

M9392A PXI Vector Signal Analyzer

Industries and applications

- Aerospace and defense
- · Wireless communications
- Digital pre-distortion (DPD)

Product description

The Agilent M9392A¹ is a PXI Vector Signal Analyzer with frequency coverage from 50 MHz to 26.5 GHz with 250 MHz of instantaneous bandwidth and up to 100 MHz streamed analog bandwidth. Achieve multichannel analysis capability by combining 2 PXI vector signal analyzers-Agilent M9392A--in one chassis. Combine with the Agilent 89600 VSA software, for a complete solution enabling analysis of communications, radar, and avionics signals in a modular, open-system standard.

Main features and benefits

Product features	Your benefit
Frequency range	50 MHz to 26.5 GHz
12-bit, 2 GS/s digitizer	Measure broadband communications and radar signals
Multichannel analysis	Detect and identify sources of interference Measure 80+80 MHz 802.11ac devices
Real-time digital down- conversion (DDC) algorithm	Data decimation, analog performance improvement
Multiple programmatic interfaces	Easy integration into existing test environments and reduced development time
PXI form-factor	Conforms to Modular Open Systems Approach (MOSA)
Seamless integration with Agilent 89600 VSA software	Immediate access to the industry's broadest, most advanced standards-based demodulation and signal analysis

1. The M9392A PXI Vector Signal Analyzer system consists of the M9202A PXIe IF Digitizer, M9302A PXI Local Oscillator, M9360A PXI Attenuator/Preselector, and the M9361A and M9351A PXI Downconverter Modules.



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Specifications and characteristics

Hardware	
Size	7 or 8 slots-wide multiple modules
Sample rate	2 GS/s
3 dB bandwidth	35 MHz min (preselected, < 3 GHz)
	40 MHz min (preselected, \geq 3 GHz)
	40 MHz min (< 2.75 GHz, bypass)
	250 MHz min (\geq 2.75 GHz, bypass)
Maximum streamed analog bandwidth (config dependant)	up to 50 MHz (with V05 option) up to 100 MHz (with V10 option)
EVM	< -40 dB at 80 MHz BW, 5.8 GHz (nominal)
EVM DANL	< -40 dB at 80 MHz BW, 5.8 GHz (<i>nominal</i>) -158 dBm/Hz, ≤ 9.5 GHz, (<i>nominal</i>)
EVM DANL	< -40 dB at 80 MHz BW, 5.8 GHz (nominal) -158 dBm/Hz, ≤ 9.5 GHz, (nominal) -147 dBm/Hz, > 9.5 GHz, (nominal)
EVM DANL Absolute amplitude accuracy	< -40 dB at 80 MHz BW, 5.8 GHz (nominal) -158 dBm/Hz, \leq 9.5 GHz, (nominal) -147 dBm/Hz, $>$ 9.5 GHz, (nominal) \pm 0.6 dB, $<$ 2.75 GHz, (nominal), after field calibration (corrected)
EVM DANL Absolute amplitude accuracy	< -40 dB at 80 MHz BW, 5.8 GHz (nominal) -158 dBm/Hz, \leq 9.5 GHz, (nominal) -147 dBm/Hz, $>$ 9.5 GHz, (nominal) \pm 0.6 dB, $<$ 2.75 GHz, (nominal), after field calibration (corrected) \pm 0.5 dB, \geq 2.75 GHz, (nominal), after field calibration (corrected)
EVM DANL Absolute amplitude accuracy	< -40 dB at 80 MHz BW, 5.8 GHz (nominal) -158 dBm/Hz, \leq 9.5 GHz, (nominal) -147 dBm/Hz, \geq 9.5 GHz, (nominal) \pm 0.6 dB, $<$ 2.75 GHz, (nominal), after field calibration (corrected) \pm 0.5 dB, \geq 2.75 GHz, (nominal), after field calibration (corrected) \pm 2 dB, (nominal), without field calibration (uncorrected)



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Software

The M9392A PXI Vector Signal Analyzer is supplied with a comprehensive portfolio of module drivers, documentation, examples, and software tools to help you quickly develop test systems with your software platform of choice.

A soft front panel interface is provided to monitor and control the PXI Vector Signal Analyzer with the following functions:

- · Setting input frequency, power, bandwidth and time span
- · Setting trigger functions
- Displaying markers
- · Formatting frequency and time displays
- Monitoring hardware status
- · Streaming data to file

Supported operating systems	Microsoft Windows XP (32-bit), Microsoft Windows Vista (32/64-bit), Microsoft Windows 7 (32/64-bit)
Standard compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Supported application development environments (ADE)	Visual Studio (VB.NET, C#, C/C++), VEE, LabVIEW, LabWindows/CVI, MATLAB
Agilent IO Libraries	Includes: VISA Libraries, Agilent Connection Expert, IO Monitor



Figure 1. Agilent M9392A PXI Vector Signal Analyzer, software interface.

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Ordering information

Typical production configuration		
Model	Description	
M9392A	PXI Vector Signal Analyzer: 50 MHz to 26.5 GHz	
M9018A	PXIe 18 slot chassis	
M9036A	PXIe embedded controller	
89601B	89600 VSA Software, transportable license	
89601B-200	Basic Vector Signal Analysis	
89601B-300	Hardware Connectivity	
89601B-AYA	Vector Modulation Analysis	
Optional model		
M9351A	PXI Downconverter: 50 MHz to 2.9 GHz	
Related products		
M9302A	PXI Local Oscillator: 3 GHz to 10 GHz	
M9202A	PXIe IF Digitizer: 12-bit, 2 GS/s	
M9360A	PXI Attenuator/Preselector: 100 kHz to 26.5 GHz	
M9361A	PXI Downconverter: 2.75 GHz to 26.5 GHz	
Accessories		
Software, example programs, and product information on CD (included)		
Cables (included)		



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PXI w

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