Keysight

M9290A CXA-m PXIe Signal Analyzer

Product Fact Sheet

Industries and Applications

– Military maintenance applications
– RF and microwave signal analysis up to 26.5 GHz
– Testing of components, devices, boards and systems
– Characterization of military and public-safety radios
– Testing of radios used in avionics, satellites, radar and electronic-warfare systems

Product Description

In test system development, one of your crucial requirements is doing more in less space—but this often means tradeoffs between footprint and precision in signal analysis. That is, until now: we've expanded the X-Series with the CXA-m, a PXIe signal analyzer that offers fully specified performance up to 26.5 GHz. A rich set of measurement capabilities, including swept and FFT modes in the same instrument, accelerates tasks such as the identification of spurious signals and harmonics.

The CXA-m also reduces time and effort in system development. For example, it ensures seamless transitions between R&D, manufacturing and maintenance by providing compatibility with code written for Keysight's X-Series signal analyzers and ESA spectrum analyzers. Ready-to-use drivers and SCPI commands simplify evaluation and programming.

Main Features and Benefits

Product features	Your benefit
Choice of four models that range from 10 Hz to 3, 7.5, 13.6 or 26.5 GHz	Deploy a smaller microwave footprint with a four-slot solution that provides best-in-class performance in key areas
Operate in swept or FFT mode	Optimize the balance between speed, sensitivity and accuracy
Proven X-Series measurement science	See consistent results across your product lifecycle
Ready-to-use drivers and SCPI commands	Easily access a rich set of measurement capabilities and create effective automated tests
X-Series attributes including familiar interface and code compatibility	Shorten the learning curve and simplify the transition from box instruments to PXI

Specifications and Characteristics

Hardware	
Frequency range	10 Hz to 3, 7.5, 13.6 or 26.5 GHz
Displayed average noise level (DANL)	−163 dBm at 1 GHz
Phase noise	−110 dBc/Hz at 1 GHz, 10 kHz offset
Third-order intercept (TOI)	+17 dBm
Analysis bandwidth	10 or 25 MHz
Size	Four-slot module

Chassis slot compatibility: PXIe Hybrid, PXIe

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Software Information

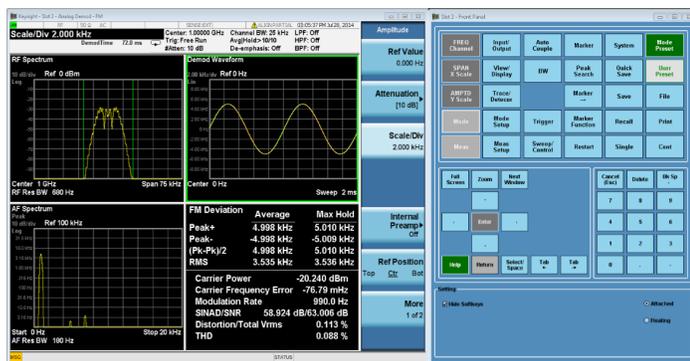|	
Operating system	Microsoft Windows 7 (64-bit)
Standard-compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Application development environments (ADEs)	Visual Studio (C/C++, C#, VB.NET), LabVIEW, LabWindows CVI, MATLAB, VEE
Keysight IO Libraries (version 16.3 or newer)	Includes: VISA Libraries, Keysight Connection Expert, IO Monitor
Keysight command expert	Instrument control for SCPI or IVI-COM drivers
X-Series measurement application	W9063A analog demodulation
	W9068A phase noise
	W9069A noise figure
	W9062A SCPI language compatibility
	N6171A MATLAB software
	N9071A GSM/EDGE/Evo
	N9080B LTE/LTE-Advanced FDD
	N9082B LTE/LTE-Advanced TDD
	N9073A W-CDMA/HSPA+
	N9081A Bluetooth®

Figure 1. The CXA-m utilizes the familiar X-Series interface through a soft front panel

Ordering Information

Model	Description
M9290A	CXA-m PXIe signal analyzer: 10 Hz to 3, 7.5, 13.6 or 26.5 GHz
	Includes software example programs and product information on CD
Typical configuration	
M9290A-F03	Frequency range: 10 Hz to 3.0 GHz
M9290A-P03	Preamplifier, 3 GHz
M9290A-PAA	Precision amplitude accuracy
M9290A-PFR	Precision frequency reference
Configurable options	
Frequency	
M9290A-F03	Frequency range, 10 Hz to 3.0 GHz
M9290A-F07	Frequency range, 10 Hz to 7.5 GHz
M9290A-F13	Frequency range, 10 Hz to 13.6 GHz
M9290A-F26	Frequency range, 10 Hz to 26.5 GHz
Preamplifier	
M9290A-P03	Preamplifier, 3.0 GHz
M9290A-P07	Preamplifier, 7.5 GHz
M9290A-P13	Preamplifier, 13.6 GHz
M9290A-P26	Preamplifier, 26.5 GHz
Precision	
M9290A-PAA	Precision amplitude accuracy
M9290A-PFR	Precision frequency reference
Attenuator	
M9290A-FSA	Fine-resolution step attenuator, 7.5 GHz
Bandwidth	
M9290A-B25	Analysis bandwidth, 25 MHz
EMC	
M9290A-EMC	Basic EMC functionality
Display	
M9290A-EDP	Enhanced display package

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