

Keysight M9393A

PXIe Performance Vector Signal Analyzer

Data Sheet

Industries and applications

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

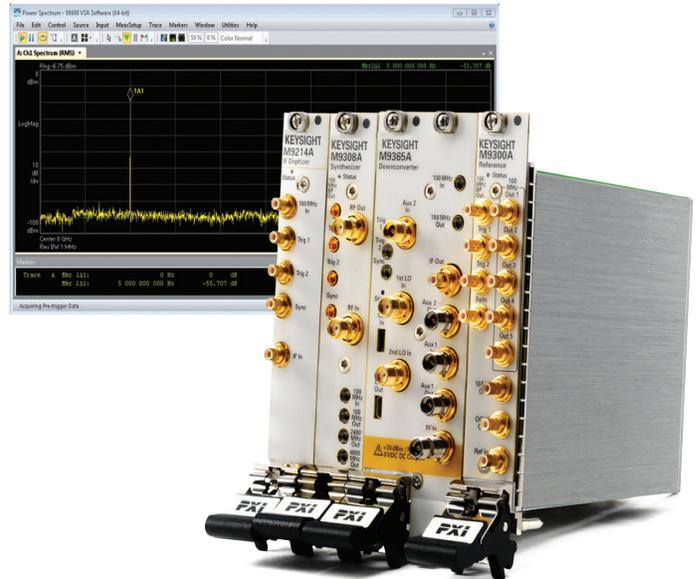
Acquire the performance edge in PXI

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	9 kHz to 8.4, 14, 18 or 27 GHz
Analysis bandwidth	40, 100 or 160 MHz
Absolute amplitude accuracy	± 0.15 dB
Frequency switching	< 150 µs
Displayed average noise level (DANL)	-160 dBm
Third-order intermodulation (TOI)	+30 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 and Keysight's standard 3-year warranty.

Hardware configuration and ordering

Model	Description
M9393A	PXle performance vector signal analyzer Comprised of: <ul style="list-style-type: none"> – M9308A PXle synthesizer – M9365A PXle downconverter – M9214A PXle IF digitizer Includes, one day startup assistance, module interconnect cables, software example programs and product information on CD, return to Keysight Warranty – 3 years
M9393A-300	Adds: <ul style="list-style-type: none"> – M9300A PXle frequency reference: 10 MHz and 100 MHz A single M9300A can support multiple M9393A instruments
Required for warranted specifications	
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
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
Tuning speed	
+ M9393A-UNZ	Fast tuning
✓	Included as standard option
+	Recommended for fastest spectrum measurements

Software information

Operating systems	Microsoft Windows XP (32-bit) 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 (version 16.3 or newer)	Includes: VISA Libraries, Keysight Connection Expert, IO Monitor
Keysight Command Expert	Instrument control for SCPI or IVI-COM drivers
89600 VSA software (version 17.2 or newer)	89601B options: 200: Basic VSA software 300: Hardware connectivity SSA: Spectrum analysis (July 2014 release) 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 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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