

Keysight 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 guaranteed 0.03 dB insertion loss repeatability throughout the operating life.



Models

| | |
|-----------|--|
| M9155C | Dual SPDT Switch, DC to 26.5 GHz, Unterminated |
| 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, Unterminated |
| 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 |
| Guaranteed 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 | 1 slot wide |
| | M9156C/CH40 | 2 slots wide |
| | M9157C/CH40 | 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 | |
| Guaranteed 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 Ω | |
| RF connector | 3.5 mm (f) for M9155C SMA (f) for M9156/7C 2.92 mm (f) for M9155/6/7CH40 | |

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

| 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 |

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 |

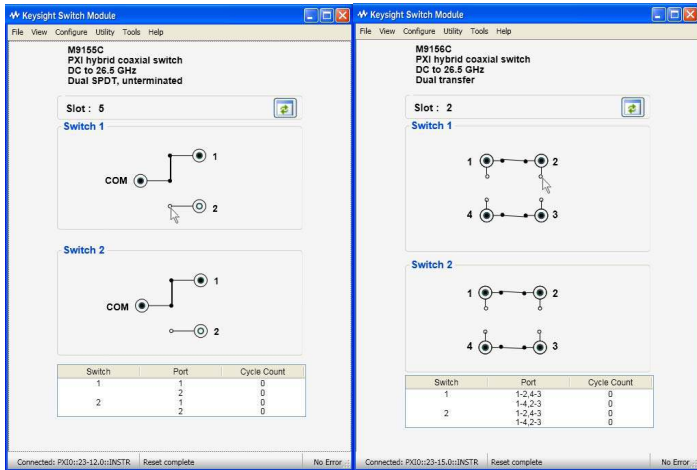


Figure 1. Soft Front Panel for M9155/6/7C.

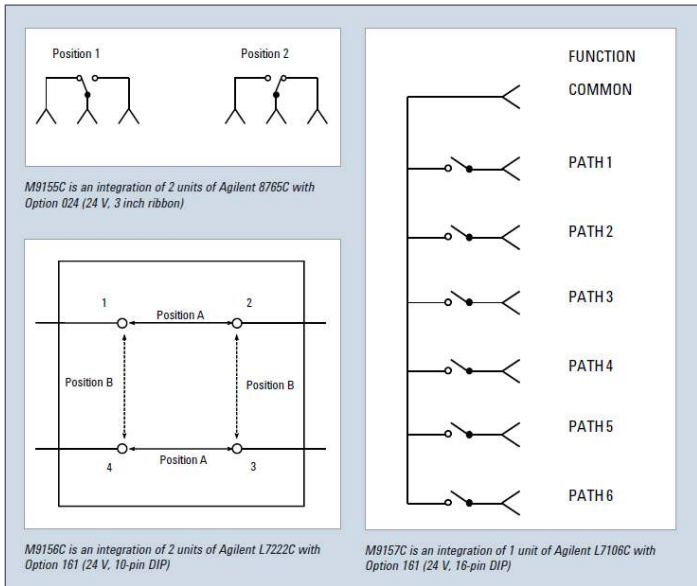
Related products

| | |
|--------|--|
| 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) |

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

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