

	KPCI-488LPA	KPXI-488	KUSB-488A
Bus/Form Factor	PCI	PXI	USB
Dimensions	4.7×2.5 in $(120 \times 64.5 \text{ mm})$	$5.3 \times 4.2 \text{ in } (134 \times 107 \text{ mm})$	$4.2\times2.6\times1.0$ in $(10.7\times6.6\times2.6$ cm)
Power (Current @ 5VDC)	400 mA typ., 750 mA max.	400 mA typ., 750 mA max.	500 mA
Transfer Speed	1.5 Mbyte/s	1.5 Mbyte/s	1.8 Mbyte/s
Safety	EN61010-1/IEC 1010	European Directive 73/23/EEC, EN60950	EN61010-1
EMC	European Directive 89/336/EEC	European Directive 89/336/ EEC, EN55022, EN55024	European Directive 89/336/EEC
Environmental	Operating: 0° to 55°C, 10% to 90% RH non-condensing.	Operating: 0° to 55°C, 5% to 95% RH non-condensing.	Operating: 0° to 55° C, 10% to 90% RH non-condensing.
	Storage: -20° to 80°C, 5% to 90% RH non-condensing	Storage: -20° to 80°C, 5% to 95% RH non-condensing	Storage: –20° to 70°C, 5% to 95% RH non-condensing



IEEE-488 (GPIB) Accessories



Model 7006-*: Single-shielded GPIB cable terminated with one feed through style and one straight on IEEE-488 connector. The mating thumb screws are metric.

7006-1 1m (3.3 ft) **7006-2** 2m (6.6 ft)



Model 7007-*: Double-shielded premium GPIB cable. Each end is terminated with a feed through style metal housing for longest life and best performance. The mating thumb screws are metric.

7007-05 0.5m (1.6 ft) 7007-1 1m (3.3 ft) 7007-2 2m (6.6 ft) 7007-4 4m (13.1 ft)

For use with: IEEE-488 Interconnect



Model 7010 Shielded IEEE-to-IEEE Adapter: Provides additional clearance between IEEE-488 cable and rear panel, allowing easier access to switches, cables, and other connectors.

For use with: IEEE-488 Interconnect



Model 8530 Centronics Adapter: IEEE-488 to Centronics cable adapter. Connects to Model 2001/2002 IEEE-488 port and any Centronics compatible printer for direct data output.

Cable Length: 2m (6.6 ft). **For use with:** 2001, 2002

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