

# Keysight M8920A PXIe Radio Test Set

## 100 kHz to 3.8/6 GHz

Field radios are a vital lifeline for warfighters, firefighters and peacekeepers. That's why the new Keysight M8920A is designed to deliver the excellence you expect from your radio. All along your lifecycle, we open up capabilities that ranges from deep analysis in design to fast testing in production.



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## Accelerate MilCom and public safety radio manufacturing

Digital 2-way radios being developed for MilCom and the public safety radio market bring new testing challenges and hurdles to overcome for manufacturers and depot testing. Radio technologies are requiring wider bandwidths, higher frequencies, and multiple radio format capabilities.

### Product description

Keysight's M8920A PXIe Radio Test Set supports many formats by combining PXI hardware with application-specific software in a single flexible and scalable chassis, providing broad multi-format coverage for next-generation radio testing.

With Keysight's new Radio Test Measurement Application (N9093), you can access and control multiple instruments on one screen while viewing a variety of critical measurements at the same time. Keysight can help deliver the operational excellence you expect from your radio.

### Applications

- Cover all necessary analog AM and FM modulation test requirements.
- Test APCO P1/P2, TETRA1, DMR, dPMR, ARIB, and custom modulation formats.
- Test commercial connectivity formats including WLAN, LTE, Bluetooth®, etc.
- All measurements can be performed with one click of a button.
- Test analog Avionics Radios, and your Avionics Databus with optional Databus modules



**M8920A PXIe Radio Test Set**

## Technical Specifications

### Definitions and conditions

Specifications describe the warranted performance of calibrated instruments. Data represented in this document are specifications under the following conditions unless otherwise noted.

- Specifications are valid from 40° to 65 °C for individual module temperature, as reported by the module, and 20° to 35 °C for environment temperature unless otherwise noted
- Calibrated instrument has been stored for a minimum of 2 hours within the allowed operating range
- If instrument has previously been stored at a temperature range inside the allowed storage range, but outside the allowed operating range, instrument must have been stored for a minimum of 2 hours within the allowed operating range before turn-on
- 30-minute warm-up time
- Calibration cycle maintained
- The RF, IF, and Source Alignments have been run within the previous 7 days
- An ALL Alignment has been run within the previous 8 hours
- If the temperature has changed more than 5 °C from the previous ALL Alignment

Typical describes additional product performance information that is not covered by the product warranty. It is performance beyond specifications that 80% of the units exhibit with a 95% confidence level. This data, shown in italics, does not include measurement uncertainty, and is valid only at room temperature (approximately 25 °C) after alignment within the stated alignment time and temperature limits.

Nominal values indicate expected performance or describe product performance that is useful in the application of the product but are not covered by the product warranty.

### Recommended best practices in use

- Use slot blockers and EMC filler panels in empty module slots to ensure proper operating temperatures. Keysight chassis and slot blockers optimize module temperature performance and reliability of test.
- Set chassis fan to high at environmental temperatures above 45 °C.

## RF Analyzer Technical Specifications and Characteristics

<b>Frequency range</b>		
Option 504	100 kHz to 3.8 GHz	
Option 506	100 kHz to 6 GHz	
<b>Analysis bandwidth <sup>1</sup></b>		
Maximum bandwidth	Option B40 (Standard)	40 MHz
	Option B85	100 MHz
	Option B1X	160 MHz
<b>Frequency accuracy</b>		
Same as accuracy of internal time base or external reference input		
<b>Internal timebase</b>		
Accuracy <sup>2</sup>	$\pm$ [(time since last adjustment x aging rate) $\pm$ temperature effects $\pm$ calibration accuracy]	
<b>Frequency stability internal TB</b>		
Yearly Aging rate	$< \pm 0.1$ ppm/year ( $\pm 1 \times 10^{-7}$ )	
Achievable initial calibration accuracy	$\pm 4 \times 10^{-8}$	
Residual FM	$\leq 0.25$ Hz p-p in 20 ms nominal	
<b>Temperature effects</b>		
20 to 30 °C	$< \pm 1.5 \times 10^{-8}$	
<b>Triggering</b>		
Trigger	Free run, external 1, external 2, RF burst, video, line, periodic	
Trigger delay range	-15 to 500 ms	
<b>Amplitude range and accuracy specifications</b>		
<b>Amplitude accuracy (RF T/R port and antenna port)</b>		
Antenna input port	100 kHz to 1 MHz	$\pm 0.6$ dB typical
Range: -70 dBm to +23 dBm	1 MHz to 3.9 GHz	$\pm 1$ dB, $\pm 0.55$ dB typical
	3.9 GHz to 6 GHz	$\pm 1.5$ dB, $\pm 0.95$ dB typical
T/R port high power attenuation ON	100 kHz to 1 MHz	$\pm 0.8$ dB Typical
Range: -30 dBm to +47 dBm	1 MHz to 3.9 GHz	$\pm 1$ dB, $\pm 0.85$ dB Typical
	3.9 GHz to 6 GHz	$\pm 1.4$ dB, $\pm 0.95$ dB Typical
T/R port high power attenuation OFF	100 kHz to 1 MHz	$\pm 0.8$ dB Typical
Range: -50 dBm to +30 dBm	1 MHz to 3.9 GHz	$\pm 1$ dB, $\pm 0.85$ dB Typical
	3.9 GHz to 6 GHz	$\pm 1.45$ dB, $\pm 0.95$ dB Typical
<b>Maximum RMS safe power input</b>		
T/R port high power attenuation ON	+47 dBm (50 W)	
T/R port high power attenuation OFF	+33 dBm (2 W)	
RF antenna port	+30 dBm (1 W)	
<b>Maximum RMS RF specified performance level</b>		
T/R port high power attenuation ON	+47 dBm (50 W) ( $< 30$ °C ambient), 30 W or 5 minutes on and 5 minutes off ( $> 30$ and $< 45$ °C ambient)	
RF antenna port	+23 dBm	
<b>TX post-demod audio filters</b>		
Low Pass Filter	300 Hz, 3 kHz, 15 kHz, 30 kHz, 80 kHz, 100 kHz, or 300 kHz	
High Pass Filters	20 Hz, 50 Hz, 300 Hz, or 400 Hz	
Band Pass Filters (weighted)	CCITT (ITU-T Rec. 041, ITU-T Rec. P.53), A-weighted (ANSI-IEC "A" weighted, per IEC Rec 179), C-weighted (IEEE Std 743-1995), C-message (C-Message per IEEE743), CCIR-1k weighted (CCIR Rec 468), CCIR-2k weighted (Dolby 2 K), CCIR unweighted (CCIR Rec 468)	
Manual Select Filter	For either LPF or HPF User Defined <sup>3</sup>	

1. Instantaneous bandwidth (1 dB bandwidth) available around a center frequency over which the input signal can be digitized for further analysis or processing in the time, frequency or modulation domain.
2. Calibration accuracy depends on how accurately the frequency standard was adjusted to 10MHz. If the adjustment procedure is followed, the calibration accuracy is given by the specification. Achievable Initial Calibration Accuracy.
3. The 3-dB cutoff frequency can be selected for the User-defined audio filters.

## RF Analyzer Technical Specifications and Characteristics (Continued)

<b>Phase noise RF T/R<sup>1</sup> port and antenna port</b>	
<b>Phase noise sidebands, (CF = 500 MHz)</b>	
1 kHz offset	-107 dBc/Hz typical
10 kHz offset	-111 dBc/Hz typical
100 kHz offset	-108 dBc/Hz typical
1 MHz offset	-133 dBc/Hz typical
<b>Spurious responses -Residual response in specified frequency ranges<sup>2</sup></b>	
<b>Antenna input port ranged to -70 dBm</b>	
< 200 MHz	-77 dBm typical
200 MHz to 6 GHz	-95 dBm typical
<b>T/R port high power attenuation OFF ranged to -70 dBm</b>	
< 200 MHz	-90 dBm typical
200 MHz to 6 GHz	-90 dBm typical
<b>T/R port high power attenuation ON ranged to 0 dBm</b>	
< 200 MHz	-90 dBm typical
200 MHz to 6 GHz	-80 dBm typical
Input related spurs, input -10 dBm range	< -62 dBm typical
<b>Display Average Noise Level (DANL) with analyzer ranged to -70 dBm</b>	
<b>Antenna input port</b>	
100 kHz to 1 MHz	-142 dBm typical
1 MHz to 200 MHz	-155 dBm, -160 dBm typical
200 MHz to 900 MHz	-157 dBm, -161 dBm typical
900 MHz to 2.1 GHz	-154 dBm, -158 dBm typical
2.1 GHz to 3.2 GHz	-148 dBm, -153 dBm typical
3.2 GHz to 4.8 GHz	-151 dBm, -156 dBm typical
4.8 GHz to 6 GHz	-145 dBm, -150 dBm typical
<b>T/R port high power attenuation OFF</b>	
100 kHz to 1 MHz	-135 dBm typical
1 MHz to 200 MHz	-129 dBm, -144 dBm typical
200 MHz to 900 MHz	-144 dBm, -149 dBm typical
900 MHz to 2.1 GHz	-140 dBm, -145 dBm typical
2.1 GHz to 3.2 GHz	-134 dBm, -139 dBm typical
3.2 GHz to 4.8 GHz	-137 dBm, -142 dBm typical
4.8 GHz to 6 GHz	-129 dBm, -134 dBm typical
<b>T/R port high power attenuation ON</b>	
100 kHz to 1 MHz	-120 dBm typical
1 MHz to 200 MHz	-114 dBm, -127 dBm typical
200 MHz to 900 MHz	-126 dBm, -131 dBm typical
900 MHz to 2.1 GHz	-122 dBm, -127 dBm typical
2.1 GHz to 3.2 GHz	-116 dBm, -121 dBm typical
3.2 GHz to 4.8 GHz	-119 dBm, -124 dBm typical
4.8 GHz to 6 GHz	-114 dBm, -119 dBm typical
<b>Input voltage standing wave ratio (VSWR) (Attenuator = 0 dB)</b>	
RF T/R port	< 1.4:1 (nominal)
Antenna port	< 1.8:1 (nominal)
<b>Triggering</b>	
Trigger	Free run, external 1, external 2, RF burst, video, line, periodic
<b>IQ analyzer</b>	
Trigger delay range	-15 to 500 ms
Resolution	0.1 $\mu$ s

1. T/R port high power attenuation OFF
2. Except at 100 MHz, 5 GHz, and 5.5 GHz

## RF Generator Technical Specifications and Characteristics

<b>Frequency range</b>			
Option 504	100 kHz to 3.8 GHz		
Option 506	100 kHz to 6 GHz		
<b>Arb baseband bandwidth</b>			
Option B40 (Standard)	100 kHz – 30 MHz	20 MHz	
	30 MHz – 60 MHz	40 MHz	
	60 MHz – 220 MHz	20 MHz	
	220 MHz – 340 MHz	40 MHz	
	340 MHz – 6 GHz	40 MHz	
Option B10	100 kHz – 340 MHz	Same as Option B40	
	340 MHz – 400 MHz	80 MHz	
	400 MHz – 6 GHz	80 MHz	
Option B1X	100 kHz – 400 MHz	Same as Option B10	
	400 MHz – 6 GHz	160 MHz	
<b>Frequency accuracy</b>			
Same as accuracy of internal time base or external reference input			
<b>Internal timebase</b>			
Accuracy <sup>1</sup>	± [(time since last adjustment x aging rate) ± temperature effects ± calibration accuracy]		
<b>Frequency stability internal TB</b>			
Yearly Aging rate	< ± 0.1 ppm/year (± 1 x 10 <sup>-7</sup> )		
Achievable initial calibration accuracy	± 4 x 10 <sup>-8</sup>		
Residual FM	≤ 0.25 Hz p-p in 20 ms nominal		
<b>Temperature effects</b>			
20 to 30 °C	< ± 1.5 x 10 <sup>-8</sup>		
<b>Amplitude level accuracy<sup>2</sup></b>			
<b>Generator port levels</b>	<b>100 kHz to 1 MHz</b>	<b>1 MHz to 3.6 GHz</b>	<b>3.6 GHz to 6 GHz</b>
> 0 dBm	± 0.8 dB typical	± 1.5 dB, ± 0.8 dB typical	± 1.65 dB, ± 1.2 dB typical
0 dBm to -60 dBm	± 0.65 dB typical	± 1.1 dB, ± 0.7 dB typical	± 1.45 dB, ± 0.85 dB typical
-60 dBm to -110 dBm	± 0.65 dB typical	± 1.25 dB, ± 0.95 dB typical	± 1.6 dB, ± 1.0 dB typical
< -110 dBm	± 0.55 dB nominal	± 0.95 dB nominal	± 1.0 dB nominal
<b>T/R port high power attenuation ON</b>			
> -40 dBm	± 0.65 dB typical	± 1.4 dB, ± 0.8 dB typical	± 1.75 dB, ± 1.4 dB typical
-40 dBm to -100 dBm	± 0.9 dB typical	± 1.4 dB, ± 0.9 dB typical	± 1.75 dB, ± 1.5 dB typical
< -100 dBm	± 1.5 dB nominal	± 1.0 dB nominal	± 1.5 dB nominal
<b>T/R port high power attenuation OFF</b>			
> 0 dBm	± 0.75 dB typical	± 1.2 dB, ± 0.6 dB typical	± 1.35 dB, ± 0.7 dB typical
0 dBm to -60 dBm	± 0.55 dB typical	± 1.4 dB, ± 0.75 dB typical	± 1.4 dB, ± 0.85 dB typical
-60 dBm to -110 dBm	± 1.2 dB typical	± 1.3 dB, ± 1.0 dB typical	± 1.5 dB, ± 0.85 dB typical
< -110 dBm	± 1.5 dB nominal	± 1.0 dB nominal	± 1.5 dB nominal
<b>Phase noise</b>			
<b>Gen port (+10 dBm output); T/R port (0 dBm output)</b>			
1 kHz offset	< -115 dBc/Hz typical		
10 kHz offset	< -112 dBc/Hz typical		
100 kHz offset	< -118 dBc/Hz typical		
1 MHz offset	< -137 dBc/Hz typical		
<b>Maximum Reverse Power Protection (RPP)</b>			
RF Gen port	10 W for 15 sec. with alarm		

1. Calibration accuracy depends on how accurately the frequency standard was adjusted to 10 MHz. If the adjustment procedure is followed, the calibration accuracy is given by the specification. Achievable Initial Calibration Accuracy.
2. Specifications apply when input port is set to Antenna In

## RF Generator Technical Specifications and Characteristics (Continued)

<b>Harmonics (T/R port and Gen port)</b>		
<b>Harmonics</b>		
Generator port at +10 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-34 dBc, -40 dBc nominal -30 dBc, -36 dBc nominal
T/R port high power attenuation ON at 0 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-35 dBc, -40 dBc nominal -30 dBc, -38 dBc nominal
T/R port high power attenuation OFF at -15 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-40 dBc nominal -40 dBc nominal
<b>Non-harmonics</b>		
Generator port at 0 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-65 dBc nominal -70 dBc nominal
T/R port high power attenuation ON at 0 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-63 dBc nominal -70 dBc nominal
T/R port high power attenuation OFF at -15 dBm	100kHz to 60MHz 60 MHz to 6 GHz	-65 dBc nominal -70 dBc nominal
<b>Sub-harmonics</b>		
Generator Port at +10 dBm	> 3 GHz	-40 dBc nominal
T/R port high power attenuation ON at 0 dBm	> 3Ghz	-40 dBc nominal
T/R port high power attenuation OFF at -15 dBm	> 3GHz	-40 dBc nominal
<b>Input voltage standing wave ratio (VSWR)</b>		
RF T/R port	< 1.6:1 (nominal)	
Generator port	< 1.8:1 (nominal)	
<b>Noise floor</b>		
RF T/R port and Gen port (at -40 dBm output)	100 kHz to 60 MHz: -155 dBm typical; 60 MHz to 6 GHz < -160 dBm typical	
<b>Generator output level range</b>		
<b>RF T/R port</b>		
100 kHz to 6 GHz (T/R port high power attenuation OFF)	-130 to +3 dBm	
100 kHz to 6 GHz (T/R port high power attenuation ON)	-130 to -20 dBm, settable to -15 dBm	
<b>RF Gen port</b>		
100 kHz to 6 GHz	-130 to +3 dBm	
100 kHz to 6 GHz (Option M8920A-1EA)	-130 to +13 dBm, settable to +15 dBm	

## Audio Module Technical Specifications and Characteristics

	Audio generator output performance	Audio analyzer input performance
<b>M9260A PXI module</b>		
Impedance	50 $\Omega$ and 600 $\Omega$	50 $\Omega$ , 600 $\Omega$ , and 1 M $\Omega$
Audio frequency range	5 Hz to 79.8 kHz	10 Hz to 80 kHz
Audio frequency resolution	363.8 $\mu$ Hz	363.8 $\mu$ Hz
Audio frequency accuracy	$\pm$ 1ppm nominal + 100 $\mu$ Hz	$\pm$ 2ppm + 100 $\mu$ Hz
Voltage range	10 $\mu$ Vp to 10 Vp	10 $\mu$ Vp to 46Vp
Amplitude accuracy	$\pm$ 0.8 %	$\pm$ 1%
Amplitude resolution	1 $\mu$ V	1 $\mu$ V
Coupling	AC, DC	AC, DC
Channels per module	2 – BNC output channels	2 – BNC input channels
Max voltage amplitude	10 Vp output	46 Vp Input
DC accuracy	$\pm$ 1%	$\pm$ 1%
AC accuracy	$\pm$ 1.0% at 1 kHz	$\pm$ 0.58% ( $\pm$ 0.05 dB)
THD measurement frequency range		100 Hz to 20 kHz
SINAD measurement frequency range		100 Hz to 20 kHz
THD accuracy		$\pm$ 0.05% nominal
THD / SINAD voltage range		1 mV to 10 V



## Audio Module RX Audio Filters

RX audio filters	
Low Pass Filter	3 kHz, 15 kHz, 30 kHz, 80 kHz
High Pass Filters	20 Hz, 50 Hz, 300 Hz, or 400 Hz
Band Pass Filters (weighted)	CCITT (ITU-T Rec. 041, ITU-T Rec. P.53), A-weighted (ANSI-IEC "A" weighted, per IEC Rec 179), C-message (C-Message per IEEE743), CCIR-1k weighted (CCIR Rec 468), CCIR-2k weighted (Dolby 2 K)
Manual Select Filter	For LPF User Defined <sup>1</sup>

## Radio Test Application Specifications

### N9093EM0E basic analog demodulation measurement application key specifications

	Modulation performance	Demodulation performance
<b>Frequency modulation</b>		
FM deviation	100 Hz to 100 kHz (settable to 1 Hz)	Peak Dev 1 kHz to 100 kHz
FM deviation accuracy	± 0.2% (nominal)	± 0.1% (nominal) rate < 20 kHz ± 1.2% (nominal) rate 20 kHz to 40 kHz
FM rate (settable range)	10 Hz to 40 kHz	20 Hz to 50 kHz
Residual distortion	0.6% (nominal)	± 0.45% (nominal) rate < 20 kHz ± 1.3% (nominal) rate 20 kHz to 40 kHz
Residual FM		1 Hz
<b>Amplitude modulation</b>		
AM depth	1% to 90%	1% to 99%
AM depth accuracy	± 0.2% (nominal) depth 30% to 90% ± 2.2% (nominal) depth < 30% or > 90%	± 0.9 (nominal) depth 10% to 95%
AM rate (settable range)	10 Hz to 10 kHz	20 Hz to 40 kHz
Residual distortion	± 0.1% (nominal) depth 30% to 90% ± 1.0% (nominal) depth < 30% or > 90%	1.5% (nominal) depth 10% to 95%
<b>Phase modulation</b>		
PM deviation	0.1 to 10 rad	0.2 to 10 rad
PM deviation accuracy	± 0.3% (nominal) 0.3 to 10 radians	± 0.3% (nominal) rate 500 Hz to 4 kHz ± 3.0% (nominal) rate < 500 Hz
PM rate (settable range)	30 Hz to 6 kHz	100 Hz to 4 kHz
Residual distortion	0.4% (nominal) 0.3 to 10 radians	0.5% (nominal) dev > 1 Radian 3% (nominal) dev < 1 Radian

### N9093EM1E basic digital demodulation measurement application key specifications

	Modulation performance	Demodulation performance
EVM	± 0.5% typical	± 0.6% typical
Mag error	± 0.3% typical	± 1.3% typical
FSK error	± 0.3% typical	± 1.0% typical
Deviation error	± 0.1% typical	± 1.0% typical

1. The 3 dB cutoff frequency can be selected for the User-defined audio filters.

## Connectivity Test Application Specifications

### WLAN 802.11ac

	Description
EVM at antenna port	-44.5 dB (typical) at -20 dBm input power BW 80 MHz -42.5 dB (typical) at -20 dBm input power BW 160 MHz
EVM at generator port	-47 dB (typical) at -5 to -15 dBm output BW 80 MHz -45 dB (typical) at -5 to -15 dBm output BW 160 MHz

### LTE-FDD/TDD

Specifications from 700 MHz to 2.6 GHz	
EVM at antenna port	0.8% Typ, 0.6% nominal at -10 dBm input power BW 20MHz
ACP at antenna port	-53 dBc Typical at -10dBm input Downlink -56 dBc typical at -10 dBm input Uplink
Composite EVM at generator port	0.8% at 0 dBm output power BW 20MHz
ACP at generator port	-60 dBc at -10 dBm output power Downlink -60 dBc at -10 dBm output power Uplink

### Bluetooth

	Description
DEVM at generator port	1% nominal at 0 dBm output
EDR floor at antenna port	0.6% Typical at 0 dBm input power

## Front Panel M9470A RF Interface Module Connections

RF connections	
RF T/R port	SMA female, 50 $\Omega$ nominal
RF antenna	SMA female, 50 $\Omega$ nominal
RF Gen port	SMA female, 50 $\Omega$ nominal
Other connections	
Frequency reference input	10 MHz, -5 to +10 dBm, nominal, SMB female, 50 $\Omega$ nominal
Frequency reference output	10 MHz, $\pm$ (10 MHz x frequency reference accuracy), > 0 dBm, SMB female, 50 $\Omega$ nominal

## General Specifications

<b>I/O characteristics M9037A controller module</b>	
Front panel connections	
USB	Four USB 2.0 (type A), Two USB 3.0 ports
Ethernet	Two 10/100/1000BASE-T (RJ45)
Video	Dual Mode DisplayPort+ (DVI-D, VGA, HDMI with an adapter)
GPIB	Micro-D 25-pin
PCIe connector	x8 PCIe connector
PXI trigger	SMB (programmable direction)
<b>Data storage (M9037A controller)</b>	
Internal	240 GB removable solid-state drive
External	Supports USB 2.0 or 3.0 compatible memory devices
<b>Temperature range</b>	
Operating	0 to 45 °C
Storage	-40 to 70 °C
<b>EMC</b>	
Complies with European EMC Directive 2014/30/EU	
<ul style="list-style-type: none"> <li>– IEC/EN 61326-1</li> <li>– CISPR Pub 11 Group 1, class A</li> <li>– AS/NZS CISPR</li> <li>– ICES/NMB-001</li> </ul>	
This ISM device complies with Canadian ICES-001	
Cet appareil ISM est conforme à la norme NMB-001 du Canada	
<b>Environmental stress</b>	
Samples of this product have been type tested in accordance with the Keysight Environmental Test Manual and verified to be robust against the environmental stresses of storage, transportation, and end-use; those stresses include, but are not limited to, temperature, humidity, shock, vibration, altitude, and power line conditions; test methods are aligned with IEC 60068-2 and levels are similar to MILPRF-28800F Class 3.	
<b>Power requirements (10-slot chassis)</b>	
Voltage/Frequency/Power (low-line)	100 to 120 V, 50/60/400 Hz, 735 W (nominal)
Voltage/Frequency/Power (high-line)	220 to 240 V, 50/60 Hz, 1300 W, (nominal)
<b>Weight (M9010A 10-slot chassis with basic modules)</b>	
Net	17.5 kg (38.7 lbs), nominal
<b>Dimensions (M9010A 10-slot chassis)</b>	
Height	194.8 mm (with feet installed)
Width	322.5 mm
Length	552.5 mm
<b>Warranty</b>	
The M8920A Radio Test Set is supplied with a Standard one- year warranty	
<b>Calibration cycle</b>	
The recommended calibration cycle is one year; calibration services are available through Keysight service centers	

## Related Literature

For more detailed product and specification information refer to the following literature and web pages:

Publication title	Publication number
M8920A PXIe Radio Test Set Technical Overview	5992-2821EN
M8920A PXIe Radio Test Set Configuration Guide	5992-2800EN
M8920A PXIe Radio Test Set Getting Started Guide	M8920-90001
M9470A PXIe 50W Interface Module Data Sheet	5992-3140EN
M9421A VXT PXIe Vector Transceiver Data Sheet	5992-1646EN
M9260A PXIe Audio Analyzer Data Sheet	5992-1918EN
PXIe Chassis Spec Guide	M9019-90015
PC Tested Configurations with PXIe Chassis Technical Overview	5990-7632EN
M9037A PXIe Embedded Controller Spec Guide	M9037-90015
Interface Modules and Adapters for PXIe Systems	5992-0377EN
M924XA InfiniiVision PXIe Modular Oscilloscopes Data Sheet	5992-2003EN
6.5 Digit PXI Digital Multimeter Data Sheet	5992-2757EN
PXIe Vector Network Analyzer Configuration Guide	5991-4885EN
PXI Avionics Bus Interface Cards Configuration Guide	5992-2448EN
89600 VSA Software Configuration Guide	5990-6386EN

## Additional Information

Product webpages:

[www.keysight.com/find/M8920A](http://www.keysight.com/find/M8920A)

[www.keysight.com/find/N9093](http://www.keysight.com/find/N9093)

[www.keysight.com/find/PXI](http://www.keysight.com/find/PXI)

X-Series measurement applications:

[www.keysight.com/find/X-Series\\_Apps](http://www.keysight.com/find/X-Series_Apps)

Signal Studio Software:

[www.keysight.com/find/signalstudio](http://www.keysight.com/find/signalstudio)

89600 VSA Software:

[www.keysight.com/find/89600](http://www.keysight.com/find/89600)

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[www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

