Keysight Technologies
M9393A PXIe Performance Vector Signal Analyzer
Product Fact Sheet

Industries and applications

– Aerospace and defense manufacturing and depot test
– Wireless device design validation and manufacturing

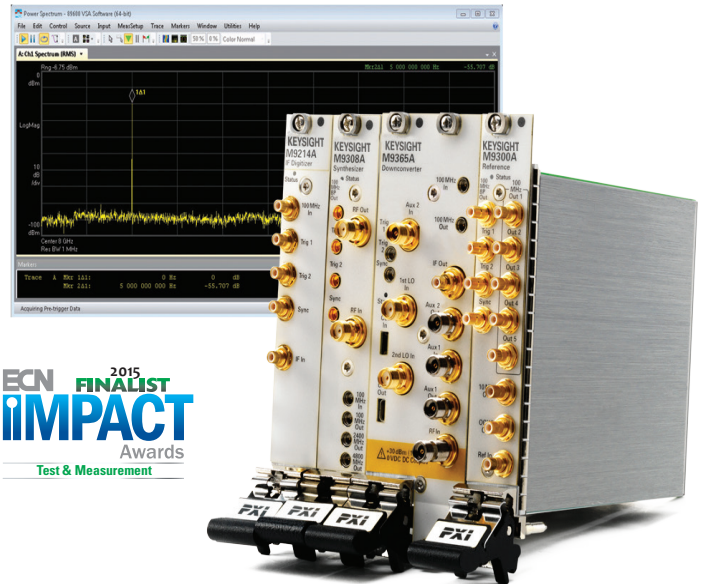## Acquire the performance edge in PXI

Whether your system supports a leading-edge design or a legacy platform, change is certain. Modular solutions are highly adaptable, and Keysight Technologies, Inc. is taking flexibility farther with the M9393A PXIe performance vector signal analyzer. The M9393A is the realization of our microwave measurement expertise in modular form. It integrates core signal-analysis capabilities with hardware speed and accuracy, enabling you to tailor your solution to fit specific needs – today and tomorrow. Deploy the M9393A and acquire the performance edge in PXI.

Validate the true performance of your device

The M9393A meets stringent system requirements with microwave performance previously unseen in modular. Quickly test to tighter tolerances with best-in-class switching speed and amplitude accuracy.

Hardware performance and characteristics	
Frequency range	Standard: 9 kHz to 8.4, 14, 18 or 27 GHz Extended: 3.6 GHz to 50 GHz
Analysis bandwidth	40, 100 or 160 MHz
Absolute amplitude accuracy	± 0.13 dB
Frequency switching	< 135 µs
Displayed average noise level (DANL)	-168 dBm / Hz
Third-order intermodulation (TOI)	+31 dBm
Size	5 slots
Chassis slot compatibility	PXIe Hybrid, PXIe

Get consistent, accurate results faster with optimized software elements

The M9393A leverages Keysight's trusted measurement science providing proven, familiar software applications to minimize development time and reduce risk.

X-Series measurement applications: Verify signal compliance with standards-based measurements for LTE, WLAN and more, while simplifying software migration through deep programmatic compatibility with Keysight benchtop signal analyzers.

89600 VSA software: Characterize signals across the entire frequency range with new high-speed stepped spectrum capability in addition to existing software support for > 75 signal formats and multi-channel analysis.

Ensure success at microwave frequencies today and tomorrow

Easily adapt to changing test needs with license key upgradable options and hardware designed for extensibility. Rely on unmatched supportability based on Keysight's N7800A calibration and adjustment software for TME self-maintainers.

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Unlocking Measurement Insights

Hardware configuration and ordering

Model	Description

M9393A	PXIe performance vector signal analyzer
	Comprised of:
	  – M9308A PXIe synthesizer
	  – M9365A PXIe downconverter
	  – M9214A PXIe IF digitizer
	Includes, one day startup assistance, module interconnect cables, software example programs and product information on CD.

M9393A-300
Required for warranted specifications
	Adds:
	  – M9300A PXIe frequency reference:
	    10 MHz and 100 MHz
	A single M9300A can support multiple M9393A instruments

Option	Description
Frequency	
✓ M9393A-F08	Frequency range, 9 kHz to 8.4 GHz
M9393A-F14	Frequency range, 9 kHz to 14 GHz
M9393A-F18	Frequency range, 9 kHz to 18 GHz
M9393A-F27	Frequency range, 9 kHz to 27 GHz
M9393A-FRX	Frequency range extension, 3.6 to 50 GHz (requires Option F27)
Analysis bandwidth	
✓ M9393A-B04	Analysis bandwidth, 40 MHz
M9393A-B10	Analysis bandwidth, 100 MHz
+ M9393A-B16	Analysis bandwidth, 160 MHz
Memory	
✓ M9393A-M01	Memory, 128 MSa
M9393A-M05	Memory, 512 MSa
M9393A-M10	Memory, 1024 MSa
Preamplifier	
M9393A-P08	Preamplifier, 8.4 GHz
M9393A-P14	Preamplifier, 14 GHz
M9393A-P18	Preamplifier, 18 GHz
M9393A-P27	Preamplifier, 27 GHz
Additional capability	
+ M9393A-UNZ	Fast tuning
M9393A-WB1	Wideband IF output
✓ Included as standard option	
+ Recommended for fastest spectrum measurements	

Software information

Operating systems	Microsoft Windows 7 (32/64-bit)
Standard compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Application development environments (ADE)	Visual Studio (C/C++, C#, VB.NET), LabVIEW, LabWindows/CVI, MATLAB, VEE
Keysight IO Libraries	Includes: VISA Libraries, Keysight Connection Expert, IO Monitor
Keysight Command Expert	Instrument control for SCPI or IVI-COM drivers
89600 VSA software	89601B options: 200: Basic VSA software SSA: Spectrum analysis AYA: Vector modulation analysis B7Z: WLAN 802.11n BHJ: WLAN 802.11ac BHD: LTE FDD BHG: LTE-Advanced FDD ... and more
X-Series measurement applications for modular instruments	M9063A Analog demodulation M9064A Digital demodulation M9068A Phase noise M9071A GSM/EDGE/Evo M9072A cdma2000®/cdmaOne M9073A W-CDMA/HSPA+ M9076A 1xEV-DO M9077A WLAN 802.11a/b/g/n/ac M9079A TD-SCDMA/HSDPA M9080B LTE FDD M9082B LTE TDD M9081A *Bluetooth*®

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