

# Keysight Technologies

## M9155/6/7C and M9155/6/7CH40

### DC to 26.5/40 GHz PXI Hybrid Switch Modules

#### Industries and Applications

- Automatic Test Equipment (ATE)
- RF communications
- Engineering verification
- RF parametric measurements
- Mid and high density switching systems

#### Product Description

M9155/6/7C is a series of PXI hybrid switch modules based on the PXI Hybrid platform. Operating from DC to 26.5/40 GHz, these modules come with 0.03 dB insertion loss repeatability throughout the operating life.



#### Models

M9155C	Dual SPDT Switch, DC to 26.5 GHz, Underterminated
M9156C	Dual Transfer Switch, DC to 26.5 GHz
M9157C	Single SP6T Switch, DC to 26.5 GHz, Terminated
M9155CH40	Dual SPDT Switch, DC to 40 GHz, Underterminated
M9156CH40	Dual Transfer Switch, DC to 40 GHz
M9157CH40	Single SP6T Switch, DC to 40 GHz, Terminated

#### Main features and benefits

Product features	Your benefit
A readily scaled integrated switching solution to satisfy your unique application platform needs	Peace of mind in switch technology from Keysight Technologies, Inc. who has a proven track record for providing versatile, quality RF and microwave switches
0.03 dB insertion loss repeatability throughout the operating life of up to 10 million cycles	Reduce downtime for recalibration, improve testing efficiency and hence maximize throughput
Unmatched isolation of 60 dB at 26.5 GHz	Maximize measurement accuracy and system flexibility
Soft front panel is available for each switch module	The embedded graphical user interface ease the trouble-shooting of your PXI systems

**Connector compatibility: PXI-H, PXI-1, cPCI**

#### Specifications

Hardware		
Size	M9155C/CH40 M9156C/CH40 M9157C/CH40	1 slot wide 2 slots wide 3 slots wide
Frequency	DC to 26.5/40 GHz	
Insertion loss*	0.42 dB at 8 GHz 0.57 dB at 18 GHz 0.70 dB at 26.5 GHz 1.1 dB at 40 GHz	
Insertion loss repeatability	< 0.03 dB	
Operating life	5 million cycles for M9155C and M9155/6/7CH40 2 million cycles for M9155/6/7C	
Typical operating life	10 million cycles for M9155C and M9155/6/7CH40 5 million cycles for M9155/6/7C	
Isolation* (M9157CH40)	100 dB at 12 GHz 70 dB at 20 GHz 65 dB at 40 GHz	
VSWR*	1.35 at 8 GHz 1.45 at 18 GHz 1.70 at 26.5 GHz 1.95 at 40 GHz	
Impedance	50 $\Omega$	
RF connector	3.5 mm (f) for M9155C SMA (f) for M9156/7C 2.92 mm (f) for M9155/6/7CH40	

\* Refer to data sheet 5990-6269EN for detailed technical specifications.



Unlocking Measurement Insights

**Software**

Software development platform	Visual Studio, C, C++, C#, Visual Basic, LabVIEW, LabWindows/CVI, MATLAB, VEE
Supported operating systems	Microsoft Windows XP SP3, (32-bit), Windows Vista, (32-bit and 64-bit) Windows 7 (32-bit and 64-bit)
Included device drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Included GUI	Soft front panel
Application code examples	C, C++, C#, Visual Basic, VEE, MATLAB

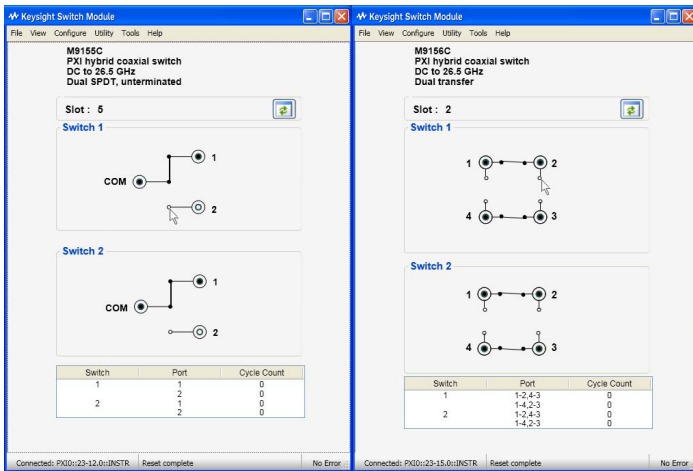
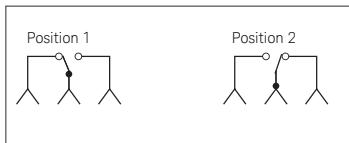
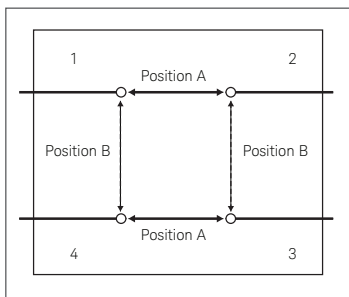


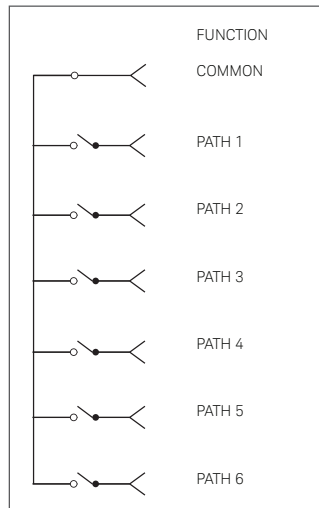
Figure 1. Soft front panel for M9155/6/7C



M9155C is an integration of 2 units of Keysight 8765C with Option 024 (24 V, 3-inch ribbon)



M9156C is an integration of 2 units of Keysight L7222C with Option 161 (24 V, 10-pin DIP)



M9157C is an integration of 1 unit of Keysight L7106C with Option 161 (24 V, 16-pin DIP)

**Ordering Information**

Model	Description
<input checked="" type="checkbox"/> M9018A	PXIe Chassis, 18- slots, 3U, 8 GB/s
<input checked="" type="checkbox"/> M9155C	PXIh Coaxial Switch, DC-26.5 GHz, Dual SPDT, Underterminated
<input checked="" type="checkbox"/> M9156C	PXIh Coaxial Switch, DC to 26.5 GHz, Dual Transfer
<input checked="" type="checkbox"/> M9157C	PXIh Coaxial Switch, DC to 26.5 GHz, Single SP6T, Terminated
<input checked="" type="checkbox"/> M9155CH40	PXIh Coaxial Switch, DC to 40 GHz, Dual SPDT, Underterminated
<input checked="" type="checkbox"/> M9156CH40	PXIh Coaxial Switch, DC to 40 GHz, Dual Transfer
<input checked="" type="checkbox"/> M9157CH40	PXIh Coaxial Switch, DC to 40 GHz, Single SP6T Switch, Terminated
<input checked="" type="checkbox"/>	Recommended configuration

**Related products**

M9392A	PXI Vector Signal Analyzer
M9302A	PXI Local Oscillator
M9351A	PXI Downconverter (50 MHz to 2.9 GHz)
M9360A	PXI Attenuator/Preselector
M9361A	PXI Downconverter (2.75 GHz to 26.5 GHz)

**Advantage services: Calibration and warranty**

Keysight Advantage Services is committed to your success throughout your equipment's lifetime.

R-51B-001-C	1 year Return-to-Keysight warranty
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 Published in USA, May 19, 2015  
 5990-6170EN  
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