VXI - SYSTEM 30 switching modules

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Detailed Price and Technical Information On-Line www.pickeringtest.com

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Innovative Modular Test from Pickering Interfaces SPRINC OF

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Internal Construction of 30-510A 88 x 8 Matrix Module (covers removed) with a total of 800 reed relays. Pickering Interfaces manufacture the World's highest density VXI switch modules



6-Slot VXI Chassis with NI MXI-2 Slot 0 Controller and 4 Pickering Interfaces VXI Modules (30-725, 30-728 & 30-850)

LX Systems From Pickering Interfaces

Many users are now specifying the LXI platform when designing new Functional Test Systems. The key advantages of LXI are:

- * The speed, simplicity, worldwide reach, low cost, ongoing enhancement and backward compatibility of LAN communication.
- * Ouick, easy configuration through the intuitive web interface built into LXI compliant instruments.
- * Simplified programming and greater software reuse through IVI drivers.
- * The ability to create hybrid systems that include LXI, GPIB, VXI, PXI, CANbus, etc.
- * Enhanced system performance and event handling via hardware and LAN-based triggering modes.
- * Synchronization of local and remote instruments through the **IEEE 1588** precision time protocol.

For more information on Pickering's LXI products, please refer to our web site: www.pickeringtest.com.





PICKERING INTERFACES - SYSTEM 30 VXI SWITCHING MODULES

Pickering Interfaces have an impressive range of high performance VXI switching modules, including Matrix, Multiplexer, RF, Microwave, Optical and Telecom. Pickering Interfaces VXI switching modules will plug into any VXI chassis and are supplied with VXI plug & play software drivers.

Pickering manufacture the world's highest density VXI modules, our VXI matrices offer up to 1200 crosspoints per 1 Slot C sized module. With this level of density we are offering a "Switching System On A Card". Additionally, System 30 VXI matrix modules incorporate automatic relay self test. They are available in a wide variety of formats with many other configurations available to order.

We also have many high performance RF/Microwave, Telecom and Optical Switching modules. Pickering Interfaces have over 100 models in our VXI family providing switching support for a broad range of applications.

All System 30 VXI modules are SCPI programmed, message based, C sized modules. They are suitable for complex functional test applications requiring very high density switching with fast switching times.



Switching Systems On A Card - A

Pickering Interfaces **VXI Switching Modules offer** the widest switching range with the highest density available in the VXI format **Ideal for Functional Test Data Acquisition** and Industrial **Automation** applications



high density Pickering VXI matrix module has the equivalent capacity of a fully loaded VXI chassis using other manufacturer's "high density" matrix modules







Very High Density VXI Switching From Pickering Interfaces

Pickering VXI modules offer very high density switching up to 1200 matrix crosspoints per module, with a choice of single pole or screened relays.

One high density System 30 matrix module can have the equivalent switching capacity of a fully loaded VXI chassis using competitor's modules. This greatly increases switching density and will reduce overall system cost.

Pickering VXI Modules are C sized, mostly 1 slot width.

Reed Relays For Maximum Performance & Reliability

All high density switching modules use only high quality reed relays with Sputtered Ruthenium contacts (electromechanical relays as in most competing products do not offer the same lifetime or low level signal performance). Reed Relays give very long life (10⁹ operations) and very consistent contact resistance in a hermetically sealed reed relay which is very important for low level signal switching.

VXI Plug & Play Drivers

All VXI modules are supplied with IVI and VXI Plug and Play compliant drivers and fully support NI Switch Executive software. Please go to the software download section of our web site for latest releases.

NI Switch Executive Support

Pickering VXI switch modules are compatible with Switch Executive from National Instruments.



NI Switch Executive is an intelligent switch management and routing application. With NI Switch Executive, you gain increased development productivity by interactively configuring and naming switch modules, external connections, and signal routes. You also increase test code reuse and system performance with switch programming in conjunction with National Instruments TestStand, LabVIEW, LabWindows/CVI, and Measurement Studio. Ultimately, NI Switch Executive simplifies switch system configuration and increases test performance, thus lowering your cost to test.



SCPI Message Based Interface with Built-In Self Test

All modules have a built in 32 bit embedded microprocessor together with a custom gate array for fast loading of switching patterns. Operating speed is close to register based modules but with the flexibility and ease of programming of a SCPI message based interface. The embedded microprocessor allows our matrix modules to have extensive Built-in Self Test, some modules have relay self test with diagnosis down to reed relay level including switch contact test.

Built-In Spare Relays

Spare relays are mounted within all high density VXI matrix modules, so should self test indicate a suspect relay then repair will only take a few minutes, thus keeping downtime to an absolute minimum.



Ordering Partially Populated Configurations

VXI Matrix modules may be ordered with a specific configuration. Some examples are shown below. The module can be factory populated as required and future updates to increase capacity can be added at any time in the future (on a return to factory basis).



Fully Populated 88 x 8 Matrix, and Partially Populated 88 x 4 and 40 x 6 Matrices

Built In Serial Port

All System 30 VXI modules have a serial port (RS-232 or USB) built right on the front panel. This offers the following significant advantages:

- · Full SCPI command set functionally.
- · Serial port allows easy familiarization and debugging of your final VXI code from a PC terminal.
- Module re-configuration may be done via serial port (no banks of confusing DIP switches). This is all assisted with built-in help screens.
- · Firmware updates may be downloaded from the Web (or CD ROM) using the serial port (firmware includes all code and gate array configurations).



- May be used as an RS-232 or USB controlled standalone switching module (no VXI chassis or slot 0 controller required). Please contact Pickering Interfaces for further information.
- · Choice of 8 baud rates up to 57600 and higher.

For further information please visit our web site: www.pickeringtest.com

Automatic Self Test

Self-Test is invoked at power on (taking around 4 seconds) and may also be operated under software command (from VXI or external serial port). Self-Test pass is indicated on a front panel LED with a full pass/fail description available using the DIAGnostic? command. Self-Test comprises 4 levels (shown in the flow chart below):-

- 1. Power Supply, Logic and Temperature Test
- 2. Relay Coil Test
- 3. Full Contact Test (matrices only)
- 4. Test For Relays Entering End Of Life (matrices only)

Power up self test includes just items 1 and 2. Full self test (run from software command) includes items 1,2,3 and 4. Self test is undertaken without removing test fixtures, built in isolation switches first disconnect the core matrix from the external fixture before the test commences (to maximise reliability these isolation switches always "cold switch"). All relay service and fail test thresholds are re-programmable. Also complete relay self test data together with detailed diagnostics may be dumped via the external serial port.



VXI Module Self-Test Flow Chart





VXI High Density Matrix Modules

- 88 x 8 Version Available in 1-Pole, 2-Pole or 1-Pole Screened Matrix Configurations
- 300 x 4 Version Available in 1-Pole or 1-Pole Screened Configurations
- Partially Populated Versions Available to Order
- Ruthenium Reed Relays For Maximum Signal Performance
- Automatic Isolation Switching For Maximized Performance
- Built-In Self Test
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification



88 x 8 Matrix with 2 pole contacts and Isolation Switches (30-510A-022)



Pickering Interfaces offers a range of high density VXI matrix modules in 88 x 8 or 300 x 4 configurations. They feature automatic isolation switches that disconnect unused rows and columns to minimize signal loading and crosstalk. Expansion to larger matrix sizes is possible by connecting multiple modules. Partially populated versions are also available, this allows the user to choose the optimum matrix for an application without incurring the cost of unused switches.

All versions use high quality instrumentation grade Sputtered Ruthenium Reed Relays that exhibit excellent contact performance under low and medium level switching conditions.

The connectors used by these modules are supported by a comprehensive range of cable and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Matrix Configuration	Number of Poles	Front Panel Connector	Relay Type	Max Switch Voltage	Max Power	Max Carry (Switch) Current	Order Code
Single 88 x 8	1-Pole	2-off 96-pin DIN 41612 3 off 125-pin Metric	Sputtered Ruthenium Reed	100V DC	20W 10W	1.2A (0.5A)	30-510A-021
	2-Pole						30-510A-022
	1-Pole Screened						30-510A-021-S
Single 300 x 4	1-Pole					1A (0.5A)	30-535-021
	1-Pole Screened						30-535-021-S



VXI RF Multiplexer Modules

- **RF** Multiplexers Available as Single 32:1, Dual 16:1, or Quad 8:1
- Up To 2GHz Bandwidth
- 50 Ω or 75 Ω Characteristic Impedance
- Choice of Front Panel SMB, Type 43, 1.0/2.3 or SMA Connectors
- Suitable For Constructing Larger Switching Networks
- Built-In Self Test
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification





Single 32 Channel MUX

Dual 16 Channel MUX

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Quad 8 Channel MUX

Available Configurations for the 30-745 RF Multiplexer



30-745 RF Multiplexer Module

This range of high density VXI RF Multiplexer modules have a frequency range of 2GHz with excellent VSWR, insertion loss and isolation performance. They can be ordered preconfigured in quad 8-channel, dual 16-channel or single 32channel formats. They are available in 50Ω and 75Ω versions with a choice of signal connectors. SMA and SMZ versions occupy 2 VXI slots, all other versions are single slot

These multiplexers are suitable for high frequency applications such as routing signals to and from test equipment, video switching or high speed logic switching.

The connectors used by these modules are supported by a comprehensive range of cable and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Configuration	Maximum Frequency	Characteristic Impedance	Signal Connectors	Maximum Power	Order Code
Ouad 8 channel Multiplexer Dual 16 channel Multiplexer Single 32 channel Multiplexer		50Ω	SMA, SMB		30-745 t
	2GHz	75Ω	Type 43/SMZ, 1.0/2.3, Mini SMB		
		50Ω	SMA, SMB		
		75Ω	Type 43/SMZ, 1.0/2.3, Mini SMB	10W	
		50Ω	SMA, SMB		
		75Ω	Type 43/SMZ, 1.0/2.3, Mini SMB		

† For the full order code suffix for each variant, see data sheet.





RF MULTIPLEXER

VXI RF Matrix Modules

- **RF** Matrix Modules With Configurations Up to Dual 8 x 9
- Up To 1.5GHz Bandwidth
- 50Ω or 75Ω Characteristic Impedance
- Loop Thru Available For The Construction of Large Self-Terminating Matrices
- Switched Shield Configuration Available
- Choice of Front Panel Connectors
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification



30-725 Dual 8x9 RF Matrix With Loop Thru



Pickering's VXI RF matrix modules are designed for the easy construction of high performance, bidirectional switching systems with frequencies up to 1.5GHz. They are available in 50Ω or 75Ω versions with a choice of signal connectors. The slot occupancy depends upon the connector type - see the data sheet for details.

Most matrices are available with automatic isolation switches and loop thru. This disconnects unused rows and columns and routes the signal to front panel connectors allowing terminations to be fitted, or for matrix expansion. The 30-725 is also available in a Switched Shield version, this is a 2-pole matrix that switches the signal and ground connections at each matrix crosspoint

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Configuration	Maximum Frequency	Characteristic Impedance	Signal Connectors	Maximum Power	Order Code	
0.011.1	1000411-	50Ω	SMB		20 725 +	
o x 9 Matrix	TOOMINZ	75Ω	SMB		50-725 +	
		50Ω	SMB			
Dual 8 x 9 Matrix	400MHz	75Ω	Type 43/SMZ, SMB, 1.0/2.3, Mini SMB		30-728	
8 x 4 Matrix	1.5GHz	50Ω	SMA, SMB		20.750 +	
	1GHz	75Ω	miniSMB	10W	30-750 1	
	1.5GHz	50Ω	SMA, SMB		20 751 4	
Dual 8 x 4 Matrix	1GHz	75Ω	miniSMB		30-751 T	
16 x 4 Matrix	1.5GHz	50Ω	SMA, SMB		20 752 4	
	1GHz	75Ω	miniSMB		30-752 T	
8 x 8 Matrix	1.5GHz	50Ω	SMA, SMB		20 752 +	
	1GHz	75Ω	miniSMB		50-755 T	

† These modules are available with loop thru option - for full order codes see data sheet.

‡ As well as loop thru, the 30-725 module is available with "switched shield" option



VXI Microwave Switch Modules

MICROWAVE SWITCH

- Up to 16 Microwave Changeover Relays in One Module
- 50Ω or 75Ω Characteristic Impedance
- Version Available With 65GHz Bandwidth
- Choice of SMA or SMZ Signal Connectors
- Versions With Lower Relay Counts Can be Easily Upgraded
- Microwave Relays are Easily Replaceable For Minimum Downtime
- Occupy 2 VXI Slots
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification



Schematic Diagram for the 30-780 16 x RF Changeover Switch Modules



Pickering's VXI Microwave switching modules are suitable for switching 50Ω signals with bandwidths up to 65GHz. They are available in a number of formats from 4 to 16 changeover relays per module. A lower bandwidth 75Ω version is also available.

These modules give you the highest RF and Microwave switching performance available within a Pickering Switching System. Applications are mainly in the Microwave region, however there are many uses in the RF spectrum where extremely low insertion loss and ultra high isolation are critical.

All variants feature easily replaceable relay modules for reduced downtime. All 50Ω modules are fitted with SMA connectors and the 75Ω version is fitted with SMZ/Type 43 connectors. These are supported by a comprehensive range of cable and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Configuration	Number of Switches	Maximum Frequency	Characteristic Impedance	Signal Connectors	Maximum Power	Order Code †
Microwave Changeover Switch	4, 8, 12, or 16	20GHz	50Ω	SMA		30-780-521
		26.5GHz		SMA	- 30W	30-780-531
		40GHz		SMA-2.9		30-780-541
		50GHz		SMA-2.4		30-780-551
		65GHz		SMA-1.8		30-780-561
		2GHz	75Ω	Type 43/SMZ		30-780-711

† For the full order code suffix for each variant, see data sheet.





VXI Microwave Multiplexer Modules

- A Range of Low Cost Microwave Multiplexers
- Up to 8-Banks of 6-Channel Multiplexers
- 50 Ω or 75 Ω Characteristic Impedance
- Version Available With 40GHz Bandwidth
- Microwave Relays are Easily Replaceable For Minimum Downtime
- Self Terminating Version Available
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification



Schematic Diagram for the 30-785 4 x 6 Channel Microwave Multiplexer

Pickering's VXI Microwave Multiplexer modules are suitable for switching 50Ω signals with bandwidths up to 40GHz. They are available in 6-channel multiplexer format with between 1 and 8 banks per module. 75Ω versions with 20GHz bandwidth are also available.



Applications are mainly in the Microwave region, however there are many uses in the RF spectrum where extremely low insertion loss and ultra high isolation are critical. Multiplexers with greater numbers of channels can be easily constructed by cascading 6-channel multiplexers in a "tree" configuration.

All variants feature easily replaceable relay modules for reduced downtime. Self terminating versions are available which automatically terminate unused multiplexer inputs All modules occupy 2 VXI slots except terminated versions which occupy 3 slots

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Configuration	Number of MUX banks	Maximum Frequency	Characteristic Impedance	Signal Connectors	Maximum Power	Order Code †
6-Channel Multiplexer	1 to 4	20GHz	50Ω	SMA		30-785-521 ‡
		26.5GHz	50Ω	SMA		30-785-531 ‡
		40GHz	50Ω	SMA-2.9	30W	30-785-541
		20GHz	75Ω	1.6/5.6		30-785-751
	5 to 8	20GHz	50Ω	SMA		30-786-521

† For the full order code suffix for each variant, see data sheet.

‡ Available with self terminating option.



VXI Microwave Matrix Modules

- Range of Versatile Microwave Matrix Modules
- Matrix Sizes Up To 6 x 6 Available
- Versions Available With 20GHz Bandwidth
- 50 Ω or 75 Ω Characteristic Impedance
- Choice of SMA, SMB, SMC or N-Type Connectors
- Optional Loop Thru Allows Cascading of Signals to Create Larger Matrices
- Built-in Self Test
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification



Typical Configuration of 30-787 5 x 5 Blocking Microwave Matrix With Loop Thru



This range of VXI Microwave Matrix modules are available in sizes from 3 x 3 up to 6 x 6. They are available in 50 Ω versions capable of switching signals up to 65GHz, or 75 Ω versions capable of switching 3GHz.

The matrices are available with an automatic isolation and loop thru option. This disconnects unused rows and columns and routes the signal to front panel connectors allowing terminations to be fitted, or for matrix expansion.

All variants are available with a choice of front panel connectors. These are supported by a comprehensive range of cable and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Configuration	Maximum Frequency	Characteristic Impedance	Signal Connectors	Maximum Power	Order Code †
	10GHz	FOO			30-787-518-3x3
3 x 3 Matrix	20GHz	5002			30-787-528-3x3
	3GHz	75Ω			30-787-708-3x3
4 x 4 Matrix	10GHz	FOO	SMA SMB SMC N-type	30W	30-787-518-4x4
	20GHz	5002			30-787-528-4x4
	3GHz	75Ω			30-787-708-4x4
	10GHz	FOO			30-787-518-5x5
5 x 5 Matrix	20GHz	5002			30-787-528-5x5
	3GHz	75Ω			30-787-708-5x5
6 x 6 Matrix	10GHz	500			30-787-518-6x6
	20GHz	5002			30-787-528-6x6
	3GHz	75Ω			30-787-708-6x6

† To order the loop thru option for any module add the suffix **-L**





MICROWAVE MATRIX

VXI Telecoms Switching Modules

TELECOMS SWITCHING

30-790 Daisy Chain

Switching Module

- A Range of Daisy Chain Switching Modules Suitable For Testing SONET/SDH Transmission Multiplexers
- Available in Unbalanced 75Ω and Balanced 120Ω Versions With 8, 16 or 32 Channels
- Expandable to Any Size: 64, 128, 256...
- Suitable For 2MBit/s Up To 155MBit/s
- All Tributaries Can Be Switched to One Signal
- **Integrated Multiplexer Allows Selection of One Tributary for Analog Testing**
- **IVI and VXI Plug and Play Drivers**
- **Complies with VXI Specification**

This range of daisy chain switching modules are specifically designed for production or verification testing of SONET/SDH transmission multiplexers switching 2MBit/s or 1.5MBit/s data. Versions are available with 8 or 16 channels for 75Ω unbalanced systems, or with 16 or 32 channels for 120Ω balanced systems. The modules incorporate switches that allow data to be fed sequentially through selected tributaries, and multiplexers enable test equipment to break into selected channels.

The modules can be cascaded to create a test system of any size. The 30-791 incorporates a channel multiplexer to enable easy expansion.

All the connectors used by these modules are supported by a comprehensive range of cable and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at:

www.pickeringtest.com



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Configuration	Number of Channels (Impedance)	Connectors	Bandwidth	Maximum Voltage	Maximum Current	Order Code
Daisy Chain Tributary Switch	8 (75Ω)	Type 43/SMZ, BNC,			0.5A	30-790
Tributary Switch + Channel MUX	8 (75Ω)	1.0/2.3, 1.6/5.6, Mini SMB	2.5GHZ			30-791
Daisy Chain Tributary Switch	16 (75Ω)	1.0/2.3, Mini SMB		100V DC 100V AC		30-792
Differential Daisy Chain Tributary Switch (balanced)	16 (120Ω)	96-pin	100MHz		1.0A	30-795
	32 (120Ω)	DIN 41612				30-796



VXI Optical Switching Modules

OPTICAL SWITCHING

- Comprehensive Range of Optical Multiplexers and Insert/Bypass Switches
- MEMS Switching Technology Offers High Reliability and Fast Operating Speed
- Single and Multi Mode Versions
- FC/APC, FC/PC, SC/PC, MU (mini SC) or LC Connectors (Single Mode Versions)
- SC or ST Connectors (Multi Mode Versions)
- Fast Operating Time of 2ms
- Long Operating Life Typically 10⁹ Operations
- IVI and VXI Plug and Play Drivers
- Complies with VXI Specification





The Pickering Interfaces range of VXI optical switching modules include high performance multiplexers and insert/bypass switches. MEMS (Micro Electro-Mechanical Systems) switch technology offers higher performance and longer operational life compared to conventional prism based optical switching.

All modules use high quality optical connectors that are supported by a comprehensive range of fiber and connector accessories.

For more information on these modules please refer to the individual data sheets or visit our web site at: www.pickeringtest.com

Optical Switch Configuration	VXI Slot Occupancy	Fiber/Wavelength Support	Connector Options	Order Codet
Single 8 to 1 Multiplexer	1	Single Mode/1200 to 1600nm	FC/APC, FC/PC, SC/PC,	20.952
Dual 8 to 1 Multiplexer	2	Multi Mode/700 to 1700nm	MU (mini SC), LC, SC, ST	30-852
Single 4 to 1 Multiplexer	1			
Dual 4 to 1 Multiplexer	1	Single Mode/1200 to 1600nm Multi Mode/700 to 1700nm	FC/APC, FC/PC, SC/PC,	30.950
Quad 4 to 1 Multiplexer	2			50-050
Hex 4 to 1 Multiplexer	2	Single Mode/1200 to 1600nm	MU (mini SC), LC	
Dual 2 to 1 Multiplexer	1		FC/APC, FC/PC, SC/PC, MU (mini SC), LC, SC, ST	
Quad 2 to 1 Multiplexer	1	Single Mode/1200 to 1600nm		20.955
Hex 2 to 1 Multiplexer	2	Multi Mode/700 to 1700nm		30-855
Octal 2 to 1 Multiplexer	2		MU (mini SC), LC, SC, ST	
Dual Insert/Bypass Switch	1	Single Mode/1200 to 1600nm	FC/APC, FC/PC, SC/PC,	
Quad Insert/Bypass Switch	2	Multi Mode/700 to 1700nm	MU (mini SC), LC, SC, ST	30.860
Hex Insert/Bypass Switch	2	Single Mode / 1200 to 1600pm	MIL (mini SC) LC	50-000
Octal Insert/Bypass Switch	2			

† For the full specification and corresponding order codes for each variant, please refer to the data sheet



VXI Switching Systems



INTERCONNECTION SOLUTIONS CATALOG

Pickering Interfaces understands that just providing the switching and instrumentation modules is not enough, users need to be provided with fast and effective ways of connecting their investment to the device under test.

The modules in the Pickering Interfaces System 30 series VXI range are supported by a comprehensive range of connector and cable accessories. The accessories are detailed in the 64 page Interconnection Solutions Catalog available in paper or downloadable format. Although the catalog is cross referenced to Pickering's System 40 PXI and System 50 PXI modules, cables are also indexed by connector type making it easy for the user to find the perfect accessories to compliment their chosen VXI module.

 Connectors & Prototyping Cables For Pickering Modules.

Comprehensive range of mating connectors for all Pickering's modules, including suggestions for suitable wire types.

• Cable assemblies For Pickering Interfaces Modules.

Pickering Interfaces offer a range of standard cables, providing a means of connecting your DUT to any Pickering Interfaces module.

 Connector Blocks & Breakouts For Pickering Modules

Pickering have a good selection of Connector Blocks and Breakouts for most modules.

• Fuse Holders and Terminals.

We offer a range of DIN rail mounted Fuse Holders and Terminals, providing a means of building and protecting your test system.

 Custom Connectors & Cabling can be made to special order, please contact Pickering sales office to discuss your application.





OTHER SWITCH AND INSTRUMENT SYSTEMS FROM PICKERING INTERFACES

Pickering have been manufacturing Modular Switching & Instrumentation systems since 1988. Our sister company Pickering Electronics have manufactured instrumentation quality reed relays since the late 1960's. Pickering Interfaces design & manufacture solutions for all major modular Test platforms including PXI, GPIB, PCI, VXI and now LXI, we also manufacture many customer solutions and have a wide range of connector/cabling designed for the demanding Functional Test Developer.

PXI Switch, Instrument & Systems - SYSTEM 40

Pickering have a full range of competitively priced 3U & 6U PXI (CompactPCI) Switch Modules, including Relay, Digital I/O, Matrix, Multiplexer, RF, Microwave, Optical and Telecom, our 3U PXI matrix modules offer up to 4400 crosspoints per module.

Pickering PXI Instruments include Arbs, Amplifiers, Digitizers, Automotive Serial Protocol Communications, 5½, 6½ & 7½ DMMs, Power Supplies, RF Power Meters, RF Attenuators, Programmable Resistor/Potentiometers, Avionics Bus Analyzers, Breadboards & Digital I/O. We are continually adding to our PXI range (over 500 models), so if the product you require is not listed please ask.





Pickering Interfaces are Strategic members of the LXI Consortium, www.lxistandard.org. LXI is the next generation of test instrumentation combining stateof-the-art measurements in a small package at a costeffective price using enhanced Ethernet connectivity and built in Triggering. Pickering Interfaces offers a range of PXI switching products in an LXI chassis. Dedicated LXI solutions include video and microwave matrices in compact form factors. New LXI products are being continuously introduced by Pickering Interfaces.





PCI Switch Modules – SYSTEM 50

Pickering Interfaces have a range of competitively priced PCI switch Modules, including General Purpose Reed Relay, Matrix, Multiplexer, RF & Programmable Resistor. Pickering Interfaces PCI Modules share the same software environment as our extensive PXI range.

LXI Instruments (LAN eXtensions for Instrumentation), LXI – SYSTEM 60



IEEE-488.2 & RS-232 Controlled Switching Systems - SYSTEM 10/20



Pickering Interfaces' System 10 and System 20 Programmable Relay Switching Systems now offer the most comprehensive range of switching modules currently available. Our switching systems will switch from nanoVolts to 7.5 kiloVolts, DC to 26.5GHz and picoAmps to 30Amps. Models are programmable using a wide range of interfaces: IEEE 488, Ethernet, USB or RS-232.



Custom Switching Solutions

Pickering Interfaces are able to meet your exact custom switching needs. With extensive experience in PXI, PCI, VXI, IEEE-488, and LXI as well as Ethernet architectures, we can develop a switching solution that matches your exact needs. For further information please visit the Custom Design area of the "Sales" section of our web site or call your local Pickering Sales office.

"A Switching Module Is Only As Good As The Relays Used"

Ruthenium Sputtered Reed Relays offer maximum performance, are hermetically sealed and offer a very stable, long life relay contact (>10⁹ operations) with fast operate time. Alternative cheaper types such as electro-mechanical armature relays or non-instrumentation grade reed relays (Rhodium plated) don't offer the consistent contact resistance, long life, fast switching speed and low level switching capability of an instrumentation reed relay. All reed relays used in our switch modules are manufactured by our sister company Pickering Electronics. www.pickeringrelay.com.





VXI Switching Systems



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