

# RF & Microwave Test Solutions from Pickering Interfaces

**Pickering Interfaces** has a wide range of RF & Microwave switch modules that can be used to increase the flexibility of Test & Measurement systems with signal bandwidths up to 65GHz. Available PXI and LXI switch module configurations include high-density multiplexers, matrices and general-purpose switches.

All versions exhibit low insertion loss and VSWR through the use of modern RF switch technology at an affordable cost. Each module has been carefully designed to ensure excellent and repeatable RF characteristics with all signal paths having nominally equal insertion loss wherever possible.

All our modules may be ordered together with mating cables to ensure speedy and successful system integration.



Detailed Pricing & Technical Data On-Line [www.pickeringtest.com](http://www.pickeringtest.com)

[www.hkaco.com](http://www.hkaco.com)





This is our 50 ohm range, our 75 ohm range has similar functionality, but with appropriate connectors.

### RF Switching to 6 GHz

Switch Type	Max Freq	No of Switches	Connectors	Order Code
SPDT Terminated	6GHz	2, 4, 6, 8	SMA	40-880
SPDT	3GHz	3, 6	SMB, MCX	40-870
SPDT	2.5GHz	4	BNC, SMA, SMB	40-710
SPDT	1.2GHz	9,17	SMB	40-754
SPDT	500MHz	9,17	MS-M	40-754
SP4T Terminated	6GHz	1, 2, 3, 4	SMA	40-882
SP4T Terminated	3GHz	1, 2	SMB, MCX	40-873
SP4T Terminated	2GHz	1	SMA, SMB	40-740
SP4T Term Common	3GHz	1, 2, 4	SMB, MCX	40-876
SP4T	3GHz	1, 2, 4	SMB, MCX	40-872
SP4T	2GHz	1, 2, 4	BNC, SMA, SMB	40-745, -746, -749
SP4T	1.8GHz	4, 10	SMB	40-755
SP4T	500MHz	5, 10	MS-M	40-755
SP4T, SP6T	6GHz	1, 2	SMA	40-784 <b>NEW</b>
SP6T Terminated	6GHz	1, 2	SMA	40-881
SP8T	3GHz	1, 2	SMB, MCX	40-874
SP8T	2GHz	1, 2	SMA, SMB	40-745, -748, -778
SP16T	3GHz	1	SMA, SMB, MCX	40-875, -777
SP16T	1GHz	1	SMA, SMB	40-747
2x2 Matrix	2.5GHz	1, 2	SMB, MCX	40-877
4x4 Matrix	6GHz	1	SMA	40-884 <b>NEW</b>
8x2 Matrix	1.5GHz	1	SMB	40-750
8x9 Matrix	500MHz	1	SMB	40-725
12x8 Matrix	300MHz	1	SMB	40-726A
Expandable 16x4, 16x2, 8x4 Matrix	300MHz	1	SMB	40-727,728,729 <b>NEW</b>

### Microwave Switching to 65 GHz

Switch Type	Max Freq	No of Switches	Connectors	Order Code
SPDT	65GHz	1,2,3,4	SMA, N-type	40-780
Transfer	26.5GHz	1,2	SMA	40-782
SP4T, SP6T	40GHz	1, 2	SMA, SMA-2.9	40-784 <b>NEW</b>
SP6T	40GHz	1, 2	SMA, SMA-2.9	40-785, 785A
SP6T Remote Relays	40GHz	1, 2, 3	SMA, SMA-2.9	40-785, 785A
SP6T Terminated	40GHz	1, 2	SMA, SMA-2.9	40-785, 785A
SP6T Term Remote	40GHz	1, 2, 3	SMA, SMA-2.9	40-785, 785A
SP6T	20GHz	1, 2, 3	SMA	40-786



**NEW**

**40-884**  
6GHz 4x4 Matrix  
SMA 50Ohm



**NEW**

**40-727**  
Expandable  
Matrix 300MHz  
SMB 50Ohm



**NEW**

**40-784**  
Microwave MUX  
6GHz,26.5GHz,40GHz  
SMA, 50Ohm



**40-870** Hex  
SPDT RF Switch  
SMB 50 Ohm



**40-875** Single  
16:1 RF MUX SMB  
50 Ohm

## PXI RF Attenuators

- **41-180** DC To 3GHz Programmable Attenuator
  - 0 to 63dB in 1dB steps
  - Single and Dual Versions in One PXI Slot
  - Use of Switched Resistive Attenuator Pads Ensures High Linearity and True DC Coupled Operation
- **41-182** 10MHz To 6GHz Programmable Attenuator
  - 0 to 31.75dB in 0.25dB Steps
  - Triple or Hex Versions in One PXI Slot
  - Solid State Switching For Long Service Life



**41-180**  
DC To 3GHz  
Programmable  
Attenuator



**41-182**  
10MHz To 6GHz  
Programmable  
Attenuator

PXI

## PXI Chassis

8 and 19 slot high performance PXI compliant chassis, available with remote health monitoring.



**40-922**  
8-Slot PXI Modular  
Chassis



**40-923A**  
19-Slot PXI Modular Chassis

**NEW**

PXI

## LXI Modular Chassis

For applications requiring a mix of RF and Microwave switching functions and the convenience of an Ethernet interface in the same 4U chassis, look no further than Pickering Interfaces' LXI modular platforms. These can accept any of our PXI RF/Microwave switches and attenuators.

LXI



**60-102**  
7-Slot LXI Modular Chassis



**60-103**  
18-Slot LXI Modular Chassis



### RF & Microwave Matrices

Module Configuration	Maximum Size	Minimum Size	Impedance	Maximum Frequency	Product Code
Dual Video Matrix	Dual 24x8	Single 24x8	75Ω	25MHz	60-711
Dual HF Matrix	Dual 24x8	Single 24x8	50Ω	50MHz	60-760
Wideband Matrix	Single 104x16	Single 8x8	50Ω	500MHz	65-110 <b>NEW</b>
1GHz RF Matrix	Single 32x16	Single 16x16	75Ω	1.5GHz	60-730
	Single 32x8	Single 8x8			60-731
	Single 32x4	Single 8x4			60-732
2.4GHz RF Matrix	Single 32x16	Single 16x16	50Ω	2.4GHz	60-770
	Single 32x8	Single 8x8			60-771
	Single 32x4	Single 8x4			60-772
Microwave Matrix	Dual 4x4	Single 3x3	50Ω	10GHz	60-750
	Single 4x4	Single 3x3		20GHz	60-751



**60-730/731/732**  
1GHz 75Ω Matrix



**60-770/771/772**  
2.4GHz 50Ω Matrix



**NEW**

**65-110**  
Wideband Modular Matrix



**60-750/751**  
10/20GHz 50Ω Matrix



### RF & Microwave Multiplexers

Module Configuration	Maximum Size	Minimum Size	Impedance	Maximum Frequency	Connector	Product Code
Video Multiplexer	72 Channel	24 Channel	75Ω	1GHz	F-Type	60-721
High Isolation Multiplexer	Dual 12 Channel	Single 12 Channel	75Ω	1GHz	F-Type	60-722
Microwave Multiplexer	16 x 6 Channel	4 x 6 Channel	50Ω	40GHz	SMA	60-800
	16 x 6 Channel	4 x 6 Channel	75Ω	2.5GHz	DIN 1.6/5.6	60-820



**60-800/820**  
50Ω/75Ω Microwave Multiplexer



**60-721**  
High Performance  
Video Multiplexer



**60-722**  
High Isolation 1GHz  
75Ω Multiplexer

# Software

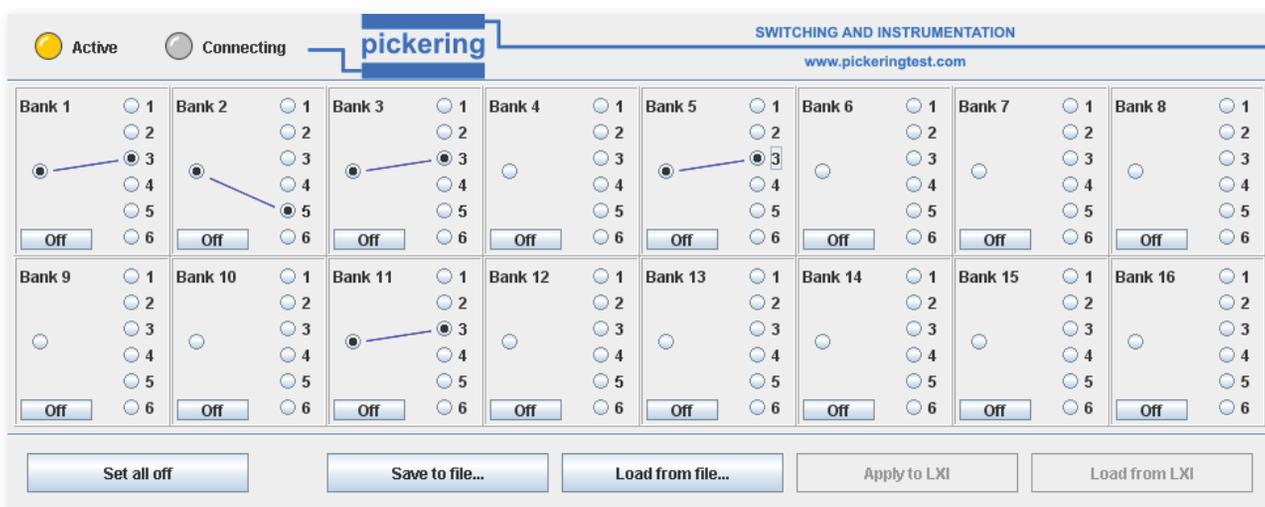
## Development flexibility

With a huge range of switching solutions based on “plug and play” and Ethernet based modules, our PXI and LXI products are an ultimate deployment platform for the automated test systems. Pickering provides the open software development interfaces allowing freedom to create different test scenarios using a wide range of development environments as follows:

- Microsoft® Visual Studio (C/C++, C# and Visual Basic)
- LabVIEW™, LabWindows/CVI, SwitchExecutive and Test Stand from NI
- Agilent VEE
- Geotest ATEasy

## Using our optimized System-level Utilities

To enhance development and debugging of automated tests, Pickering provides Soft Front Panels (SFPs) and diagnostic tools with all of our products. Our SFPs help users control the module in a more simple and intuitive way. SFPs for LXI can also be accessed through the web browser to provide manual configuration, to verify connectivity and to explore module functionality.



## Simplifying Software Solutions

Pickering provides different driver sets based on comprehensive IVI, VISA and DLL (Direct I/O) drivers which are compatible with Windows XP/Vista/7 and Linux based operating systems. Each driver supports our entire PXI switch card range hence simplifying software solutions. Most drivers are also compatible with Real-Time operating systems such as LabVIEW RT.

All drivers are provided with extensive documentation and examples to help you develop test routines with ease, and you can use the software of your choice.

*Switch On to Pickering*

# Accessories

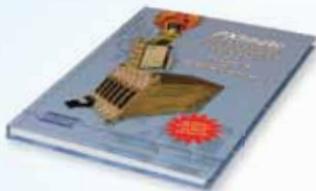
Pickering Interfaces understands that just providing switching and instrumentation modules is not enough - users need to be provided with fast and effective ways of connecting their investment to the device under test. The modules in the Pickering Interfaces PXI and LXI families are fully supported by a comprehensive range of connector and cable accessories. The accessories are detailed in the **176 page Connection Solutions Catalog** available in paper or downloadable format at [www.pickeringtest.com/pdf/Interconnection](http://www.pickeringtest.com/pdf/Interconnection). The catalog is cross-referenced to all our module front-panel connectors making it easy for users to find the perfect accessories to complement their chosen products.



## Further Information

Pickering Interfaces has a variety of comprehensive information to assist you in the selection and design of your PXI based tester. To obtain your copy please visit the Catalog section of our web site or call your local Pickering Interfaces sales office.

**PXIimate** is a 160 page publication which looks in detail at the PXI standard and offers guidelines to help efficiently build a PXI-based test system. The latest edition features a chapter on PXI Express as well as information on the new LXI standard. Download your free electronic copy at: [www.pickeringtest.com/pdf/pximate](http://www.pickeringtest.com/pdf/pximate)



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**LXI Product Guide**  
Comprehensive Short Form Catalog Listing Pickering's LXI Module range

**PXI Product Guide**  
Comprehensive Short Form Catalog Listing Pickering's large range of PXI Modules

**"PXI Module Map"**  
A simple foldout selection guide to all of Pickering's 500+ PXI Modules.



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**HongKe**

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