

# Keysight Technologies

## Comprehensive Services For Your PXIe Signal Analyzer and Generators

M9391A PXIe VSA

M9381A PXIe VSG

M9380A PXIe CW Source

M9300A PXIe Frequency Reference





## Introduction

### Lower your total cost of ownership

Whether it's from tight delivery schedules or time-to-market pressures, you're constantly required to do more. That's why Keysight Technologies, Inc. offers a broad portfolio of services designed to optimize your productivity and efficiency when using the M9391A PXI VSA, M9381A PXI VSG and other PXI signal sources. From instrument maintenance and repair, to calibration and software solutions, or consulting and education, Keysight offers services that lower your total cost of ownership.

## Ensure proper calibration

### Providing highest confidence in test

Keysight performs calibrations at its owned service centers and offers the highest number of RF parameter accreditations. There are over 50 locations in Keysight's global network, 46 of which are owned and operated by Keysight. Calibrations can also be performed at your facility by a Keysight expert using the same procedures as those used at our service centers. All of this ensures consistent calibration and measurements at your facilities around the world.

The exacting calibration procedure used at the Keysight service centers is also available in the N7800A Calibration and Adjustment software. It automates calibration to save time, reduce cost and ensure consistent quality results. The software includes automated adjustments whenever measurement performance is outside acceptable limits.

The N7800A software is in compliance with ISO 17025:2005, ANSI Z540-1:R2002, and ANSI Z540.3-2006 standards. The software offers measurement uncertainty analyses in accordance with the ISO Guide for Expression of Uncertainty of Measurements. Measurement reports are generated and you may select the report format you need to comply with your specific quality needs. Please see the example, at right.

The modules within each of our signal sources (M9381A, M9380A) or receiver (M9391A) are calibrated together as one unit. This provides you with the highest level of confidence and the best specification accuracy. This is particularly important in cases where test quality and traceability are important to meet your measurement needs. For example, the M9381A VSG modules calibrated together include the M9301A, M9310A and M9311A. Similarly, the M9391A VSA modules calibrated together include the M9301A, M9350A and M9214A. The M9300A Frequency Reference is calibrated as a standalone product. One year calibration intervals are recommended.

The PXLe source or receiver's calibration status is maintained through the "electronic calibration sticker" which can be accessed programmatically or via the soft front panel shown in Figure 1. It is used to set your preferences and manage your instrument's calibration. You may set it to notify when your PXLe instrument is approaching its calibration due date or when it's out of calibration. It also detects invalid calibrations if individual modules are swapped around. Other features allow you to manage calibration intervals and set a passphrase to protect against unauthorized changes to your preference settings. All these features are there to maintain the integrity and quality of your products.

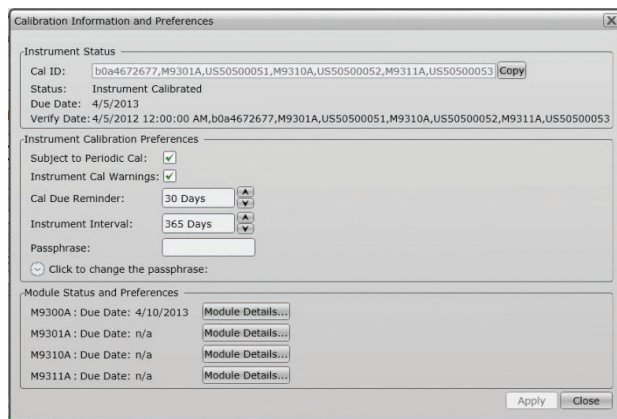


Figure 1. Calibration status in the instrument's soft front panel.

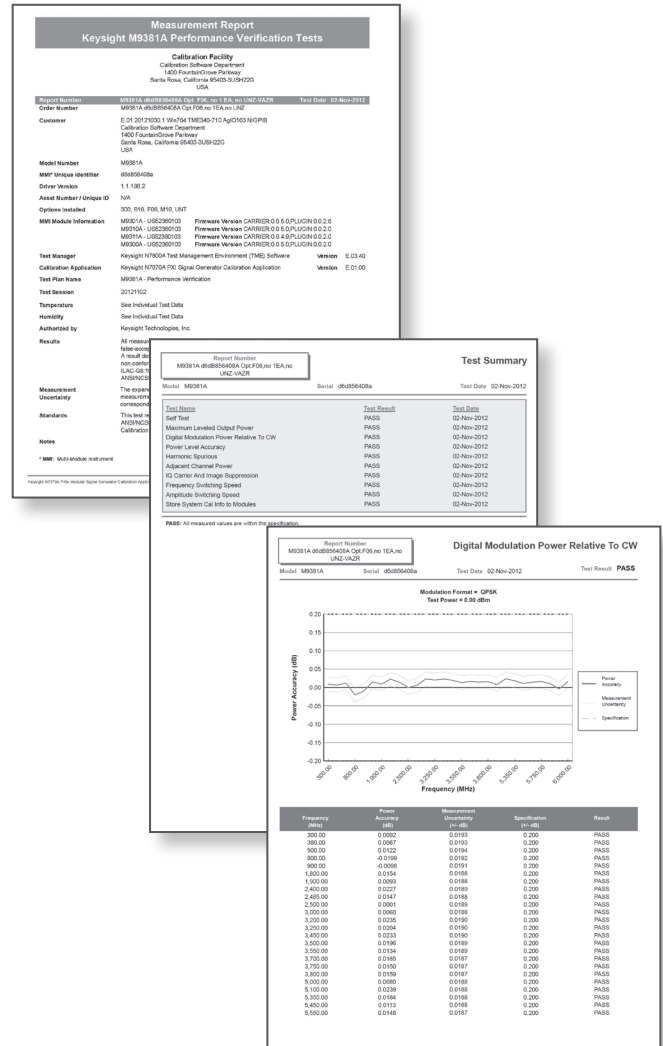


Figure 2. Example of measurement reports from the Calibration and Adjustment software.

## Fast repairs, easy upgrades, investment protection

### Easily upgrade your equipment capability

All PXIe options – such as memory, frequency range or modulation bandwidth – are controlled by a licensing key and can be quickly upgraded. This means you can upgrade your equipment without shipping it to a Keysight facility. Simply place an order for the upgrade which can be activated online and installed via the instrument's soft front panel.

### Get started quickly

### One day complimentary startup assistance

Gain access to a technical expert who will help you hit the ground running with the hardware and powerful software tools included with the Keysight's PXIe VSA (M9391A) or PXIe Signal Sources (M9381A, M9380A or M9300A). The flexible instruction format is designed to get you to your first measurements and familiarize you with ways to adapt the equipment to a specific application.

## Ordering information

### Services and support offerings

N7800A	Calibration and Adjustment Software
M9391A-UK6	Commercial Calibration Certificate for M9391A
M9381A-UK6	Commercial Calibration Certificate for M9381A
M9380A-UK6	Commercial Calibration Certificate for M9380A
M9300A-UK6	Commercial Calibration Certificate for M9300A

### Related products

M9391A	PXIe Vector Signal Analyzer 1 MHz to 6 GHz
M9381A	PXIe Vector Signal Generator 1 MHz to 6 GHz
M9380A	PXIe CW Source 1 MHz to 6 GHz
M9300A	PXIe Frequency Reference

## Over 50 service centers around the world

Keysight's worldwide reach and strategically located centers enable us to quickly repair your equipment. Our quality assurance process ensures that our repairs leave your instrument as good as new.

### Americas

US	Irvine, CA	Phoenix, AZ
	Santa Rosa, CA	Arlington Hts, IL
	Roseville, CA	Durham, NC
	Colorado Springs, CO	Bethlehem, PA
	Loveland, CO	Chelmsford, MA
	Richardson, TX	
Canada	Montreal	Toronto
Mexico	Guadalajara	
Brazil	Sao Paulo	Manaus

### Europe | Middle East | Africa

UK	Winnersh	
Germany	Boeblingen	
Finland	Helsinki	Oulu
Sweden	Stockholm	
Denmark	Copenhagen	
Netherlands	Amsterdam	
France	Paris	
Spain	Madrid	
Italy	Milan	
Russia	Moscow	
Israel	Tel Aviv	
Turkey	Ankara *	
Saudi Arabia	Riyadh *	
South Africa	Centurion *	

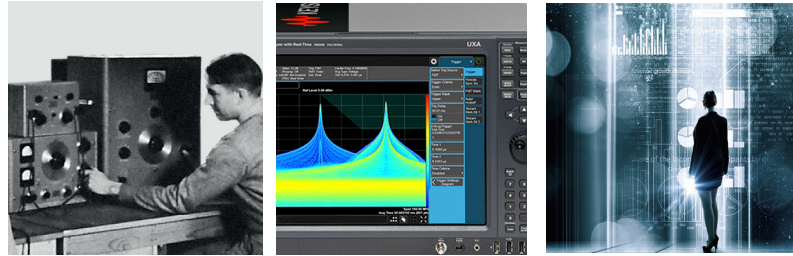
### Asia | Australia

Japan	Tokyo	
Korea	Seoul	
China	Cheng Du	Beijing
	Hong Kong	Shenzhen Shanghai
	Suzhou	
	Chang An	
Taiwan	Tao Yuan	
India	Bangalore	New Delhi
Singapore	Singapore	
Malaysia	Penang	Kuala Lumpur
Thailand	Bangkok	
Vietnam	Hanoi	
Philippines	Manila	
Australia	Melbourne	
New Zealand	Alicetown *	

\* Keysight Service Partner

## Evolving Since 1939

Our unique combination of hardware, software, services, and people can help you reach your next breakthrough. We are unlocking the future of technology.  
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#### myKeysight

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Accelerate Technology Adoption.  
Lower costs.

#### Keysight Services

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Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.



#### Keysight Assurance Plans

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Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

#### Keysight Channel Partners

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Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.

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For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at:  
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 Quality Management System

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